

08-2015

CRUSHING, PULVERISING, OR DISINTEGRATING; PREPARATORY TREATMENT OF
GRAIN FOR MILLING

Brechen, Pulverisieren oder Zerkleinern; Vorbehandlung von Getreide für die Vermahlung

COMMINUTING TOOL

Die Erfindung betrifft ein zu einer Rotationsbewegung antreibbares Zerkleinerungswerkzeug für Kunststoffmaterialien, umfassend einen Träger (1), der um eine auf ihm zentral gelegene Drehachse (B) rotierbar ist und auf dessen Oberfläche (3) Werkzeuge (4) zur Bearbeitung und Zerkleinerung der Kunststoffmaterialien angeordnet sind. Erfindungsgemäß ist vorgesehen, dass im Bereich der Drehachse (B) des Trägers (1) ein Abweiser (5) angeordnet ist, wobei in einem radial an den Abweiser (5) anschließenden Bereich des Trägers (1) steg- oder leistenförmige Förderflügel (6) angeordnet sind und in dem an die Förderflügel (6) radial zum Rand (7) hin anschließenden Bereich des Trägers (1) die Werkzeuge (5) angeordnet sind.

Publication: [WO 2015113089 A1 20150806](#)

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Prio: AT 20140128 A50055/2014

Appl.No: AT2015050020

IPC: B02C 18/08 2006.01 (IA)

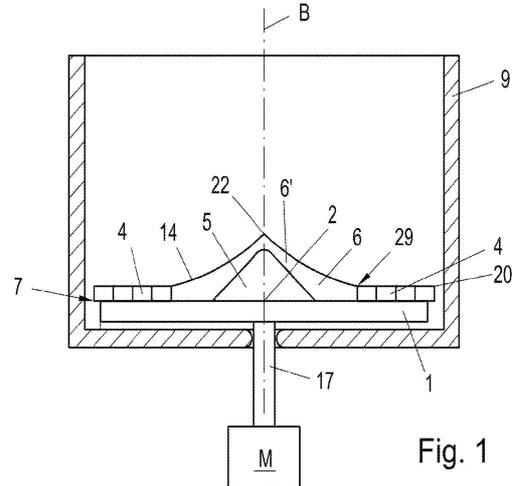


Fig. 1

CRUSHER HAVING A SETTABLE ECCENTRIC

Die vorliegende Erfindung betrifft einen Brecher (1) mit einem Brechorgan (10), das über ein Exzenterelement (11) wirkverbunden angetrieben ist, sodass durch eine über das Exzenterelement (11) erzeugbare Brechbewegung in den Brecher (1) eingebautes Brechgut zerkleinerbar ist. Erfindungsgemäß ist wenigstens eine Exzenterbuchse (12) vorgesehen, die über eine Wirkoberfläche (13) mit dem Exzenterelement (11) durch einen Reibschluss in Verbindung steht, und wobei die Exzenterbuchse (12) eine Druckmittelkammer (14) aufweist, die derart in die Exzenterbuchse (12) eingebracht ist, dass bei einer Druckbeaufschlagung der Druckmittelkammer (14) der Reibschluss zwischen dem Exzenterelement (11) und der Exzenterbuchse (12) veränderbar ist.

Publication: [WO 2015113771 A1 20150806](#)

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Prio: DE 20140131 10 2014 101 240.2

Appl.No: EP2015000182

IPC: B02C 1/02 2006.01 (IA)

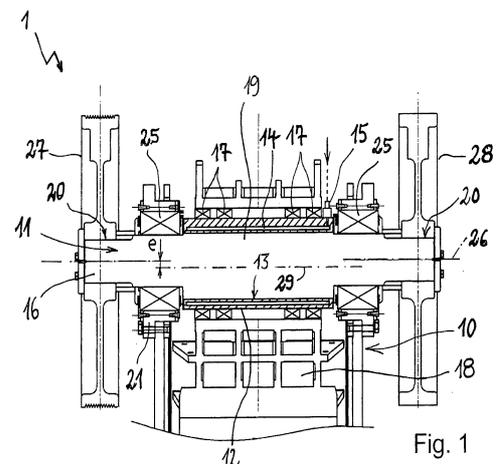


Fig. 1

AGITATOR BALL MILL

Eine Rührwerkskugelmühle umfasst eine Mahlkammer (1), eine in die Mahlkammer (1) hineinragende, drehbar gelagerte Rührwelle (5), auf der als Schaufelräder ausgebildete Rührorgane (10, 20, 30) axial in einem Abstand voneinander angeordnet sind, und einen Einlass (6) zur Zufuhr von Mahlgut und Mahlkörpern sowie einen Auslass (7) zur Entnahme des gemahlten Guts. Die Rührorgane (10, 20, 30) sind so ausgebildet, dass sie im Betrieb ein aus zu mahlendem bzw. dispergierendem Gut und Mahlkörpern bestehendes Gemisch durch ihr Inneres von der Rührwelle (5) weg nach aussen fördern. In der Mahlkammer (1) sind mit der Rührwelle (5) drehfest verbundene Rückförderorgane (17, 27, 37; 47; 57) angeordnet, welche das Gemisch seitlich neben und/oder zwischen den Rührorganen (10, 20, 30) nach innen zur Rührwelle (5) hin fördern.

Publication: [WO 2015118090 A1 20150813](#)

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Prio: EP 20140207 14154350.4

Appl.No: EP2015052463

IPC: B02C 17/16 2006.01 (IA)

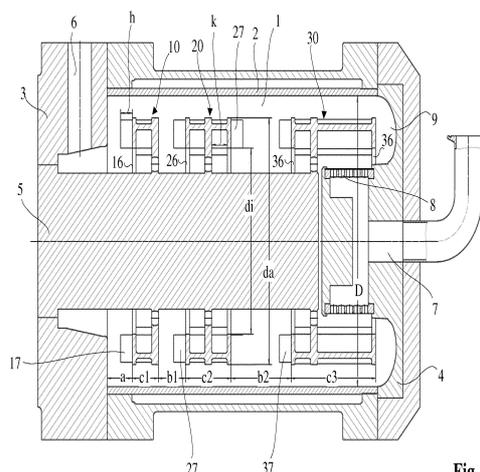


Fig. 1

SIEVE

The invention relates to a sieve (1) having a plurality of sub-components (2, 3, 4), which can be transformed from a first assembled position to create a plate with a plurality of apertures therein through which material can be forced, with each aperture being formed from at least two assembled sub-components, and which can be transformed to a cleaning position in which the sub-components can be separated such that the apertures are split allowing material particles to be removed from split apertures (9).

Publication: [WO 2015118360 A1 20150813](#)

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Prio: GB 20140210 1402221.4

Appl.No: GB2015050369

IPC: B02C 18/36 2006.01 (IA)

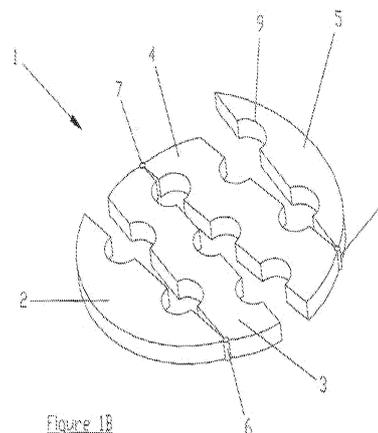


Figure 1B

MILL FOR GRINDING METAL MATERIALS

A mill (1) for grinding materials comprising: a casing (3) defining an inner cavity (9) and delimiting an advancement path of the materials from an inlet section (10) to an outlet section (11) of the casing (3) through the inner cavity (9) and at least one rotor (4) arranged inside the cavity (9) and configured for rotating with respect to the casing (3), the rotor (4) comprising a shaft (24) engaged to the casing (3) for rotation around a main axis (A) and a plurality of grinding elements (25) associated with the shaft (24).

Publication: [WO 2015118448 A1 20150813](#)

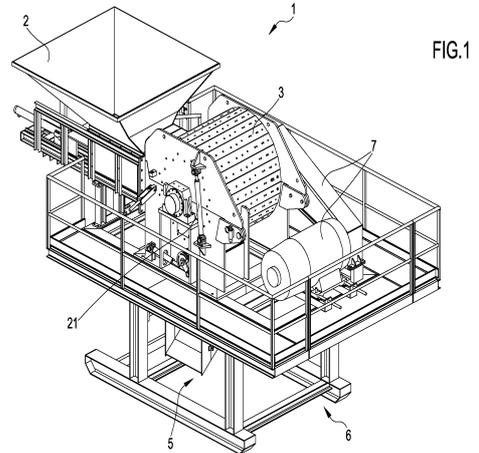
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Prio: IT 20140204 BS2014A000033

Appl.No: IB2015050818

IPC: B02C 13/10 2006.01 (IA)



COUNTER-ROTATING PINNED DISC MILL

Die Erfindung betrifft eine gegenläufige Stiftmühle (10), insbesondere zur Vermahlung von Lebensmitteln, bestehend aus einer Gehäuseanordnung (12) mit zumindest einem ersten und einem zweiten Gehäuseteil (28, 30), zwei darin koaxial zueinander auf einer Mahlachse (13) angeordneten Mahlwellen (14, 16), von denen mindestens eine Mahlwellen (14, 16) einen Mahlguteinlass aufweist und hohl ausgeführt ist, durch die einem Mahlraum (17) Mahlgut zuführbar ist, zwei auf den einander zugewandten Enden (18, 20) der Mahlwellen (14, 16) zueinander parallel angeordneten Mahlscheiben (22, 24), einem Mahlgutauslass, durch den aus dem Mahlraum (17) Mahlgut abführbar ist, wobei mindestens ein Gehäuseteil (28, 30) längs der Mahlachse (13) über Lagermittel verschiebbar ausgebildet ist.

Publication: [WO 2015121012 A1 20150820](#)

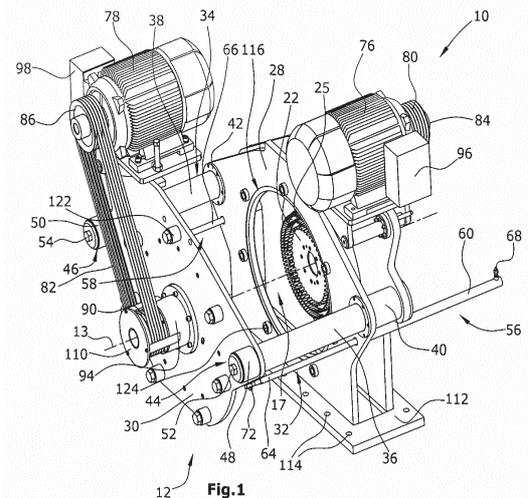
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Prio: DE 20140213 10 2014 101 786.2

Appl.No: EP2015050542

IPC: B02C 13/20 2006.01 (IA)



MACHINE FOR PROCESSING INFECTIOUS, IN PARTICULAR MEDICAL, WASTE

The invention relates to a machine (1) comprising a container (2) into which waste is loaded and an assembly (3) for shredding said waste; the shredder assembly (3) comprising a shredder (5) housed in a sliding tray inside a receiving compartment (28) comprised by the structure of the machine (1), the receiving compartment (28) being delimited by side walls and by a rear wall (29) which has an opening; the tray comprises a distal boss (27) which, in the position in which this tray is fully engaged in the receiving compartment (28), can be engaged adjustably in the opening in the rear wall (29). According to the invention, the machine (1) comprises: a cover (30) which can cover the part of the distal boss (27) which projects beyond the rear wall (29) in the position in which the tray is fully engaged in the receiving compartment (29), the cover (30) being provided with a flange which is designed to be bolted to the rear wall (29) and has, on its inner edge, a bevelled surface (32); and a seal (31) which can be engaged adjustably about the part of the distal boss (27) projecting beyond the rear wall (29) in the position in which the tray is fully engaged in the receiving compartment (28), until it is in contact with the rear wall (29) and is crushed by the bevelled surface (32) of the cover (30) when the latter is bolted to the rear wall (29).

Publication: [WO 2015121826 A1 20150820](#)

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Prio: FR 20140214 14 51188

Appl.No: IB2015051059

IPC: B02C 18/14 2006.01 (IA)

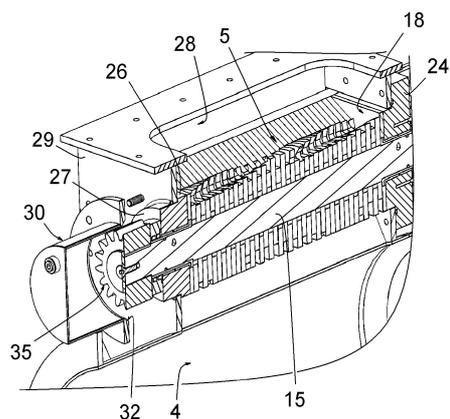


FIG. 8

SEGMENTED ROLLER AND METHOD OF RECONDITIONING SAME

A roller surface reinforcement system and a method of reconditioning a roller is provided. A plurality of surface segments are fastened to a hub. In some embodiments, an engagement structure is provided to maintain a gap between adjacent surface segments to reduce wear. The surface segments can be provided with studs, teeth, depressions, blades, grooves, paddles, or the like. When the roller is worn out, the plurality of surface segments can be removed and replaced with new surface segments, so as to create a reconditioned roller surface.

Publication: [WO 2015123770 A1 20150827](#)

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Prio: US 20140219 61/941,856, US 20141106 62/076,117

Appl.No: CA2015050119

IPC: B02C 4/30 2006.01 (IA)

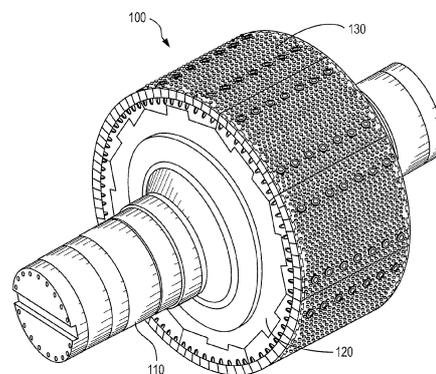


FIG 1

ROLLER WITH REPLACEABLE EDGE REINFORCEMENTS

A roller with replaceable edge reinforcements is provided. A plurality of removable edge reinforcements are disposed radially along the peripheral edge of the end face of the roller. The reinforcements are slidably connected to the end face of the roller, either directly or indirectly, using male and female interlocking members, preferably in a U-shaped dovetail. The edge reinforcements are constructed from a suitably hard material and accept wear in place of the peripheral edge of the roller itself. In some embodiments, a pin and dimple arrangement is provided to assist the sliding engagement of the male and female members. A tool recess may also be provided to assist with removing the edge reinforcements.

Publication: [WO 2015123772 A1 20150827](#)

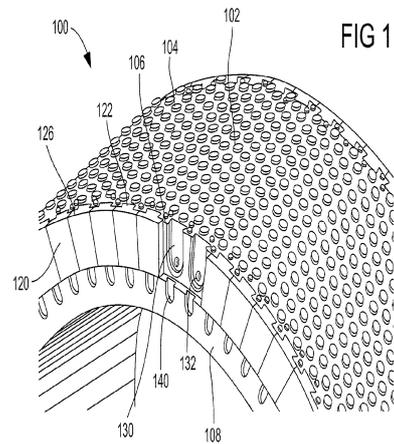
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Prio: US 20140219 61/941,884

Appl.No: CA2015050121

IPC: B02C 4/30 2006.01 (IA)



ROLLER AND REPLACEABLE SURFACE SEGMENTS FOR ROLLER

The present invention relates to rollers subjected to wear conditions and surface reinforcements for such rollers. More specifically, the present invention relates to the orientation of projections on the rollers or surface segments of such rollers. In one embodiment, the roller includes a hub. The roller also includes a plurality of removable surface segments attachable to the hub so as to form a layer around the hub. Each surface segment has two opposed sides and an exterior surface. The spacing between projections across the exterior surface decreases from each of the opposed sides to an intermediate point between the opposed sides.

Publication: [WO 2015123773 A1 20150827](#)

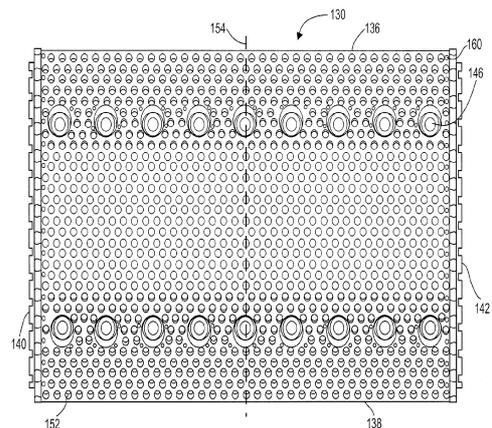
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Prio: US 20140219 61/941,746, US 20141106 62/076,117

Appl.No: CA2015050122

IPC: B02C 4/30 2006.01 (IA)



CANISTER GRINDER

Disclosed is a canister grinder. The canister grinder according to the present invention comprises: a coffee bean container for storing coffee beans; a grinder which is detachably coupled to one side of the coffee bean container, has a coffee bean insertion hole into which the coffee beans stored in the coffee bean container can be inserted, and grinds the coffee beans inserted through the coffee bean insertion hole; and a powder container, detachably coupled to the other side of the coffee bean container, for containing the coffee bean powder ground by the grinder.

Publication: [WO 2015126167 A1 20150827](#)

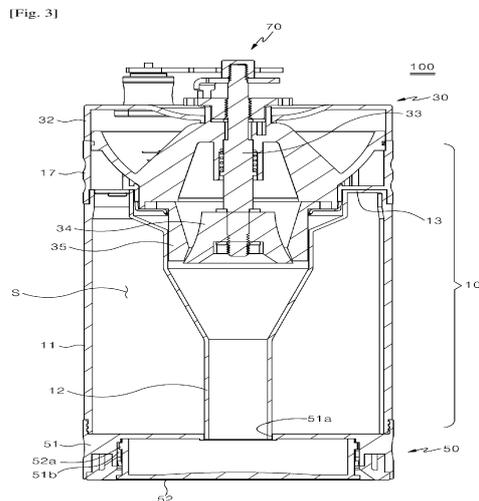
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Prio: KR 20140221 10-2014-0020130

Appl.No: KR2015001643

IPC: B02C 7/08 2006.01 (IA)



ROLL FOR A ROLLER GRINDER, AND ROLLER GRINDER COMPRISING SUCH ROLL

The present disclosure relates to a roll for a roller grinder. The roll includes a shaft having a support structure; a plurality of grinding shell segments circumferentially arranged around the shaft to form a tubular grinding shell supported by the support structure; and a wedging device for each grinding shell segment. Each wedging device is arranged in a channel extending axially along the shell and defined by the associated grinding shell segment and the support structure. Each wedging device is arranged to releasably secure the grinding shell segment to the support structure. The present disclosure also relates to a high pressure grinder including the above roll.

Publication: [US 20150217295 A1 20150806](#)

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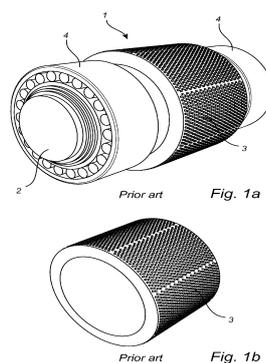
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Prio: EP 20120829 1218107.8, WO 20150225 PCT/IB2013/056886

Appl.No: US14423827

IPC: B02C 4/30 2006.01 (IA)

Patent Application Publication Aug. 6, 2015 Sheet 1 of 6 US 2015/0217295 A1



Organic Shredder Apparatus and Method for Operating an Organic Shredder

An apparatus and method is provided for organic material reduction and preparation for subsequent recycling or disposal in a self-contained system which is safe for equipment operators, and highly cost and floor-space efficient. The apparatus includes a preferably-shaped hopper for receiving organic materials to the reduced, preferably a floating auger, a solids pump and a macerator. The system preferably generates a processed organic material discharge with a particle size on the order of $\frac{1}{8}$; without concern as to the liquid content of the incoming organic material. The apparatus may be operated by a method which is completely automated following operator initiation, including automatically attempting self-clearing actions in the event of detecting clogs or jams in the processing components.

Publication: [US 20150217296 A1 20150806](#)

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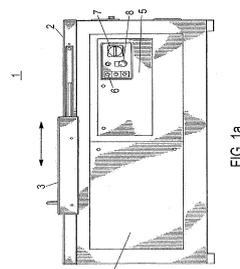
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Prio:

Appl.No: US14687379

IPC: B02C 9/04 2006.01 (IA)

Patent Application Publication Aug. 6, 2015 Sheet 1 of 7 US 2015/0217296 A1



Hammer wheel mechanism capable of adjusting grinding force for annular roller type upright mill

A hammer wheel mechanism capable of adjusting the grinding force of an annular type upright mill is provided, wherein a swinging arm is provided on a stelliform support via a swinging arm shaft, a hammer wheel is provided on a first end of the swing arm via a hammer wheel shaft, and a counterweight is provided on the swinging arm via an adjuster bolt. The present invention has beneficial effects as follows. The counterweight capable of moving transversely along the swinging arm is provided on a second end of the swinging arm of the hammer wheel. When the machinery is operating, the counterweight generates an inert centrifugal force simultaneously. According to the principle of the plane force system, a balancing torque is generated on a fulcrum. Adjusting corresponding position of the counterweight or changing the weight of the counterweight itself is capable of setting or adjusting the grinding force of the hammer wheel, so as to achieve an optimal effect, in such a manner that the machinery is capable of effectively grinding materials, the quality of the product is improves and production efficiency of the machinery is improved.

Publication: [US 20150217297 A1 20150806](#)

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Prio: CN 20120817 201210294386.2, WO 20150216 PCT/CN2013/081658

Appl.No: US14421987

IPC: B02C 15/08 2006.01 (IA)

Patent Application Publication Aug. 6, 2015 US 2015/0217297 A1

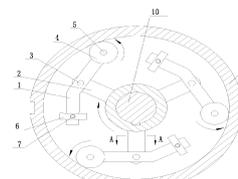


Fig. 1

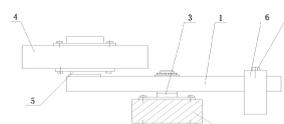


Fig. 2

Flexible vertical grinder

A flexible vertical grinder, having a main shaft mounting frame (4) on a grinder frame (1); a main shaft (3) is mounted on the main shaft mounting frame; a stelliform bracket (9) is mounted on the main shaft; a hammer wheel grinder and a material-sorting balance wheel device are mounted on the stelliform bracket; the material-sorting balance wheel (4) and the hammer wheel (17) are on the same horizontal plane. The vertical grinder can apply different grinding forces according to different specific surface areas of the to-be-ground material, and can grind materials of different grades properly but not excessively, thus greatly improving crushing efficiency, having good overall rigidity and stable operation, and facilitating maintenance.

Publication: [US 20150217298 A1 20150806](#)

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Prio: CN 20120817 201210293481.0, WO 20150216 PCT/CN2013/081674

Appl.No: US14421988

IPC: B02C 15/08 2006.01 (IA)

Patent Application Publication Aug. 6, 2015 Sheet 1 of 5 US 2015/0217298 A1

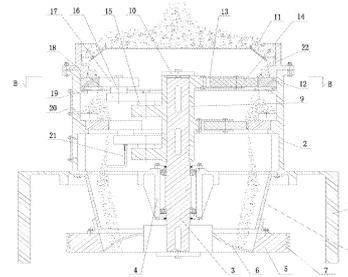


Fig. 1

DISINTEGRATING DEVICE

The invention relates to a disintegrating device, comprising a machine housing, which can be installed on an installation plane or an installation surface, and at least one disintegrating roller. The disintegrating rollers is rotatably supported in the machine housing and has at least one disintegrating tool arranged thereon, at least one counter blade, which interacts with the disintegrating tool, and at least one comb carrier on at least one wall of the machine frame extending parallel to the axis of rotation of the disintegrating roller. The invention is characterized in that at least part of the wall of the machine housing forms a common, in particular pivotable assembly together with the comb carrier.

Publication: [US 20150217299 A1 20150806](#)

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Prio: DE 20120803 20 2012 007 418.0, WO 20150202 PCT/EP2013/065424

Appl.No: US14419069

IPC: B02C 18/14 2006.01 (IA)

Patent Application Publication Aug. 6, 2015 Sheet 1 of 5 US 2015/0217299 A1

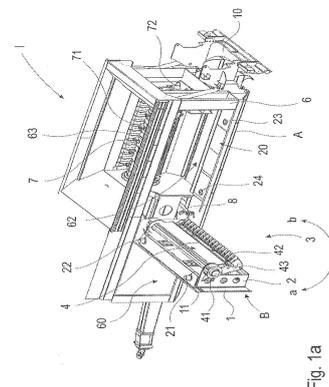


Fig. 1a

METHOD FOR PROCESSING A USED MATTRESS, A METHOD FOR COMPRESSING A USED MATTRESS, COMPRESSION APPARATUS FOR COMPRESSING A USED MATTRESS, DECONSTRUCTION APPARATUS FOR DECONSTRUCTING A MATTRESS, INFUSION APPARATUS FOR INFUSING A MATTRESS, INTEGRITY TESTING APPARATUS FOR TESTING THE INTEGRITY OF A MATTRESS AND SILAGE BIN FOR STORAGE OF A MATTRESS

Method and apparatus for deconstructing, cutting, shredding or disintegrating a mattress, sofa, car seat or similar items with steel or metal sub frames by the use of high pressure water jets whereby the mattress, sofa, car seat or the like is compressed and then deconstructed while compressed by the use of high pressure water jets.

Publication: [US 20150217300 A1 20150806](#)

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Prio: AU 20120817 2012903549, WO 20150217 PCT/AU2013/000905

Appl.No: US14422030

IPC: B02C 19/00 2006.01 (IA)

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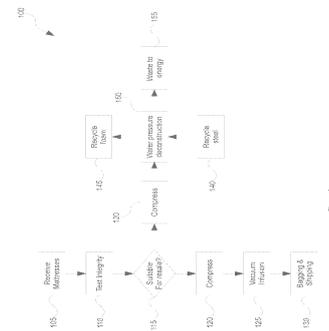


Figure 1

METHOD FOR PRETREATING BIOMASSES TO OBTAIN BIOFUEL

A method for pretreating biomasses to allow their subsequent conversion to biofuel comprises the following steps:-a) causing the biomasses to pass through a first mechanical reduction device (1) to enable the biomasses to be reduced in size to smaller-sized particles;-b) placing the particles on a particle filtering grille so that particles (P1) smaller than a predetermined size pass through the grille and feed out of the first mechanical reduction device (1);-c) making the particles (P1) which are smaller than the predetermined size pass through a first particle classifying device (2) to allow the particles (P1) to be divided according to size into a first fraction (f1) of coarse size particles and a second fraction (f2) of fine size particles.

Publication: [US 20150217301 A1 20150806](#)

Applicant: FOODOVERSEAS S.R.L., 00131 ROMA, IT

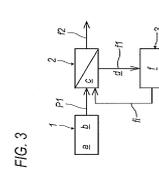
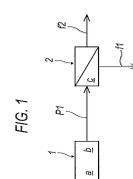
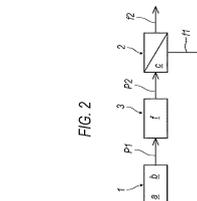
Inventor: Sabatino, La Froscia, Viggianello, IT

Prio: EP 20120914 12425153.9, WO 20150303 PCT/IB2013/058528

Appl.No: US14425545

IPC: B02C 23/14 2006.01 (IA)

Patent Application Publication Aug. 6, 2015 Sheet 1 of 5 US 2015/0217301 A1



ADVANCED SYSTEM RECOVERY FOR FEED SYSTEM

A feed system for a woodchipper including a material-interface member for feeding material into a chipping mechanism of the woodchipper, an actuator for moving a material-interface member into interfacing and non-interfacing positions with the material, a sensor for detecting an operational parameter of the woodchipper, and a controller to direct the actuator. The controller operates by receiving the operational parameter of the woodchipper, establishing a normative operating value, and determining if the woodchipper is a first status or a second status based on a comparison between the operational parameter and the normative operating value. If the woodchipper is a first status, the controller instructs the actuator to move the material-interface member into the interfacing position. If the woodchipper is a second status, moving the material-interface member into a non-interfacing position.

Publication: [US 20150217302 A1 20150806](#)

Applicant: Altec Industries, Inc., Birmingham, US; Altec Industries, Inc., Birmingham, US

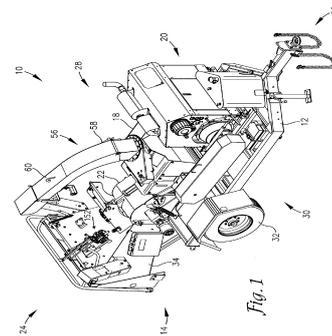
Inventor: Zlatko, Dumpor, Raleigh, US; Vlad P., Patrangenaru, Columbia, US

Prio:

Appl.No: US14171525

IPC: B02C 25/00 2006.01 (IA)

Patent Application Publication Aug. 6, 2015 Sheet 1 of 9 US 2015/0217302 A1



METHOD AND APPARATUS FOR REDUCING GIVE IN A CRUSHER

A crusher for crushing mineral material, a method for decreasing give in a crusher and a mineral material processing plant. The crusher includes a movable and a fixed crushing element arranged to receive a force. The crusher further includes a hydraulic cylinder and a piston inside the hydraulic cylinder and a piston rod attached to the piston which extends through a first end of the hydraulic cylinder and is connected to the movable crushing element. The hydraulic cylinder has a first space around the part of the piston rod in the hydraulic cylinder and a second space limited by the first space and the piston. The crusher further includes a valve and a hydraulic fluid connection from the valve to the first space. The valve is configured to enable a flow of hydraulic fluid into the first space in response only to the piston moving in the hydraulic cylinder towards the second space due to said force.

Publication: [US 20150224508 A1 20150813](#)

Applicant: Metso Minerals, Inc., Helsinki, FI; Metso Minerals, Inc., Helsinki, FI

Inventor: Jari, Jonkka, Kangasala, FI

Prio: FI 20120824 20125877, WO 20150205 PCT/FI2013/050812

Appl.No: US14419666

IPC: B02C 1/02 2006.01 (IA)

Patent Application Publication Aug. 13, 2015 Sheet 1 of 6 US 2015/0224508 A1

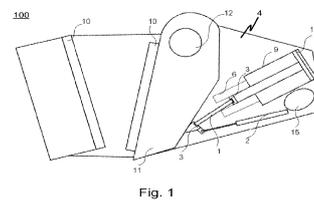


Fig. 1

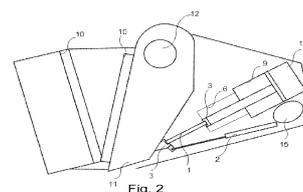


Fig. 2

GRAIN MILL LINER ASSEMBLY

A grain mill liner assembly includes a generally circular support member having an outer surface and an inner surface, a plurality of gear teeth inserts spaced about the inner surface of the support member, and a plurality of retainer elements spaced about the inner surface of the support member and configured to be removably attached to the support member. Each retainer element engages adjoining gear teeth inserts for securing the gear teeth inserts to the support member.

Publication: [US 20150224509 A1 20150813](#)

Applicant: Kennametal Inc., Latrobe, US; Kennametal Inc., Latrobe, US

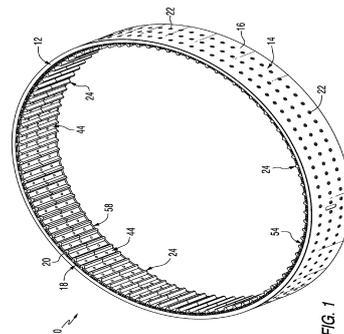
Inventor: Hugo, Serrano, Lowell, US; J. Denny, Robertson, Bella Vista, US; William H., Pierce, Rogers, US

Prio:

Appl.No: US14178911

IPC: B02C 15/00 2006.01 (IA)

Patent Application Publication Aug. 13, 2015 Sheet 1 of 5 US 2015/0224509 A1



CLASSIFIER-EQUIPPED MEDIA-AGITATION TYPE PULVERIZER

Provided is a classifier-equipped media-agitation type pulverizer, which is capable of moving up pulverized particles to a classification section by supplying a secondary gas in an amount less than ever before, thereby enhancing classification capability of a classifying wheel. Solution A classifier-equipped media-agitation type pulverizer of the present invention comprises: a pulverization section disposed in a lower portion of a tubular container; a classification section disposed in an upper portion of the tubular container; a vessel housed inside the pulverization section, and having an agitator member disposed therein to pulverize a raw material; at least one secondary gas inlet port provided in the pulverization section; a classifying wheel for wheel-rotation type product classification disposed in the classification section; a fine powder discharge passage connected to the classification section so as to discharge a classified fine powder therethrough; an upward passage for leading particles subjected to the pulverization, from the pulverization section to the classification section; and a downward passage for returning a coarse powder which has not been collected by the classification section, from the classification section to the pulverization section. The agitator member has a cylindrical rotor body rotatably disposed in the vessel to extend vertically, while defining an annular pulverization chamber between an outer periphery of the cylindrical rotor body and an inner periphery of the vessel, and a circulation mechanism is provided between the pulverization section and the classification section to promote a flow of carrier gas carrying the pulverized powder, in a direction from the pulverization section to the classification section.

Publication: [US 20150224510 A1 20150813](#)

Applicant: ASHIZAWA FINETECH LTD., Narashino-shi, Chiba, JP

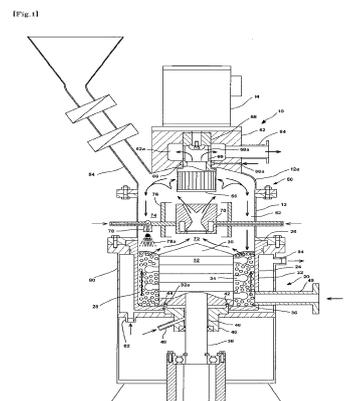
Inventor: Tsuyoshi, Ishikawa, Narashino-shi, JP; Naoki, Hagiwara, Narashino-shi, JP

Prio: JP 20121121 2012-254826, WO 20131206 PCT/JP2013/053975

Appl.No: US14124424

IPC: B02C 17/16 2006.01 (IA)

Patent Application Publication Aug. 13, 2015 US 2015/0224510 A1



Unit for supplying sheet-like material for a document shredder

The invention relates to a unit for supplying sheet-like material for a document shredder, wherein the unit has a main body on which a paper support having a support face is disposed such that by at least one conveying element in each case one sheet is successively drawn off a stack of paper/sheet-like material which is supported on the support face and conveyed toward a supply slot of the document shredder, wherein the at least one conveying element is a conveyor roller, the sleeve face of which includes a multiplicity of structured part-areas such that the static friction between this conveyor roller and the respective sheet is increased.

Publication: [US 20150224511 A1 20150813](#)

Applicant: Hermann, Schwelling, Salem, DE

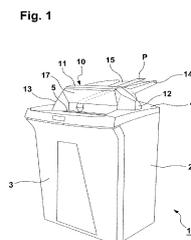
Inventor: Hermann, Schwelling, Salem, DE

Prio: DE 20140122 102014100716.6

Appl.No: US14602069

IPC: B02C 18/22 2006.01 (IA)

Patent Application Publication Aug. 13, 2015 Sheet 1 of 6 US 2015/0224511 A1



METHOD AND SYSTEM FOR COMMINUTING GRINDING STOCK USING A ROLLER MILL

The invention relates to a method and an apparatus for comminuting grinding stock with a roller mill, wherein a grinding plate cooperates with at least two grinding rollers and the grinding stock supplied in the mass flow is comminuted between grinding plate and grinding roller. At least two grinding rollers are driven via dedicated drives, wherein a power compensation control is carried out for the drives of the grinding rollers, such that the power of the drives is controlled in a predefined ratio to one another. The power control is then effected by changing the mass flow of the grinding stock supplied to at least one of the grinding rollers.

Publication: [US 20150224512 A1 20150813](#)

Applicant: THYSSENKRUPP INDUSTRIAL SOLUTIONS AG, Essen, DE; THYSSENKRUPP INDUSTRIAL SOLUTIONS AG, Essen, DE

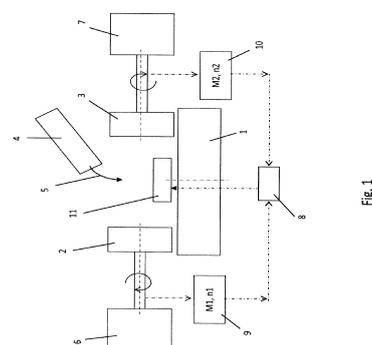
Inventor: Pedro, Guerrero Palma, Lippetal, DE; Ludwig, Könnig, Ahlen, DE

Prio: DE 20120719 10 2012 106 554.3, WO 20150119 PCT/EP2013/064043

Appl.No: US14415606

IPC: B02C 25/00 2006.01 (IA)

Patent Application Publication Aug. 13, 2015 Sheet 1 of 5 US 2015/0224512 A1



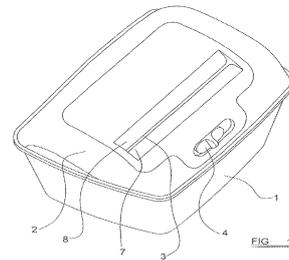
SHREDDING MACHINE

A shredding machine for domestic or office use having a feed passage 3 leading to a cutting mechanism 10, 11 powered by an electric motor, has a thickness measuring device 15 for measuring the thickness of bundles of paper fed through the feed passage and the machine is controlled by a microprocessor which receives signals from the thickness measuring device and prevents the cutting mechanism from being energised if the thickness measured is above a threshold determined by the microprocessor. The microprocessor varies the threshold in accordance with electrical supply voltage, the electric motor temperature and the electric current drawn by the motor during a previous shredding operation, so that the maximum thickness the shredder will accept can be reduced automatically when motor temperature increases or as the effectiveness of the machine deteriorates throughout its working life.

Publication: [US 20150224513 A1 20150813](#)

Applicant: ACCO UK LIMITED, AYLESBURY, GB
Inventor: Paul A., Aries, Brierley Hill, GB; Michael D., Sawford, Aylesbury, GB
Prio: GB 20070802 0715074.1
Appl.No: US14696778
IPC: B02C 25/00 2006.01 (IA)

Patent Application Publication Aug. 13, 2015 Sheet 1 of 10 US 2015/0224513 A1



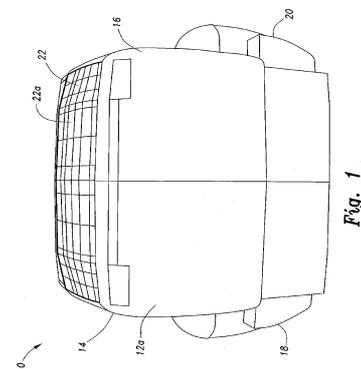
COMPOSTABLE WASTE PROCESSING APPARATUS

The compostable waste processing apparatus includes a pulverizing device and a shredding device in separate compartments within a housing. The pulverizing device and the shredding device may be driven by at least one electronic motor. The electronic motor may be powered by one or more batteries that are charged by a photovoltaic panel of the housing. The compostable waste processing apparatus has a simple and efficient structure to facilitate use by a wide range of end-users, including households.

Publication: [US 20150231637 A1 20150820](#)

Applicant: UMM AL-QURA UNIVERSITY, Makkah, SA;
UMM AL-QURA UNIVERSITY, Makkah, SA
Inventor: DHUHA HAMED NAWAB, ALI, MAKKAH, SA
Prio:
Appl.No: US14181296
IPC: B02C 18/00 2006.01 (IA)

Patent Application Publication Aug. 20, 2015 Sheet 1 of 5 US 2015/0231637 A1



ORGANIC WASTE TREATMENT SYSTEM

A comminution unit for an organic waste treatment system is described. The comminution unit includes a comminution means for comminuting organic waste; a funnel assembly for receiving the organic waste, the funnel assembly being positioned above the comminution means and including at least one inwardly angled section for directing organic waste to the comminution means; a pre-processing assembly being positioned in the funnel assembly and above the comminution means, the pre-processing assembly adapted to agitate and shred the organic waste; a motor for driving the comminution means and the pre-processing assembly about an axis of rotation; and a waste outlet positioned below the comminution means and via which comminuted organic waste is transported away from the comminution unit. The pre-processing assembly includes one or more arms extending radially from the axis of rotation.

Publication: [US 20150231638 A1 20150820](#)

Applicant: PIONEER WASTE MANAGEMENT HOLDINGS TRUST PTY LIMITED, Taren Point, New South Wales, AU; PIONEER WASTE MANAGEMENT HOLDINGS TRUST PTY LIMITED, Taren Point, New South Wales, AU

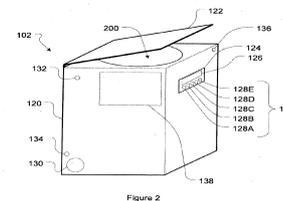
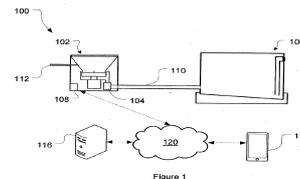
Inventor: Noel, Mancuso, Taren Point, AU

Prio: AU 20120830 2012903769, WO 20150227 PCT/AU2013/000983

Appl.No: US14424972

IPC: B02C 18/00 2006.01 (IA)

Patent Application Publication Aug. 20, 2015 Sheet 1 of 14 US 2015/0231638 A1



FOOD WASTE DISPOSAL

A food waste disposal includes a grinding part configured to grind food waste, a dewatering part configured to receive the ground food waste from the grinding part and to discharge water out of the received food waste, and a connecting frame having a rotating shaft. The dewatering part is rotatably coupled to the connecting frame via the rotating shaft. Further, the dewatering part is configured to be rotated vertically downward away from the grinding part in a top/bottom direction around the rotating shaft.

Publication: [US 20150231639 A1 20150820](#)

Applicant: LG ELECTRONICS INC., Seoul, KR

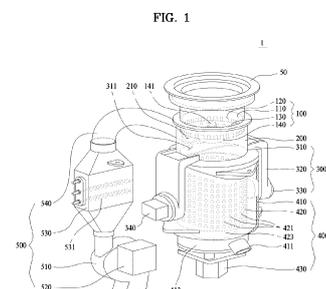
Inventor: Sungmin, KIM, Seoul, KR; Jongseok, KIM, Seoul, KR; Sunki, LEE, Seoul, KR

Prio: KR 20140220 10-2014-0019592

Appl.No: US14624658

IPC: B02C 18/00 2006.01 (IA)

Patent Application Publication Aug. 20, 2015 Sheet 1 of 5 US 2015/0231639 A1



METHOD AND APPARATUS FOR FRACTURING POLYCRYSTALLINE SILICON

The present invention provides a method and an apparatus for fracturing polycrystalline silicon, and the method comprises steps of placing the polycrystalline silicon in a water tank containing water; applying an instant high voltage to the water tank so that high-voltage discharge occurs in the water of the water tank to fracture the polycrystalline silicon. The apparatus comprises a high-voltage transformer (B), a high-voltage rectifier (G), a charging capacitor (C), a disconnecting switch (K), a water tank (F) containing water, and a first electrode (1) and a second electrode (2) which are submerged in the water tank (F), the first electrode and the second electrode being disposed with a certain distance therebetween, wherein a primary winding of the high-voltage transformer (B) is connected to mains supply, a first terminal of a secondary winding of the high-voltage transformer is sequentially connected to the high-voltage rectifier (G), the disconnecting switch (K) and the first electrodes (1), a second terminal of the secondary winding is grounded and connected to the second electrode (2), and the charging capacitor (C) is connected between a common terminal of the high-voltage rectifier (G) and the disconnecting switch (K) and a common terminal of the secondary winding and the second electrode (2). The method and apparatus have advantages of simple process, uniform fragments and no metal contamination.

Publication: [US 20150231642 A1 20150820](#)

Applicant: Xinte Energy Co. Ltd. a limited company; Xinte Energy Co., LTD., Urumqi, Xinjiang, CN

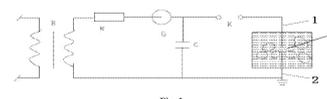
Inventor: Bo, Yin, Urumqi, CN; Guangjian, Hu, Urumqi, CN; Xiqing, Chen, Urumqi, CN; Bin, Huang, Urumqi, CN; Guilin, Liu, Urumqi, CN

Prio: CN 20120918 201210346137.3, WO 20150313 PCT/CN2013/083545

Appl.No: US14428335

IPC: B02C 19/18 2006.01 (IA)

Patent Application Publication Aug. 20, 2015 US 2015/0231642 A1



TUMBLER GRINDER SCREEN

The present disclosure relates generally to a material reducing screen having an inner side and an outer side. The material reducing screen includes a plurality of slot openings and a material tumbler bar extending across the plurality of slot openings. The material reducing screen may be included, for example, in one of a horizontal grinder and a tub grinder.

Publication: [US 20150231643 A1 20150820](#)

Applicant: Vermeer Manufacturing Company, Pella, US

Inventor: Duane R., DeBoef, Sherrard, US

Prio:

Appl.No: US14312295

IPC: B02C 19/20 2006.01 (IA)

Patent Application Publication Aug. 20, 2015 Sheet 1 of 9 US 2015/0231643 A1

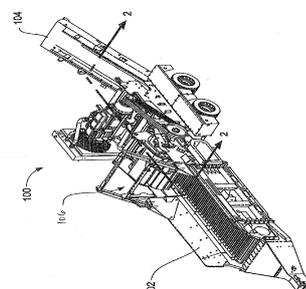


Fig. 1

SHREDDER THICKNESS WITH ANTI-JITTER FEATURE

A shredder includes a housing having a throat for receiving at least one article to be shredded, and a shredder mechanism received in the housing and including an electrically powered motor and cutter elements. The shredder also includes a detector that is configured to detect a thickness of the at least one article being received by the throat, and a controller that is configured to operate the motor to drive the cutter elements to shred the at least one article and to set a flutter threshold higher than the predetermined maximum thickness threshold, if the detected thickness is less than a predetermined maximum thickness threshold. The controller is also configured to thereafter continuously detect the thickness of the at least one article being inserted into a throat of the shredder; and to perform a predetermined operation responsive to the thickness detector detecting that the thickness of the at least one article is greater than the flutter threshold.

Publication: [US 20150231644 A1 20150820](#)

Applicant: Fellowes, Inc., Itasca, US
Inventor: Tai Hoon K., Matlin, Round Lake Beach, US;
Michael Dale, Jensen, Wood Dale, US

Prio:
Appl.No: US14699399
IPC: B02C 25/00 2006.01 (IA)

Patent Application Publication Aug. 20, 2015 Sheet 1 of 9 US 2015/0231644 A1

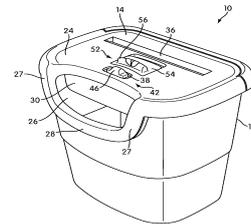


FIG. 1

JAW CRUSHER DRIVING DEVICE

Provided is a jaw crusher driving device in which a driving torque can be transmitted reliably to a rotation driving shaft to perform a crushing operation by strongly fixing a hydraulic pressure motor between a body frame of a jaw crusher and a flywheel. The jaw crusher includes a fixed tooth, a movable tooth, a rotation driving shaft rotatably supported on a body frame, and a pair of flywheels provided in the rotation driving shaft. The driving device includes: a hydraulic pressure motor in which a rotation shaft portion can rotate in relation to a motor body when pressure fluid is supplied; a connector for connecting one flywheel of the pair of flywheels and the rotation shaft portion; and a torque arm provided between the body frame and the motor body so as to prevent the motor body from rotating about an axis of the rotation driving shaft.

Publication: [US 20150238970 A1 20150827](#)

Applicant: NAKAYAMA IRON WORKS, LTD., Takeo-shi, JP;
NAKAYAMA IRON WORKS, LTD., Takeo-shi, JP
Inventor: Hiroshi, Nakayama, Takeo-shi, JP; Hideki,
Tominaga, Takeo-shi, JP

Prio: JP 20140225 2014-34654
Appl.No: US14630103
IPC: B02C 1/02 2006.01 (IA)

Patent Application Publication Aug. 27, 2015 Sheet 1 of 4 US 2015/0238970 A1

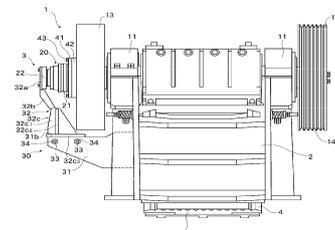


FIG. 1

Shredding System

The present invention relates to a shredder (1) for comminuting organic material to form shreds, comprising a shredding chamber (2) provided with rotatable cutting means (3), wherein the shredder (1) furthermore comprises a fan chamber (6) containing a fan (7) which is connected to the shredding chamber (2) via a passage (4), wherein the fan (7) is configured to generate a suction force which will suck the shreds out of the shredding chamber via the passage and will remove these from the fan chamber (6) via a discharge opening (8). In contrast to the known shredders, the shredder (1) according to the invention no longer has a discharge opening in the shredding chamber and, in addition, no longer requires a calibration grille.

Publication: [US 20150238971 A1 20150827](#)

Applicant: Feltron nv, Otegem, BE; Feltron nv, Otegem, BE

Inventor: Frederic, Lietaer, Otegem, BE

Prio:

Appl.No: US14190444

IPC: B02C 18/22 2006.01 (IA)

Patent Application Publication Aug. 27, 2015 Sheet 1 of 5 US 2015/0238971 A1

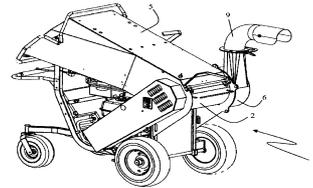


Fig. 1

Method and Device for Fragmenting and/or Weakening Material by Means of High-Voltage Pulses

The invention relates to a method for fragmenting and/or weakening material by means of high-voltage pulses, the material and a processing fluid being arranged in a processing zone formed between two electrodes such that the entire processing zone is flooded with processing fluid, and high-voltage pulses being applied to the electrodes such that high-voltage breakdowns occur between the two electrodes and/or such that predischARGE channels are formed without breakdowns. An electrode with a metallic conductor is chosen for at least one of the two electrodes, the conductor being provided partially or completely with an insulator or insulating coating at the working end of the electrode that is in contact with the processing fluid, the permittivity of the insulator/insulating coating being at least 75% of the permittivity of the processing fluid.

Publication: [US 20150238972 A1 20150827](#)

Applicant: Reinhard, Müller-Siebert, Bern, CH; Fabrice, Monti Di Sopra, Thun, CH; Harald, Giese, Stutensee, DE; Urs, Friedli, Bern, CH

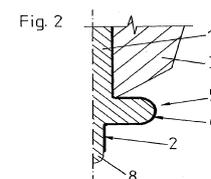
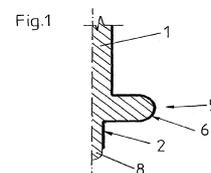
Inventor: Reinhard, Müller-Siebert, Bern, CH; Fabrice, Monti Di Sopra, Thun, CH; Harald, Giese, Stutensee, DE; Urs, Friedli, Bern, CH

Prio: WO 20120824 PCT/CH2012/000203

Appl.No: US14423618

IPC: B02C 19/18 2006.01 (IA)

Patent Application Publication Aug. 27, 2015 Sheet 1 of 10 US 2015/0238972 A1



GRINDING MACHINE

A method for grinding a grinding material in a mill including a grinding body and at least one roller which rolls on the grinding body under a grinding pressure, wherein the grinding material is fed in a stream of grinding material, forms a grinding bed between the grinding body and the roller and is crushed in the grinding bed by the roller, wherein a grinding bed height of the grinding bed between the grinding body and the roller is continuously measured, and wherein the mill is controlled based on control variables to achieve a predetermined nominal condition, wherein the control variables include at least the grinding pressure and the stream of the grinding material and the nominal condition includes at least one nominal value for the grinding bed height, wherein a mechanical condition of the roller and therefrom a stability of the grinding bed are continuously determined.

Publication: [US 20150238973 A1 20150827](#)

Applicant: GBF Gesellschaft fuer Bemessungsforschung
MBH, Aachen, DE

Inventor: Ralf, Haase, Aachen, DE

Prio: DE 20120822 1020121077401

Appl.No: US14615850

IPC: B02C 25/00 2006.01 (IA)

Patent Application Publication Aug. 27, 2015 Sheet 1 of 2 US 2015/0238973 A1

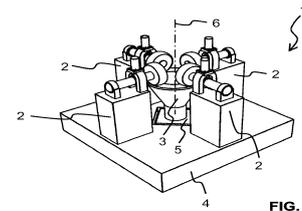


FIG. 1

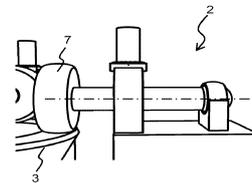


FIG. 2

DEVICE FOR COMMINUTING SOLIDS OR SUSPENSIONS CONTAINING SOLIDS AND METHOD FOR STARTING A COMMINUTING PROCESS OF A MILLING DEVICE

Es ist eine Vorrichtung zum zerkleinernden Bearbeiten von Feststoffen oder Suspensionen mit Feststoffanteilen offenbart. Die Vorrichtung umfasst einen Mahlbehälter mit einer Vielzahl von im Mahlbehälter aufgenommenen Mahlkörpern, wenigstens eine sich stirnseitig in den Mahlbehälter erstreckende Antriebswelle und mehrere im Mahlbehälter positionierte und von der Antriebswelle rotierende bewegbare Rührelemente. Zwischen wenigstens einem der mehreren Rührelemente und der Antriebswelle ist ein Drehspiel ausgebildet, welches eine koaxiale und begrenzte relative Drehbewegung des wenigstens einen Rührelementes zur Antriebswelle erlaubt.

Publication: [EP 2902110 A1 20150805](#)

Applicant: NETZSCH-Feinmahltechnik GmbH,
Sedanstrasse 70, 95100 Selb, DE

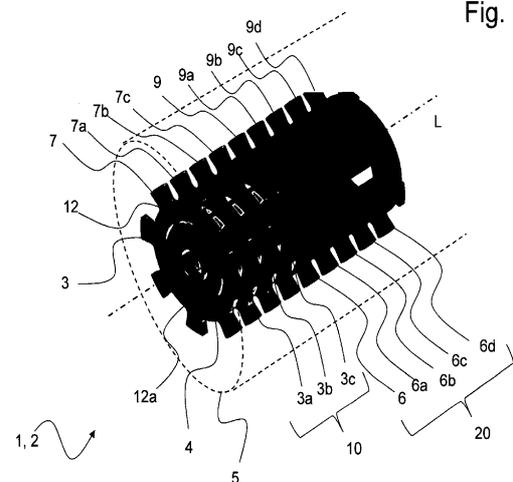
Inventor: Götzel, Arne, Grenzweg 19, 08248 Klingenthal,
DE

Prio: DE 20140130 102014101165

Appl.No: EP15000096

IPC: B02C 17/16 2006.01 (IA)

Fig. 1



Unit for feeding sheet material for a document shredder

Die Erfindung betrifft eine Einheit zum Zuführen von blattförmigem Material für einen Aktenvernichter, wobei die Einheit einen Grundkörper aufweist, an welchem eine Papierauflage, mit einer Auflagefläche, so angeordnet ist, dass mit wenigstens einem Fördererelement von einem auf die Auflagefläche aufgelegten Stapel Papier / blattförmigen Material nacheinander folgend jeweils ein Blatt abgezogen und zu einem Zuführschlitz des Aktenvernichters hin transportiert wird, wobei das wenigstens eine Fördererelement eine Förderrolle ist, deren Mantelfläche eine Vielzahl von strukturierten Teilflächen aufweist, so dass die Haftreibung zwischen dieser Förderrolle und dem betreffenden Blatt erhöht wird.

Publication: [EP 2902111 A1 20150805](#)

Applicant: Schwelling, Hermann, Hartmannweg 5, 88682 Salem, DE

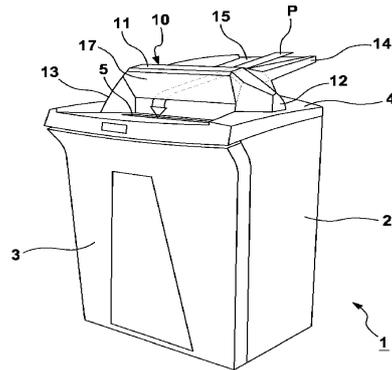
Inventor: Schwelling, Hermann, Hartmannweg 5, 88682 Salem, DE

Prio: DE 20140122 102014100716

Appl.No: EP15152180

IPC: B02C 18/00 2006.01 (IA)

Fig. 1



Agitator ball mill

Eine Rührwerkskugelmühle umfasst eine Mahlkammer (1), eine in die Mahlkammer (1) hineinragende, drehbar gelagerte Rührwelle (5), auf der als Schaufelräder ausgebildete Rührorgane (10, 20, 30) axial in einem Abstand voneinander angeordnet sind, und einen Einlass (6) zur Zufuhr von Mahlgut und Mahlkörpern sowie einen Auslass (7) zur Entnahme des gemahlten Guts. Die Rührorgane (10, 20, 30) sind so ausgebildet, dass sie im Betrieb ein aus zu mahlendem bzw. dispergierendem Gut und Mahlkörpern bestehendes Gemisch durch ihr Inneres von der Rührwelle (5) weg nach aussen fördern. In der Mahlkammer (1) sind mit der Rührwelle (5) drehfest verbundene Rückförderorgane (17, 27, 37; 47; 57) angeordnet, welche das Gemisch seitlich neben und/oder zwischen den Rührorganen (10, 20, 30) nach innen zur Rührwelle (5) hin fördern.

Publication: [EP 2905080 A1 20150812](#)

Applicant: Willy A. Bachofen AG, Junkermattstrasse 11, 4132 Muttenz, CH

Inventor: Die Erfindernennung liegt noch nicht vor

Prio:

Appl.No: EP14154350

IPC: B02C 17/16 2006.01 (IA)

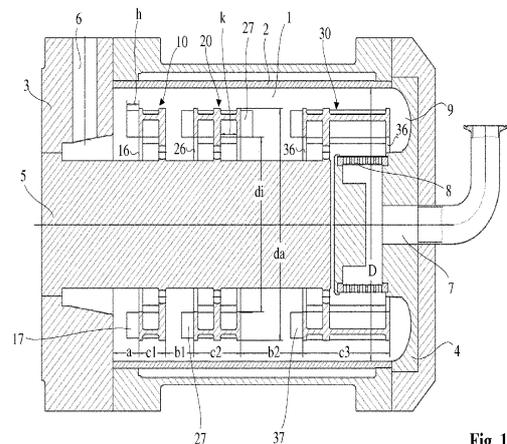


Fig. 1

Basket mill with milling area sealing

Tauchmühle, die um eine Rührwelle (4) angetrieben wird, umfassend eine Mahlraumabdichtung zwischen der Rührwelle (4) und einem Mahlraum, der durch ein Mahlraumgehäuse (11) gebildet wird, mit einem Spaltsieb (8), das eine Seitenwand des Mahlraumgehäuses (11) bildet, mit einem Dichtring (13) oder zwei Spaltringen (32, 33), der oder die das Mahlraumgehäuse (11) gegenüber der Rührwelle abdichtet, gekennzeichnet durch eine Trägerplatte (20), die um die Rührwelle angeordnet ist, und die den Dichtring (13) oder den Außen-Spaltring aufnimmt, wobei die Trägerplatte (20) schwimmend in Bezug zum Mahlraumgehäuse gelagert ist, ohne dabei mit der Rührwelle mitzudrehen.

Publication: [EP 2905081 A1 20150812](#)

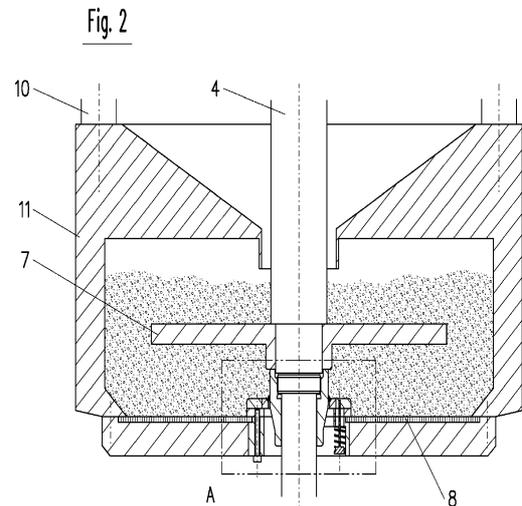
Applicant: Wilhelm Niemann GmbH & Co KG,
Nordlandstraße 16, 49326 Melle-
Neuenkirchen, DE

Inventor: Niemann, Frank, Nordlandstraße 16, 49326
Melle-Neuenkirchen, DE

Prio: DE 20140205 102014101436, DE 20141217
102014118909

Appl.No: EP15151982

IPC: B02C 17/16 2006.01 (IA)



Device for biogas facilities for comminuting and milling of liquid-solid mixtures

Die Vorrichtung dient zur Verwendung in Biogasanlagen zum Zerkleinern und Zermahlen von Flüssig-Feststoffgemischen. Sie besteht aus einer Kugelmühle (10) mit einer um eine horizontale Achse drehbar angetriebenen, mit Kugeln (30) befüllten Trommel (24), die an einer Stirnseite durch einen Deckel (22) und an der anderen Stirnseite durch einen Boden (20) geschlossen ist. An beiden Stirnseiten ist eine Drehdurchführung (26) für die kontinuierliche Beschickung mit dem zu zerkleinernden Gut bzw. für die kontinuierliche Abgabe des zerkleinerten Gutes vorgesehen. Dabei ist es besonders vorteilhaft, wenn die zylindrische Innenwand (34) der Trommel (24) konzentrisch in einer zylindrischen Außenwand (36) freischwebend und mechanisch entkoppelt gelagert ist. Hierzu kann zwischen Innenwand (34) und Außenwand (36) eine Dämmschicht (38) eingesetzt sein.

Publication: [EP 2907577 A1 20150819](#)

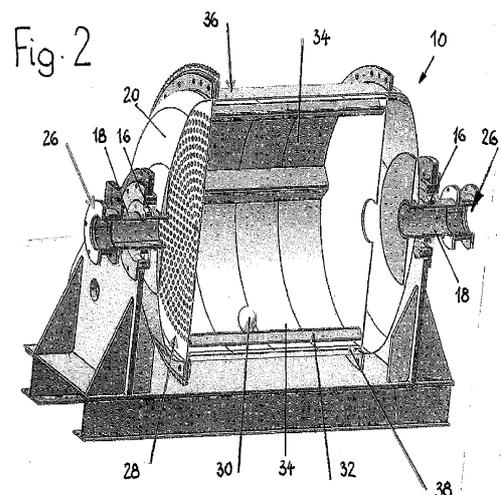
Applicant: Geisberger Gesellschaft für
Energieoptimierung mbH, Hassenham 4,
84419 Schwindegg, DE

Inventor: Geisberger, Maximilian, Hassenham 4, 84419
Schwindegg, DE

Prio: DE 20140213 202014100640 U

Appl.No: EP15154986

IPC: B02C 17/04 2006.01 (IA)



Grinding container for grinding mill with at least one plug

Es ist ein Mahlbehälter (1) für eine Zerkleinerungsmühle offenbart. Der Mahlbehälter (1) umfasst einen Behältermantel (9), der einen Mahlraum (M) definiert, wenigstens eine den Behältermantel (9) durchdringende Öffnung (3), die einen Zugang zum Mahlraum (M) bereitstellt und wenigstens einen abnehmbar am Mahlbehälter (1) gehaltenen und die Öffnung (3) verschließenden Stopfen (5). Dem Stopfen (5) und dem Behältermantel (9) ist wenigstens eine elastisch verformbare Dichtungseinheit (7) zwischengeordnet. Die Dichtungseinheit (7) bildet zumindest bereichsweise einen winklig gegenüber einer Außenmantelfläche des Stopfens (5) angestellten und in Richtung des Mahlraums (M) geneigten Dichtungsabschnitt (8) aus, der kraftbeaufschlagt mit der Außenmantelfläche des Stopfens (5) in Oberflächenkontakt gebracht ist.

Publication: [EP 2907578 A1 20150819](#)

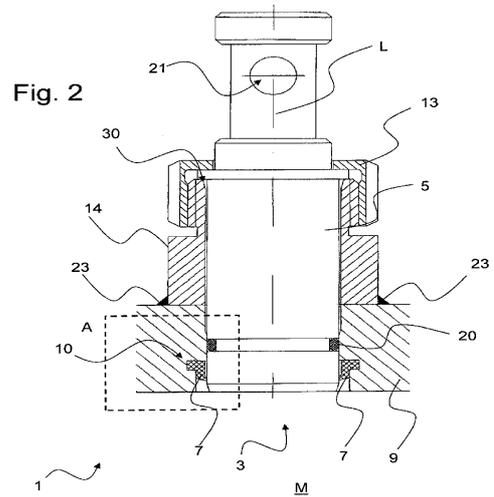
Applicant: NETZSCH-Feinmahltechnik GmbH,
Sedanstrasse 70, 95100 Selb, DE

Inventor: Pausch, Horst, Max-Reger-Straße 3, 95126
Schwarzenbach, DE

Prio: DE 20140212 102014101699

Appl.No: EP15000154

IPC: B02C 17/16 2006.01 (IA)



OAT PROCESSING APPARATUS AND METHOD

An oats processing equipment comprises at least two groups of awners and at least two groups of oat grinders, with awners within the same group being connected in parallel or in series, and oat grinders within the same group being connected in parallel or in series, preferably 3 to 4 groups of awners and oat grinders are included. An oat processing method comprises steps of: (S00) classifying oats subjected to surface processing according to grain sizes; (S10) feeding oats of a certain class into a plurality of groups of awners for more than two stages of awn removing; and (S20) feeding the oats subjected to the awn removing into a plurality of groups of oat grinders for more than three stages of grinding. The inputted load of a single awner and an oat grinder is limited, thus achieving the technical effect of grinding oats gently and separating the oats finely.

Publication: [EP 2910307 A1 20150826](#)

Applicant: Inner Mongolia Sanzhuliang Natural Oats Industry Corporation, Siyuan North Road east side Sunshine Boulevard north side Ruyi Industrial New District Economic and Technological Development Zone, Hohhot City, Inner Mongolia 010030, CN

Inventor: SUN, Zuobang, Siyuan North Road east side, Sunshine Boulevard north side, Ruyi Industrial New District, Economic and Technological Development Zone, Hohhot City, Inner Mongolia 010030, CN; SUN, Zhi, Siyuan North Road east side, Sunshine Boulevard north side, Ruyi Industrial New District, Economic and Technological Development Zone, Hohhot City, Inner Mongolia 010030, CN; WANG, Wei, Siyuan North Road east side, Sunshine Boulevard north side, Ruyi Industrial New District, Economic and Technological Development Zone, Hohhot City, Inner

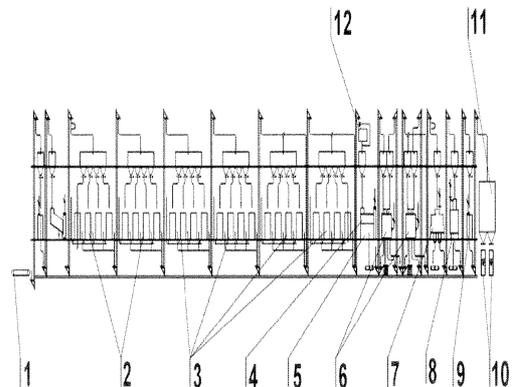


Figure 1

Mongolia 010030, CN
Prio: CN 20121018 201210397367
Appl.No: EP12854554
IPC: B02B 5/02 2006.01 (IA)

DEVICE FOR PRESSING EMPTY CONTAINERS TOGETHER AND METHOD THEREFOR

Vorrichtung zum Zusammendrücken leerer Behälter, insbesondere Getränkeflaschen oder -dosen aus Kunststoff, insbesondere aus PET, oder Weißblech, umfassend • ein Gehäuse (1), mit einer Einfüllöffnung (2) sowie einer Ausgangsöffnung (3), und • eine im Gehäuse (1) angeordnete Schneid- und Presseeinheit (4) sowie • Mittel zum Antrieb und zur Steuerung der Schneid- und Presseeinheit (4), wobei • die Schneid- und Presseeinheit (4) wenigstens zwei, bezüglich ihren Drehachsen zueinander beabstandet angeordnete Walzen (4.1 und 4.2) enthält, dadurch gekennzeichnet, dass • jede der Walzen (4.1 und 4.2), in Längsrichtung ihrer Drehachse (A1; A2) gesehen, zwei Arten von mehreren Abschnitten (S1 und S2) aufweist, wobei • nacheinander im Wechsel folgende Abschnitte (S1 und S2) jeweils einen anderen äußeren Durchmesser (D1; D2) besitzen, und, • im montierten Zustand der beiden Walzen (4.1 und 4.2), wenigstens die den größeren äußeren Durchmesser (D2) aufweisenden Abschnitte (S2) zueinander versetzt und mit ihren Umfangsflächen teilweise kämmend /überlappend nebeneinander angeordnet sind und somit jeweils eine Schneidscheibe (5) bilden, deren Umfangsflächen (5.1) jeweils wenigstens eine Nut besitzt, und die den kleineren äußeren Durchmesser (D1) aufweisenden Abschnitte (S1) mehrere radial nach innen gerichtete, bis zu einem Kerndurchmesser (4.3) reichende Einstiche (E) besitzen derart, dass mehrere Druckscheiben (6) gebildet sind, die jeweils mit der Breite (B3) des Einstiches (E) zueinander beabstandet sind.

Publication: [EP 1620252 B1 20150812](#)

Applicant: Schwelling, Hermann, Hartmannweg 5, 88682 Salem, DE

Inventor: Schwelling, Hermann, Hartmannweg 5, 88682 Salem, DE

Prio: DE 20030427 10320509, DE 20030526 10325368, DE 20031113 10353188

Appl.No: EP4728172

IPC: B02C 18/18 2006.01 (IA)

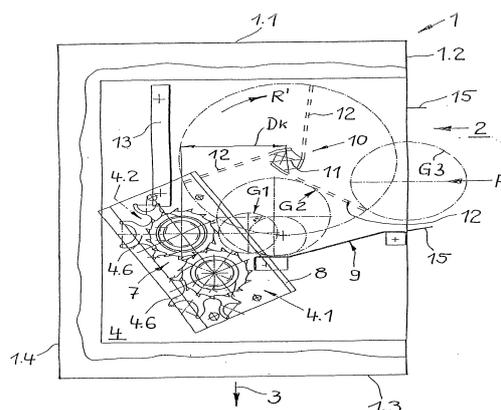


Fig. 1

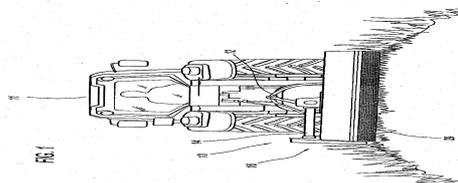
Apparatus for shredding a material

Vorrichtung (10) zum Zerkleinern eines Materials, insbesondere eines Pflanzenmaterials, vor allem Grasmaterial, wobei die Vorrichtung einen Rotor (18) umfasst, der mit einer Vielzahl an Zerkleinerungselementen (32) versehen ist, die auf dem Rotor (18) angelenkt sind und mit jeweiligen Schneidmitteln (34) zusammenwirken, um das Material zu zerkleinern, wobei die Vorrichtung dadurch gekennzeichnet ist, dass der Körper (32) des Zerkleinerungselements einen schmalen Gelenkabschnitt (40) und einen breiten Endabschnitt (42), der jeweilige sich quer über die jeweiligen seitlichen Kanten (40a, 40b) des schmalen Gelenkabschnitts (40) des Zerkleinerungselements erstreckende Querenden (42a, 42b) aufweist, umfasst; dass der schmale Gelenkabschnitt des Zerkleinerungselements (32) eine Bohrung (38) aufweist, durch die das Zerkleinerungselement um eine Achse schwenkbar ist, die im Wesentlichen senkrecht zum Körper (32) des Zerkleinerungselements ist; und dass der breite Endabschnitt (42) eine sich quer erstreckende Kante (36) ausbildet, um das am Ende des Körpers (32) bereitgestellte Material einzugreifen und zu zerkleinern.

Publication: [EP 1869963 B1 20150805](#)

Applicant: Nobili S.p.A., Via Circonvallazione Sud, 46, 40062 Molinella (Bologna), IT

Inventor: Rossi, Mario, Via Montello, 15, 40062 Molinella (Bologna), IT



METHOD FOR GRINDING CALCIUM CARBONATE IN WATER IN THE PRESENCE OF AN ACRYLIC POLYMER SOLUTION AND A CARBONATE ALKALINE SALT MANUFACTURED IN SITU IN SAID SOLUTION

Verfahren zur Herstellung einer wässrigen Suspension von Calciumcarbonat durch Mahlen in Wasser mit mindestens einem wasserlöslichen Acrylsäurepolymer unter Eintragen mindestens eines Alkalicarbonatsalzes in die Suspension, bei dem man: a) in eine wässrige Lösung mindestens ein wasserlösliches Acrylsäurepolymer, das sauer oder teilweise oder vollständig neutralisiert ist, und ein Alkalihydroxid in flüssiger Form einträgt, wobei die verwendete Hydroxidmenge größer ist als die zur vollständigen Neutralisation des Polymers notwendige Menge, b) in die Lösung vor und/oder während und/oder nach Schritt a), vorzugsweise nach Schritt a), gasförmiges Kohlendioxid einträgt, c) die nach Schritt b) erhaltene Lösung in eine Calciumcarbonat enthaltende wässrige Suspension einträgt, d) die Suspension mahlt.

Publication: [EP 2686387 B1 20150812](#)

Applicant: Coatex S.A.S, 35 rue Ampère Z.I. Lyon Nord, 69730 Genay, FR

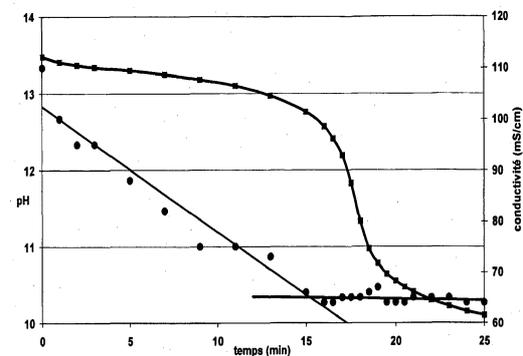
Inventor: GUERRET, Olivier, Piquegraille, F-46170 Pern, FR; JACQUEMET, Christian, 24 Allée Henriette, F-69005 Lyon, FR

Prio: FR 20110318 1152228

Appl.No: EP11813364

IPC: C09C 1/02 2006.01 (IA)

FIGURE 1 / 1

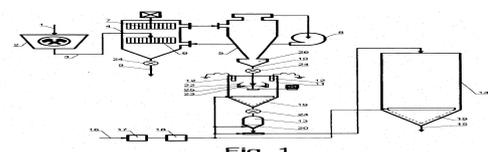


Method of obtaining protected against caking ultrafine fractions of rain raw materials such as chalk, gypsum, limestone, and system for this method execution

Verfahren zum Schutz gegen Zusammenbacken ultrafeiner Fraktionen von Rohmaterialien wie Kalk, Gips, Kalkstein, wobei anfänglich das Rohmaterial in eine Prallmühle, vorzugsweise Hammermühle zugeführt wird, wo es einer Zerkleinerung mit gleichzeitiger mechanischer Aktivierung von Körnern unterzogen wird und das so erhaltene Produkt, das eine polydisperse Mischung von Körnern mit breitem Spektrum von Korngröße ist, wird über eine pneumatische Förderleitung in einen dynamischen Separator geleitet, wo die grobe Fraktion mit Korngröße von über 90 μm getrennt und durch ein Entladesystem aus dem Separator nach außen geleitet wird, während aus der mit einem zirkulierenden Gasstrom mitgerissenen, in den oberen Teil von Separator geführten Fraktion mit Korngröße unten 90 μm , eine gewünschte feine Fraktion, vorzugsweise unten 40 μm ausgeschieden, in den Zyklonabscheider vom zirkulierenden Gas getrennt und in einen Sammelbehälter abgeleitet wird, dadurch gekennzeichnet, dass das erhaltene ultrafeine im Sammelbehälter (26) unter Zyklonabscheider (5) gesammelte Schüttgut vor weiterem Transport und Lagerung einer Konditionierung unterzogen wird, die daraus besteht, dass das vom Gas getrennte feinkörnige, im Prallmühle (2) mechanisch aktivierte Schüttgut, durch das Entladesystem (10) mit Schwerkraft, vorzugsweise durch eine Zellenradschleuse (24) in einen mechanischen Desintegrator (11) geführt wird, wo die Körner einer mechanischen de - Agglomeration und Aktivierung unterzogen werden als auch Ableitung der elektrostatischen Aufladung aus der Fläche von elektrisierten Körnern durch spontanes miteinander und mit Komponenten einer festen Palisade von Aufprallstangen (25) als auch mit über den gesamten Umfang des Desintegrators (11) angeordneten, die die elektrostatischen Aufladung aufnehmenden Komponenten und zwar metallische Elektroden im Form von Stangen oder vorz... (+742)

Publication: [EP 2689854 B1 20150826](#)

Applicant: Innowacyjne Przedsiębiorstwo Wielobranzowe POLIN sp. z o.o., Ul. Francuska 35/37, 40-028 Katowice, PL



Inventor: Bis, Zbigniew, ul. Traugutta 77R, 42-215
Czestochowa, PL
Prio: PL 20120726 40015012
Appl.No: EP12460055
IPC: B02C 13/00 2006.01 (IA)

BOTTOM GRATE OF A CRUSHER OR DRUM CHIPPER AND METHOD OF PRODUCING THE BOTTOM GRATE

Bodenrost (7) für einen Häcksler (1) zum Häckseln und/oder Zerkleinern von Material, der Häcksler mit (1) mit einem stationären Körper (3), einem zylindrischen Rotor (5), der drehbar auf Lagern angebracht ist, wobei der äußere Umfang des Rotors (5) mit Zerdrück- und/oder Schneidklingen (55) versehen ist, und wobei unterhalb des Rotors (5) ein gekrümmter Bodenrost (7) vorgesehen ist, der der Form des Rotors (5) entspricht, wobei der Bodenrost (7) mit gekrümmten Endabstützelementen (11) und Zwischenabstützelementen (13) im Wesentlichen senkrecht zu der Achse des Rotors (5) und mit Klingen (9) im Wesentlichen parallel zu der Achse des Rotors (5) versehen ist, dadurch gekennzeichnet, dass der Bodenrost (7) durch Drücken montiert wird, sodass eine Drückkraft zwischen zwei Abstützelementen (11,13) des Bodenrosts (7) ausgebildet wird, welche aus einem Paar Endabstützelemente (11) oder einem Paar Zwischenabstützelemente (13) oder einem Endabstützelement und einem Zwischenabstützelement (13) bestehen, indem außer Eingriff bringbare Zugelemente (17), die auf den zwei Abstützelementen (11,13) im Wesentlichen parallel zur Achse des Rotors (5) abgestützt werden, in Eingriff gebracht werden, wobei eine oder mehrere Klingen (9) des Bodenrosts (7) und die Abstützelemente (11,13) zueinander gedrückt werden.

Publication: [**EP 2704837 B1 20150812**](#)

Applicant: Andritz Oy, Tammasaarenkatu 1, 00180
Helsinki, FI
Inventor: KALJUNEN, Markku, Ripistönkatu 26, FI-15300
Lahti, FI; KOKKO, Pekka, Pähkinätie 31, FI-
16710 Hollola, FI
Prio: FI 20110506 20115439
Appl.No: EP12724350
IPC: B02C 13/284 2006.01 (IA)

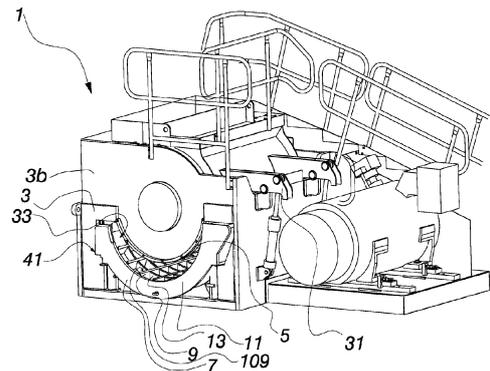


Fig. 1

Verfahren zur Einarbeitung von Vertiefungen in einer Walzenrolle

Die Erfindung betrifft ein Verfahren zur Einarbeitung von Vertiefungen in die Oberfläche einer Walzenrolle für eine Walzenpresse. Erfindungsgemäß ist vorgesehen, ein thermisches Behandeln einer zylindrischen Walzenoberfläche, wobei die Walzenoberfläche im Bereich der erwünschten Vertiefungen so stark erwärmt wird bis sich die Materialeigenschaften der Walzenoberfläche in Bezug auf die Härte des Walzenmaterials dauerhaft, das heißt auch nach Abkühlung, verändern. Durch eine erstmalige Inbetriebnahme bildet sich die erwünschte Profilierung durch die erwünschten Vertiefungen spontan aus. Die thermische Behandlung bedeutet eine besonders einfache und kostengünstige Methode zur Profilierung von Walzenrollen. besonders bereits verschlissene Walzenrollen können so leicht aufgearbeitet werden.

Publication: [**DE 102014002366 A1 20150820**](#)

Applicant: KHD Humboldt Wedag GmbH, 51067, Köln, DE
Inventor: Kopp, Günther, 51107, Köln, DE; Brendler,
Dieter, 51465, Bergisch Gladbach, DE
Prio:
Appl.No:
IPC: B02C 4/30 2006.01 (IA)

"Lochscheibe mit integrierter Formstufe für Schneidsätze von vorzugsweise nach dem Wolfwerkzeug-Wirkprinzip arbeitenden Schneidemaschinen"

Die Erfindung betrifft die Gestaltung von Messern für vorzugsweise nach dem Wolfwerkzeug-Wirkprinzip arbeitende Schneidemaschinen mit dem Ziel der Leistungssteigerung und Qualitätsverbesserung. Die Lochscheibe (1) erhält von einer Seite (2), wie üblich, mit der Einbringtiefe a (7) senkrecht verlaufende gerade Bohrungen (3). Von der gegenüberliegenden Seite (2) sind im Bereich b (8) im Winkel α ; (5) kleiner 90 Grad zur Senkrechten schräg verlaufende Bohrungen (6) eingebracht. Somit entsteht eine Abknickung (4) im Bohrungsdurchgang. Dieser Knick (4) erhöht die Stabilität und es werden Schwingungen weitestgehend vermieden, sowie Durchbiegungen während des Trennprozesses verhindert. In der Folge verbessert sich die Abscherwirkung des Messers, weil die Messerschneiden durchgängig an der Lochscheibenoberfläche anliegen können. Je nach bevorzugtem Einbau können der Rohstoffeintritt bzw. der Rohstoffaustritt entweder auf der Lochscheibenseite (2) mit den senkrechten Bohrungen (3) oder auch auf der Seite mit den Schrägbohrungen (6) erfolgen. Der Winkel α ; (5), die Einbringtiefe a (7) der geraden Bohrungen und der Bereich b (8) der Schrägbohrungen können in Abhängigkeit vom Zustand des zu verarbeitenden Rohstoffes ausgewählt werden. Dabei liegt das Verhältnis der Länge a (7) der Geradlochbohrung (3) zum Bereich b (8) des Verlaufs der Schrägbohrung (6) zwischen 1:1 bis 3:1.

Publication: [DE 102014002518 A1 20150827](#)

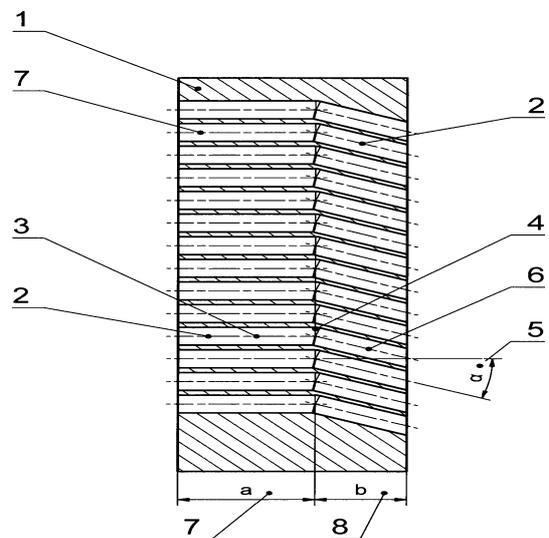
Applicant: INOFEX Fleisch-, Lebensmitteltechnik und -technologie GmbH, 06108, Halle, DE

Inventor: Haack, Eberhard, Dr.-Ing., 06108, Halle, DE; Zhu, Tianguang, Suzhou, CN

Prio:

Appl.No:

IPC: B02C 18/36 2006.01 (IA)



Antriebsanordnung für eine Vertikal-Rollenmühle

Antriebsanordnung für eine Vertikal-Rollenmühle, mit einem Gehäuse (10); mit einer Druckplatte (11), die um eine vertikale Druckplattendrehachse (12) drehbar an dem Gehäuse (10) abgestützt ist und die einen Abtrieb der Antriebsanordnung bildet; mit einer Getriebeeinrichtung (13), die unterhalb der Druckplatte (11) in dem Gehäuse (10) angeordnet ist und die mit der Druckplatte (11) in Drehantriebsverbindung steht; mit mehreren Elektromotoren (14), die unterhalb der Getriebeeinrichtung (13) in dem Gehäuse (10) angeordnet sind, wobei jeder Elektromotor (14) eine radial versetzt zur Druckplattendrehachse (12) verlaufende Rotordrehachse (15) aufweist, und wobei die Rotordrehachsen (15) der Elektromotoren (14) mit der Getriebeeinrichtung (13) in Drehantriebsverbindung stehen; wobei jeder Elektromotor (14) über jeweils mehrere radial versetzt zur jeweiligen Rotordrehachse (15) verlaufende, ausschließlich gehäusefest gelagerte Wellen (16, 17) in ein für alle Elektromotoren (14) gemeinsames Hohlrad (18) eintreibt, welches mit der Druckplatte (11) in Drehantriebsverbindung steht.

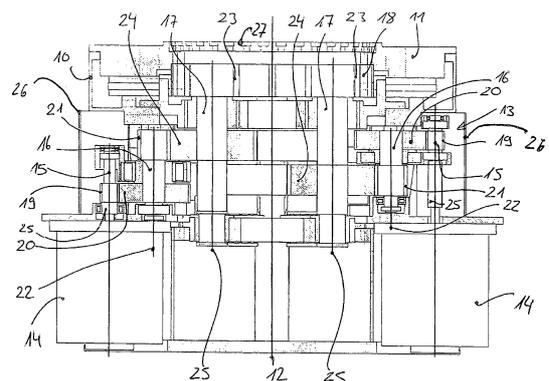
Publication: [DE 102014002867 A1 20150820](#)

Applicant: Renk Aktiengesellschaft, 86159, Augsburg, DE

Inventor: Boiger, Peter, 86199, Augsburg, DE; Sommer, Ingo, 86609, Donauwörth, DE

Prio:

Appl.No:



IPC: B02C 15/04 2006.01 (IA)

Brecher mit einstellbarem Exzenter

Die vorliegende Erfindung betrifft einen Brecher (1) mit einem Brechorgan (10), das über ein Exzenterelement (11) wirkverbunden angetrieben ist, sodass durch eine über das Exzenterelement (11) erzeugbare Brechbewegung in den Brecher (1) eingebbares Brechgut zerkleinerbar ist. Erfindungsgemäß ist wenigstens eine Exzenterbuchse (12) vorgesehen, die über eine Wirkoberfläche (13) mit dem Exzenterelement (11) durch einen Reibschluss in Verbindung steht, und wobei die Exzenterbuchse (12) eine Druckmittelkammer (14) aufweist, die derart in die Exzenterbuchse (12) eingebracht ist, dass bei einer Druckbeaufschlagung der Druckmittelkammer (14) der Reibschluss zwischen dem Exzenterelement (11) und der Exzenterbuchse (12) veränderbar ist.

Publication: [DE 102014101240 A1 20150806](#)

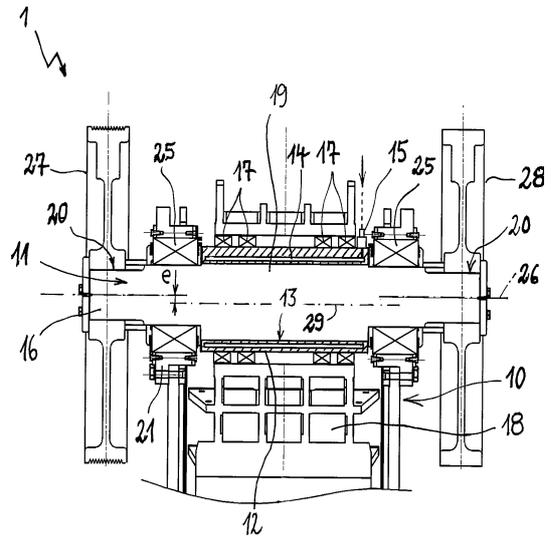
Applicant: ThyssenKrupp AG, 45143, Essen, DE;
ThyssenKrupp Industrial Solutions AG, 45143, Essen, DE

Inventor: Tschelina, Piotr, Dr., 59269, Beckum, DE;
Leuschen, Guido, Dr., 48231, Warendorf, DE;
Papajewski, Detlef, 44879, Bochum, DE

Prio:

Appl.No:

IPC: B02C 2/04 2006.01 (IA)



Gegenläufige Stiftmühle

Die Erfindung betrifft eine gegenläufige Stiftmühle (10), insbesondere zur Vermahlung von Lebensmitteln, bestehend aus einer Gehäuseanordnung (12) mit zumindest einem ersten und einem zweiten Gehäuseteil (28, 30), zwei darin koaxial zueinander auf einer Mahlachse (13) angeordneten Mahlwellen (14, 16), von denen mindestens eine Mahlwellen (14, 16) einen Mahlguteinlass aufweist und hohl ausgeführt ist, durch die einem Mahlraum (17) Mahlgut zuführbar ist, zwei auf den einander zugewandten Enden (18, 20) der Mahlwellen (14, 16) zueinander parallel angeordneten Mahlscheiben (22, 24), einem Mahlgutauslass, durch den aus dem Mahlraum (17) Mahlgut abführbar ist, wobei mindestens ein Gehäuseteil (28, 30) längs der Mahlachse (13) über Lagermittel verschiebbar ausgebildet ist.

Publication: [DE 102014101786 A1 20150813](#)

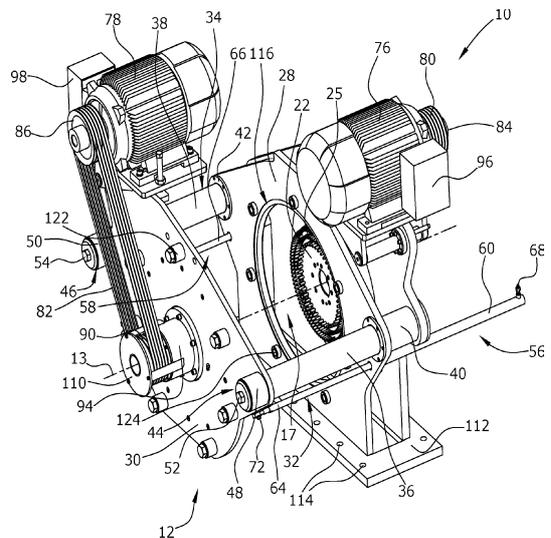
Applicant: Hamburg Dresdner Maschinenfabriken GmbH, 01239, Dresden, DE

Inventor: Holl, Wolfgang, 21720, Guderhandviertel, DE

Prio:

Appl.No:

IPC: B02C 13/22 2006.01 (IA)



Tauchmühle mit Mahlraumabdichtung

Tauchmühle, die um eine Rührwelle (4) angetrieben wird, umfassend eine Mahlraumabdichtung zwischen der Rührwelle (4) und einem Mahlraum, der durch ein Mahlraumgehäuse (11) gebildet wird, mit einem Spaltsieb (8), das eine Seitenwand des Mahlraumgehäuses (11) bildet, mit einem Dichtring (13) oder zwei Spaltringen (32, 33), der oder die das Mahlraumgehäuse (11) gegenüber der Rührwelle abdichtet, gekennzeichnet durch eine Trägerplatte (20), die um die Rührwelle angeordnet ist, und die den Dichtring (13) oder den Außen-Spaltring aufnimmt, wobei die Trägerplatte (20) schwimmend in Bezug zum Mahlraumgehäuse gelagert ist, ohne dabei mit der Rührwelle mitzudrehen.

Publication: [DE 102014118909 A1 20150806](#)

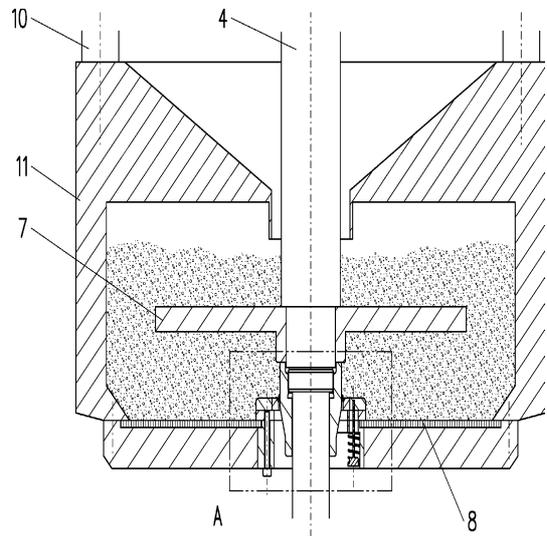
Applicant: Wilhelm Niemann GmbH & Co. KG
Maschinenfabrik, 49326, Melle, DE

Inventor: Niemann, Frank, 49326, Melle, DE

Prio: DE 20140205 10 2014 101 436.7

Appl.No:

IPC: B02C 17/16 2006.01 (IA)



Mobile Vorrichtung zur Behandlung von wertstoffhaltigem Abbaugut

Die Erfindung betrifft eine mobile Vorrichtung (1) zur Behandlung von wertstoffhaltigem Abbaugut, mit einer das Abbaugut brechenden Zerkleinerungsvorrichtung (5), wenigstens einer ersten das zerkleinerte Abbaugut in eine wertstoffhaltige Fraktion und eine Abfallfraktion trennende Sortiervorrichtung (6), sowie einem die wertstoffhaltige Fraktion aufnehmenden Container (8), wobei die Zerkleinerungsvorrichtung (5), die Sortiervorrichtung (6) und der Container (8) auf einem Fahrgestell (2) aufgenommen sind.

Publication: [DE 102014202792 A1 20150820](#)

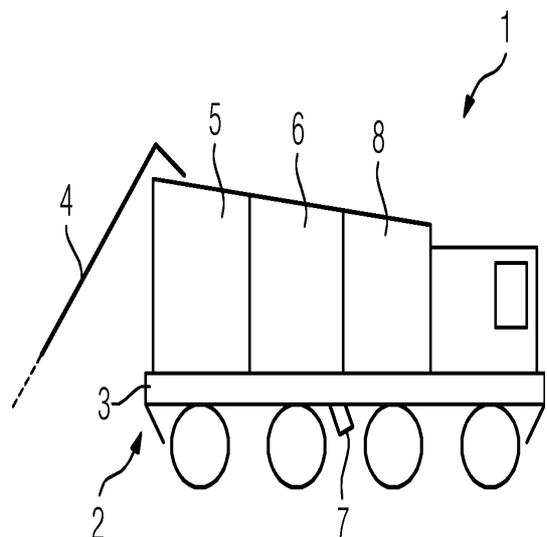
Applicant: Siemens Aktiengesellschaft, 80333, München, DE

Inventor: Friedrichs, Patrick, 52531, Übach-Palenberg, DE; Meyer, Franz Michael, Prof. Dr., 52066, Aachen, DE; Stoltz, Nicolas, 52062, Aachen, DE; Wolfrum, Sonja, Dr., 91052, Erlangen, DE

Prio:

Appl.No:

IPC: B02C 21/02 2006.01 (IA)



Schreddernetzwerk und Verfahren zum Schreddermanagement

Ein Schreddernetzwerk weist ein Serversystem auf, ein Netzwerk-Managementsystem, das mit dem Serversystem zum Verarbeiten von Daten kommuniziert, und mehrere Schredder. Jeder der mehreren Schredder weist einen Schneidmechanismus auf, der zum Zerkleinern von dort zugeführtem Material betrieben werden kann, eine Steuerung, die von mehreren Sensoren Daten empfängt, und ein Kommunikationsmodul zum Herstellen eines Kommunikationsprotokolls zwischen dem Schredder und dem Serversystem oder dem Netzwerk-Managementsystem.

Publication: [DE 102015001459 A1 20150806](#)

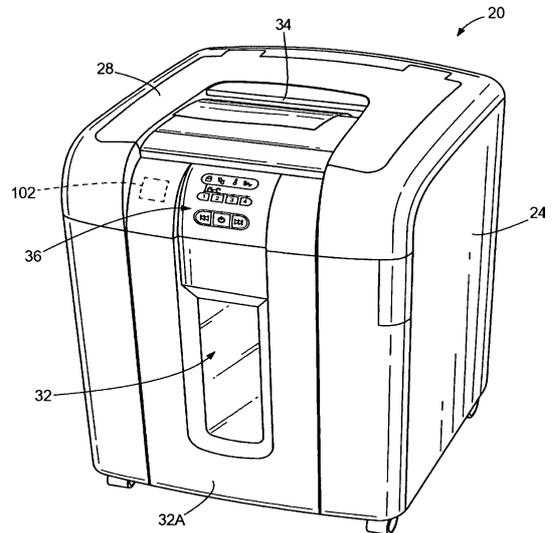
Applicant: ACCO BRANDS CORPORATION, Ill., Lake Zurich, US

Inventor: Aries, Paul A., West Midlands, Brierley Hill, GB; Stranders, Michael, Herts, Tring, GB

Prio: US 20140205 61/935,993

Appl.No:

IPC: B02C 18/00 2006.01 (IA)



VERTICAL TYPE CRUSHER

PROBLEM TO BE SOLVED: To provide a suitable technology for efficiently crushing raw material, in a vertical type crusher using an auxiliary roller. **SOLUTION:** During operation of a vertical type crusher 1A, raw material discharged from a rotary table 2 to reach an annular passage, is positively blown up to a classification mechanism so that an amount of the raw material unnecessarily remaining in the crusher may be reduced, due to a greater blowing-up angle formed with an armor ring A1 having a greater fitting angle arranged in an area of an annular passage 30A to which the raw material including a greater amount of fine grains crushed by a crushing roller 3 flows. In addition, the raw material in the crusher is positively returned onto the rotary table so that a pressure loss of gas flowing in the crusher may be reduced, due to a smaller blowing-up angle formed with an armor ring A2 having a smaller fitting angle arranged in an area of an annular passage 30B to which a greater amount of the raw material uncrushed by the crushing roller flows. **COPYRIGHT:** (C)2015,JPO&INPIT

Publication: [JP 2015062883 A 20150409](#)

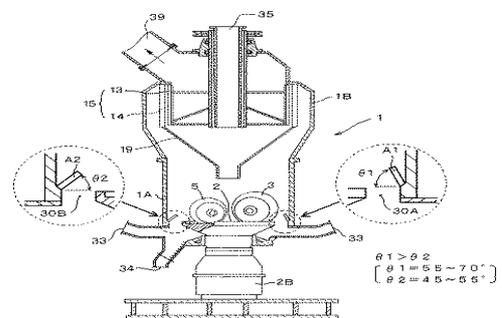
Applicant: UBE MACHINERY CORPORATION LTD

Inventor: HINAUCHI TATSUYA; KASAI HIROBUMI

Prio:

Appl.No: JP2013199666

IPC: B02C 15/04 2006.01 (IA)



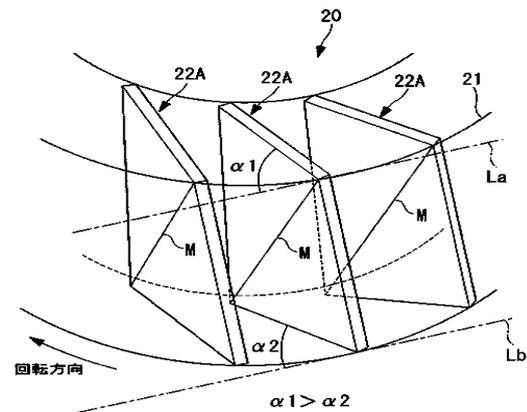
VERTICAL ROLLER MILL

PROBLEM TO BE SOLVED: To provide a vertical roller mill with a rotary classifier, capable of reducing a coarse particle rate in a product fine coal.
SOLUTION: In a vertical roller mill including a rotary classifier 20 provided in a housing for separating fine powder having a small particle size to discharge the fine powder to an outside by passing of a solid two-phase flow transferring powder obtained by pulverizing a solid on an air flow, the rotary classifier 20 includes multiple plate rotary vanes 22A arranged circumferentially at identical pitches on a circumferential wall surface of a cone 21 rotating within the housing. Each of these plate rotary vanes 22A is installed such that a radially inward side thereof is inclined in a rotational direction with respect to a line orthogonal to outer tangents La and Lb on a rotation locus, and installation angles α_1 and α_2 of the plate rotary vane 22A with respect to the respective outer tangents La and Lb are set to satisfy ($\alpha_1 > \alpha_2$) such that the installation angle (α_1) of a vane upper end portion is greater than the installation angle (α_2) of a vane lower end portion.
COPYRIGHT: (C)2015,JPO&INPIT

Publication: [JP 2015066544 A 20150413](#)

Applicant: MITSUBISHI HITACHI POWER SYSTEMS LTD
Inventor: DAIMARU TAKUICHIRO; ARIMA KENICHI;
 MATSUMOTO SHINJI; SUGA HIROSHI;
 KUSHIOKA KIYONORI

Prio:
Appl.No: JP2013206375
IPC: B02C 15/00 2006.01 (IA)

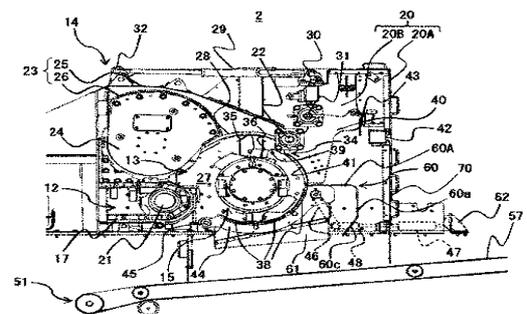


SELF-TRAVELLING CRUSHING MACHINE

PROBLEM TO BE SOLVED: To provide a self-travelling crushing machine that can satisfy dimensional restrictions and effectively prevent clogging of a crusher.
SOLUTION: A self-travelling crushing machine comprises a traveling body, left and right base frames mounted on a truck frame of the traveling body, a crusher 13 mounted on the left and right base frames, a discharge conveyor 51 that is arranged between the left and right base frames and extends forward from under the crusher 13, and a chute for guiding crushed materials discharged from the crusher 13 onto the discharge conveyor 51. The crusher 13 has a crushing rotor 15, which is housed in a crushing chamber 27 and the rotational axis of which extends in left and right directions, screens 38 provided at a discharge part of the crushing chamber 27, and a hood 60 located in front of the screens 38 to receive crushed materials discharged forward from the crushing chamber 27.
COPYRIGHT: (C)2015,JPO&INPIT

Publication: [JP 2015071123 A 20150416](#)

Applicant: HITACHI CONSTR MACH CO LTD
Inventor: UEDA KAZUNORI
Prio:
Appl.No: JP2013206609
IPC: B02C 21/02 2006.01 (IA)



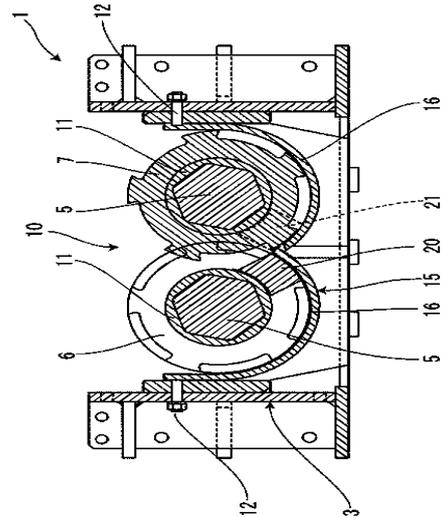
BIAXIAL CRUSHER

PROBLEM TO BE SOLVED: To provide a biaxial crusher where shearing treatment can be performed again by removing crushed pieces caught between crushing blades when the sheared crushed pieces are caught between the crushing blades adjacent to each other in an axial direction.**SOLUTION:** A plurality of stoppers 20, 21 are aligned in parallel positioning between crushing blades 6, 7 adjacent to each other in an axial direction. The stoppers 20, 21 are disposed on a screen 16 facing the engaging part 10 of each crushing blade 6, 7, crushed pieces sheared at the engaging part 10 are brought into contact with the stopper 20 even if the crushed pieces sheared at the engaging part 10 are caught between the crushing blades, for instance the crushing blade 6, adjacent to each other in the axial direction and then co-rotation with the crushing blade 6 is prevented. The crushed pieces whose rotation is regulated by the stopper 20 are engaged by the other reversely rotating crushing blade 7 and sheared by the crushing blade 7 and the stopper 20.**COPYRIGHT:** (C)2015,JPO&INPIT

Publication: [JP 2015071132 A 20150416](#)

Applicant: UENO TEKKUSU KK
Inventor: UENO HIDEMASA; UENO MITSUAKI; UENO MUNEMASA; KUSUNOKI HIDEKI; IIYOSHI HIROKI

Prio:
Appl.No: JP2013207366
IPC: B02C 18/14 2006.01 (IA)

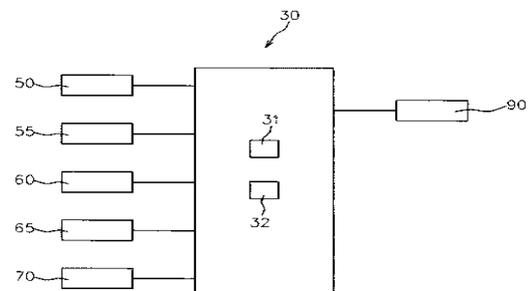


RICE HULLING SYSTEM

PROBLEM TO BE SOLVED: To provide a rice hulling system capable of notifying an operator of hulled rice working efficiency useful for the operator.**SOLUTION:** The rice hulling system comprises: an unhulled rice tank; a huller for hulling the unhulled rice supplied from the unhulled rice tank; a controller; a notifying device for notifying a user of information; and a collection amount sensor for detecting an amount of generated hulled rice generated by the huller. The controller calculates hulled rice working efficiency which is an amount of hulled rice acquired per unit time on the basis of a detection signal of the collection amount sensor, and notifies the user of the hulled rice working efficiency via the notifying device.**COPYRIGHT:** (C)2015,JPO&INPIT

Publication: [JP 2015071135 A 20150416](#)

Applicant: YANMAR CO LTD
Inventor: OKADA SHINSUKE
Prio:
Appl.No: JP2013207901
IPC: B02B 7/00 2006.01 (IA)



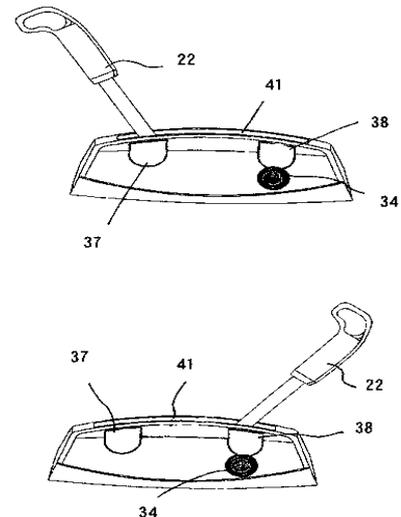
HULLING SORTER

PROBLEM TO BE SOLVED: To provide a hulling sorter in which a circulation/discharge selector valve can be smoothly switched.**SOLUTION:** A circulation/discharge selector switch (34) is provided for manually switching a circulation/discharge selector valve (18) between inside-machine circulation and outside-machine discharge. When the circulation/discharge selector switch (34) is operated to switch from the inside-machine circulation to the outside-machine discharge, a later process transfers to an automatic control even when the circulation/discharge selector switch (34) is not operated again. When the circulation/discharge selector switch (34) is operated to switch from the outside-machine discharge to the inside-machine circulation, the inside-machine circulation is continued until the circulation/discharge selector switch (34) is operated again.**COPYRIGHT:** (C)2015,JPO&INPIT

Publication: [JP 2015073909 A 20150420](#)

Applicant: ISEKI & CO LTD
Inventor: CHIKAMOTO MASAYUKI; NINOMIYA SHINJI;
 YATSUKA KOICHI

Prio:
Appl.No: JP2013209336
IPC: B02B 7/02 2006.01 (IA)



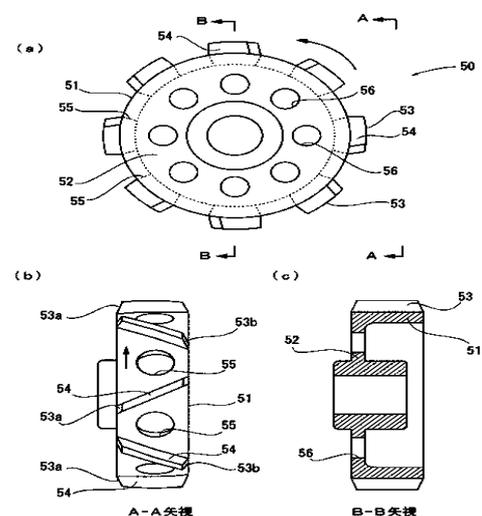
MEDIUM-AGITATION-TYPE WET PULVERIZER

PROBLEM TO BE SOLVED: To provide a medium-agitation-type wet pulverizer in which stable and excellent pulverization processing is obtained and inconvenience of medium segregation phenomenon, medium co-rotation phenomenon, etc. can be prevented.**SOLUTION:** A medium-agitation-type wet pulverizer comprises: a cylindrical container; a separator which partitions the container inside into an inside chamber and an outside chamber; a rotation shaft which is inserted through one end of the container and is provided as rotatable; and a rotor 50 which is fixed to the rotation shaft and rotates. The rotor 50 comprises: a cylindrical agitation member 51; and a discoid holding member 52. The agitation member 51 comprises: a plurality of protruding parts 53 at an outer periphery surface; and a plurality of through holes 55 which make the inner side and the outer side of the agitation member 51 communicate with each other. A part of the plurality of protruding parts 53 imparts a force toward one end side of the container against a substance to be processed and a medium, and the another part of the plurality of protruding parts 53 imparts a force toward the another end side of the container against the substance to be processed and the medium.**COPYRIGHT:** (C)2015,JPO&INPIT

Publication: [JP 2015073920 A 20150420](#)

Applicant: NIPPON COKE & ENGINEERING CO LTD
Inventor: SEKINE YASUYOSHI

Prio:
Appl.No: JP2013210009
IPC: B02C 17/16 2006.01 (IA)



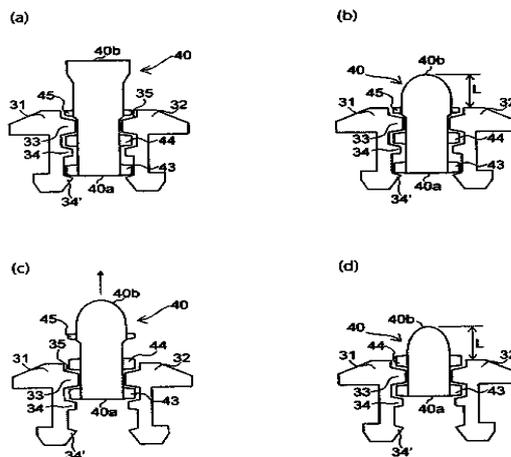
CRUSHER

PROBLEM TO BE SOLVED: To provide a crusher equipped with a striking plate which can be used at a high utilization rate.
SOLUTION: On both longitudinal side faces of a striking plate 40, a first striking plate side projection 43 which is positioned near an end 40a on the axis side, of the striking plate 40, and a second striking plate side projection 44 which is positioned on the outer peripheral side with respect to the first striking plate side projection 43, are provided. The first striking plate side projection 43 is configured in such a manner that the projection 43 can be disposed at either an axis side position further than the axis side projections 34, of respective protectors 31, 32, or a position between a first protector side projection 33 and the axis side projections 34 of the respective protectors 31, 32. Further, the second striking plate side projection 44 is so configured in such a manner that the projection 44 can be disposed at a position between the first protector side projection 33 and the axis side projections 34 of the respective protectors 31, 32 when the first striking plate side projection 43 is disposed at the axis side position further than the axis side projections 34 of the respective protectors 31, 32.
COPYRIGHT: (C)2015,JPO&INPIT

Publication: [JP 2015073964 A 20150420](#)

Applicant: EARTH TECHNICA:KK
Inventor: OYAMA ATSUSHI; NISHI MASAHIKO; IIZASA MASAHARU; SUGIYAMA NAONOBU; KOJIMA TETSUTA

Prio:
Appl.No: JP2013213146
IPC: B02C 13/28 2006.01 (IA)



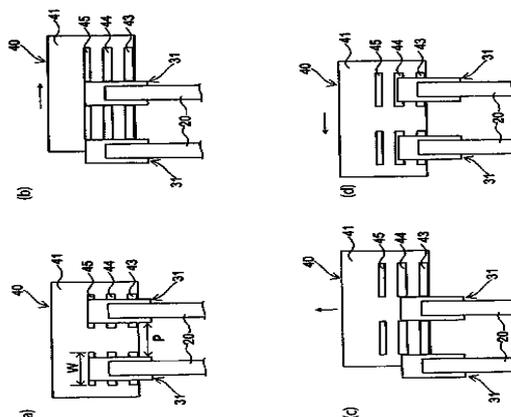
CRUSHER

PROBLEM TO BE SOLVED: To provide a crusher which can shorten a time required for exchange of a striking plate.
SOLUTION: Paired protectors respectively have at least one protector side projection which extends along an axial direction of a main shaft, and an axis side projection which is provided on the axis side further than the protector side projection and which extends along an axial direction of the main shaft. Further, both longitudinal side faces of a striking plate are provided with at least one striking plate side projection which extends along the axial direction of the main shaft and can be disposed at a position between the protector side projection and the axis side projection of the protector. A length of the striking plate side projection of the striking plate in the axial direction of the main shaft is smaller than a clearance in the axial direction of the main shaft between the protector side projection of the protector attached to one rotor disk and the protector side projection of the protector attached to other rotor disk adjacent to the one rotor disk.
COPYRIGHT: (C)2015,JPO&INPIT

Publication: [JP 2015073965 A 20150420](#)

Applicant: EARTH TECHNICA:KK
Inventor: OYAMA ATSUSHI; NISHI MASAHIKO; IIZASA MASAHARU; SUGIYAMA NAONOBU; KOJIMA TETSUTA

Prio:
Appl.No: JP2013213152
IPC: B02C 13/28 2006.01 (IA)



SHREDDER

PROBLEM TO BE SOLVED: To provide a shredder capable of effectively shredding objects to be processed, improving processing efficiency, and easily releasing tangled objects to be processed. **SOLUTION:** In a casing 10 having an input port 10a and a discharge port 10b for objects to be processed, of a shredder 1, there are disposed a shredding rotor 2 having a shredding blade 4, and a conveyance rotor 3 having an engaging blade 5 so that the shredding rotor 2 is located below the conveyance rotor 3 in a vertical direction. The shredding rotor 2 and the conveyance rotor 3 are rotatably driven in directions opposite to each other so that the shredding blade 4 and the engaging blade 5 go from the input port 10a toward the discharge port 10b through a part between the rotors. The shredding rotor and the conveyance rotor are driven so that the peripheral speed of the shredding blade 4 of the shredding rotor 2 is equal to or greater than sixteen times the peripheral speed of the engaging blade 5 of the conveyance rotor 3 and less than or equal to twenty times the peripheral speed of the engaging blade 5 of the conveyance rotor 3, thus an object to be processed is effectively shredded by the shredding blade 4, being held by the engaging blade 5. COPYRIGHT: (C)2015, JPO&INPIT

Publication: [JP 2015077542 A 20150423](#)

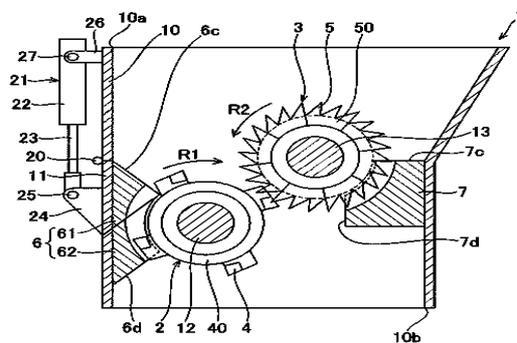
Applicant: MIIKE IRON WORKS CO LTD; OHBAYASHI CORP

Inventor: KOBAYASHI YOSHIKAZU; KOBAYASHI HIDEMASA; KAWAI KENJI; KUWAMOTO MITSUO; KAMIJO HIROAKI; KURIO NOBUO; SEISHU YOSHIO; MORI NAOKI

Prio:

Appl.No: JP2013215175

IPC: B02C 18/14 2006.01 (IA)



RICE BRAN OIL CONTAMINATION PREVENTION RICE MILLING METHOD AND APPARATUS OF THE SAME

PROBLEM TO BE SOLVED: To provide a polishing technique which does not cause such a deterioration of quality of polished rice that positive static electricity is generated upon milling, unpolished rice, unless higher pressure is applied, cannot be processed into polished rice because of static electricity resistance hindrance, further, oil droplets of rice bran oil exist on skin, therefore, the oil droplets are crushed by a high pressure upon milling, the rice bran oil is flown out and contaminates polished rice and the yellowing, discoloration, the lack of deliciousness or the like is caused, in the conventional rice milling method for processing unpolished rice into polished rice by removing skin of unpolished rice as bran. **SOLUTION:** Electrons having negative charge are supplied to a milling part by attaching an AC high voltage minute electric current application device, static electricity resistance hindrance due to positive static electricity is neutralized and dissolved, thereby, a pressure upon the milling is lowered, crushing of oil droplets of rice bran oil is prevented, outflow contamination of rice bran oil is prevented and, thereby, high-quality polished rice which is not contaminated with rice bran oil is provided. COPYRIGHT: (C)2015, JPO&INPIT

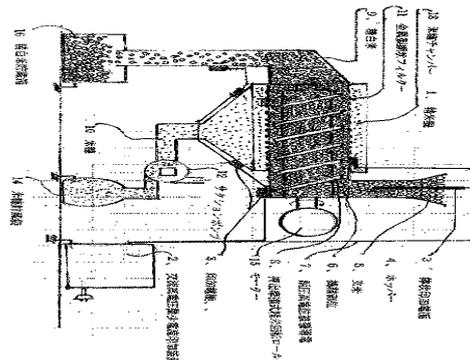
Publication: [JP 2015080782 A 20150427](#)

Applicant: MARUKO DENSHI KK

Inventor: MARUKO EIJI

Prio:

Appl.No: JP2013231539



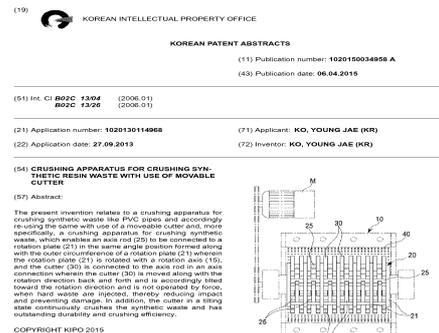
IPC: B02B 7/00 2006.01 (IA)

CRUSHING APPARATUS FOR CRUSHING SYNTHETIC RESIN WASTE WITH USE OF MOVABLE CUTTER

The present invention relates to a crushing apparatus for crushing synthetic waste like PVC pipes and accordingly re-using the same with use of a moveable cutter and, more specifically, a crushing apparatus for crushing synthetic waste, which enables an axis rod (25) to be connected to a rotation plate (21) in the same angle position formed along with the outer circumference of a rotation plate (21) wherein the rotation plate (21) is rotated with a rotation axis (15), and the cutter (30) is connected to the axis rod in an axis connection wherein the cutter (30) is moved along with the rotation direction back and forth and is accordingly tilted toward the rotation direction and is not operated by force, when hard waste are injected, thereby reducing impact and preventing damage. In addition, the cutter in a tilting state continuously crushes the synthetic waste and has outstanding durability and crushing efficiency.

Publication: **KR 20150034958 A 20150406**

Applicant: KO, YOUNG JAE, KR
Inventor: KO, YOUNG JAE, KR
Prio: KR1020130114968
Appl.No: KR1020130114968
IPC: B02C 13/04 2006.01 (IA)

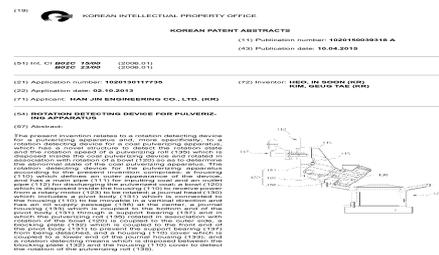


ROTATION DETECTING DEVICE FOR PULVERIZING APPARATUS

The present invention relates to a rotation detecting device for a pulverizing apparatus and, more specifically, to a rotation detecting device for a coal pulverizing apparatus, which has a novel structure to detect the rotation state and the rotation speed of a pulverizing roll (135) which is disposed inside the coal pulverizing device and rotated in association with rotation of a bowl (120) so as to determine the abnormal state of the coal pulverizing apparatus. The rotation detecting device for the pulverizing apparatus according to the present invention comprises: a housing (110) which defines an outer appearance of the device, and has a main pipe (111) for inputting coal and an outlet pipe (112) for discharging the pulverized coal; a bowl (120) which is disposed inside the housing (110) to receive power from a rotary motor (123) to be rotated; a journal head (130) which includes a pivot body (131) which is connected to the housing (110) to be movable in a vertical direction and has an oil supply passage (138) at the center, a journal housing (133) which is coupled to the bottom end of the pivot body (131) through a support bearing (137) and in which the pulverizing roll (135) rotated in association with rotation of the bowl (120) is coupled to the outer side, a blocking plate (132) which is coupled to the front end of the pivot body (131) to prevent the support bearing (137) from being detached, and a housing (110) cover which is coupled to a lower end of the journal housing (133); and a rotation detecting means which is disposed between the blocking plate (132) and the housing (110) cover to detect the rotation of the pulverizing roll (135).

Publication: **KR 20150039318 A 20150410**

Applicant: HAN JIN ENGINEERING CO., LTD., KR
Inventor: HEO, IN SOON, KR; KIM, GEUG TAE, KR
Prio: KR1020130117735
Appl.No: KR1020130117735



IPC: B02C 15/00 2006.01 (IA)

HYDRAULIC CONTROLLING CIRCUIT FOR PULVERIZER

The present invention relates to a hydraulic control circuit for a pulverizer, which improves reliability and operation efficiency by improving a hydraulic circuit in the pulverizer manufacturing powered coal in electric power station or iron works, comprising a pulverizer which pulverizes coals supplied from a coal supplier with use of hydraulic pressure and discharges powered coal; a hydraulic circuit; and a hydraulic control circuit which detects hydraulic pressure of hydraulic oil supplied from the hydraulic circuit to the pulverizer and delays the hydraulic oil supply for a certain time, when detecting low pressure, thereby enabling a hydraulic pump to stop and controlling the hydraulic circuit wherein the hydraulic control circuit comprises an operation stop part which is locally or remotely operated according to an operation mode of local panels and is operated and stops in a remote operation mode with use of a control command generated by the detected signal of the hydraulic detecting sensor and enables the hydraulic pump to be operated or stops in a local mode by the manipulation of an operation switch; and a hydraulic pump trip circuit which trips the hydraulic pump after passing a certain time when a signal is generated like a low hydraulic pressure at an elapsed time while operating the hydraulic pump and the pulverizer, thereby controlling increase and decrease of the hydraulic pressure compared with the signals between the feedback of the hydraulic pressure and speed feedback signal of the coal supplier.

Publication: **KR 20150041445 A 20150416**

Applicant: GEUMHWA PSC CO., LTD., KR

Inventor: KANG, HYUN WOO, KR

Prio:

Appl.No: KR1020130119982

IPC: B02C 25/00 2006.01 (IA)

(19) KOREAN INTELLECTUAL PROPERTY OFFICE

KOREAN PATENT ABSTRACTS

(11) Publication number: 1020150041445 A
(43) Publication date: 16.04.2015

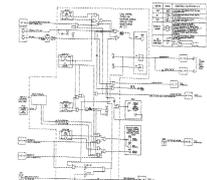
(51) Int. Cl. **B02C 25/00** (2006.01)
B02C 15/00 (2006.01)

(21) Application number: 1020130119982
(22) Application date: 08.10.2013

(71) Applicant: GEUMHWA PSC CO., LTD. (KR)
(72) Inventor: KANG, HYUN WOO (KR)

(54) **HYDRAULIC CONTROLLING CIRCUIT FOR PULVERIZER**

(57) Abstract:
The present invention relates to a hydraulic control circuit for a pulverizer, which improves reliability and operation efficiency by improving a hydraulic circuit in the pulverizer manufacturing powered coal in electric power station or iron works, comprising a pulverizer which pulverizes coals supplied from a coal supplier with use of hydraulic pressure and discharges powered coal; a hydraulic circuit; and a hydraulic control circuit which detects hydraulic pressure of hydraulic oil supplied from the hydraulic circuit to the pulverizer and delays the hydraulic oil supply for a certain time, when detecting low pressure, thereby enabling a hydraulic pump to stop and controlling the hydraulic circuit wherein the hydraulic control circuit comprises an operation stop part which is locally or remotely operated according to an operation mode of local panels and is operated and stops in a remote operation mode with use of a control command generated by the detected signal of the hydraulic detecting sensor and enables the hydraulic pump to be operated or stops in a local mode by the manipulation of an operation switch; and a hydraulic pump trip circuit which trips the hydraulic pump after passing a certain time when a signal is generated like a low hydraulic pressure or an elapsed time while operating the hydraulic pump and the pulverizer, thereby controlling increase and decrease of the hydraulic pressure compared with the signals between the feedback of the hydraulic pressure and speed feedback signal of the coal supplier.



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STANDARD CRUSHER OF BITUMINOUS COAL FOR POWER GENERATION

The present invention relates to a mineral dressing crusher for adjusting the quality of a coal preparation plant in a mine. Business of delivering bituminous coal to a power plant belongs to big business. The core of the bituminous coal business (industry) is to win a war with water. A newly invented standard crusher of bituminous coal for power generation is a means to solve the problem. The present invention as a crusher system exclusively crushes the bituminous coal into the indicated size of thickness. There may be only a bit of dust generated during the process of crushing the bituminous coal into the limited size. The present invention does not generate dust and noise during the crushing process and consumes less horsepower. Moreover, the present invention does not cause any wear and is capable of ignoring a failure. Therefore, the standard crusher can certainly be a pioneer in bituminous coal industries for power generation or the like.

Publication: **KR 20150043255 A 20150422**

Applicant: JOHNG, IN KWAN, KR

Inventor: JOHNG, IN KWAN, KR

Prio:

Appl.No: KR1020150043631

(19) KOREAN INTELLECTUAL PROPERTY OFFICE

KOREAN PATENT ABSTRACTS

(11) Publication number: 1020150043255 A
(43) Publication date: 22.04.2015

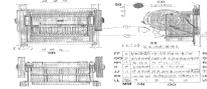
(51) Int. Cl. **B02C 1/02** (2006.01)
B02C 1/08 (2006.01)

(21) Application number: 1020150043631
(22) Application date: 27.03.2015

(71) Applicant: JOHNG, IN KWAN (KR)
(72) Inventor: JOHNG, IN KWAN (KR)

(54) **STANDARD CRUSHER OF BITUMINOUS COAL FOR POWER GENERATION**

(57) Abstract:
The present invention relates to a mineral dressing crusher for adjusting the quality of a coal preparation plant in a mine. Business of delivering bituminous coal to a power plant belongs to big business. The core of the bituminous coal business (industry) is to win a war with water. A newly invented standard crusher of bituminous coal for power generation is a means to solve the problem. The present invention as a crusher system exclusively crushes the bituminous coal into the indicated size of thickness. There may be only a bit of dust generated during the process of crushing the bituminous coal into the limited size. The present invention does not generate dust and noise during the crushing process and consumes less horsepower. Moreover, the present invention does not cause any wear and is capable of ignoring a failure. Therefore, the standard crusher can certainly be a pioneer in bituminous coal industries for power generation or the like.



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- (56) Prior art:
- (57) Claims:
- (58) Bibliography:
- (59) Other documents:
- (60) Other information:
- (61) Other information:
- (62) Other information:
- (63) Other information:
- (64) Other information:
- (65) Other information:
- (66) Other information:
- (67) Other information:
- (68) Other information:
- (69) Other information:
- (70) Other information:
- (71) Applicant: JOHNG, IN KWAN (KR)
- (72) Inventor: JOHNG, IN KWAN (KR)
- (73) Other information:
- (74) Other information:
- (75) Other information:
- (76) Other information:
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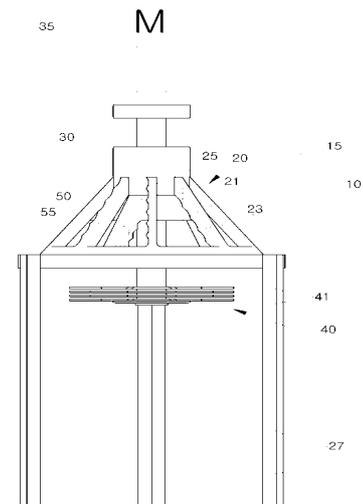
IPC: B02C 1/02 2006.01 (IA)

LIVESTOCK SLURRY GRINDING APPARATUS

The present invention relates to a livestock slurry grinding apparatus. The apparatus is used to cut off and grind the slurry of livestock dead or eliminated due to plague at the same time to effectively grind various types of livestock slurry. The apparatus includes: a flow pipe including a flow path to move the cattle slurry; a main housing which is rigidly installed on the flow path of the flow pipe and includes a grinding space to grind the slurry and a discharge hole connected to the flow path of the flow pipe to discharge the slurry; a rotating shaft which is mounted on the main housing to rotate; a cutting unit which is rigidly installed on an end of the rotating shaft and cuts off the slurry as moving the slurry to the grinding space in the main housing; and a grinding unit which is rigidly installed on the rotating shaft to be rotated with the cutting unit and has the outer peripheral surface coming in contact with the main housing while being rotated.

Publication: **KR 20150044185 A 20150424**

Applicant: KOREA BIO TECH CO., LTD., KR
Inventor: KIM, HWA KYUNG, KR; KIM, SAN, KR
Prio:
Appl.No: KR1020130123247
IPC: B02C 18/06 2006.01 (IA)

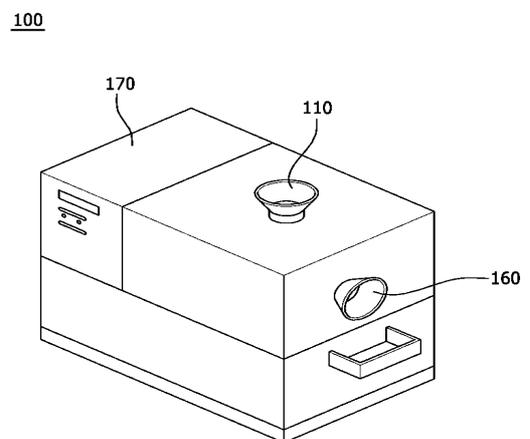


APPARATUS FOR SEPARATING PARTS OF PRINTED CIRCUIT BOARDS

The present invention relates to an apparatus for separating parts of printed circuit boards, comprising a first feeder in which a printed circuit board with parts is injected; a second feeder which is connected to the first feeder and transfers the injected printed circuit board in a certain direction; a driving unit which is connected to the second feeder and drives and rotates the second feeder; a part separating unit which is connected to the second feeder and the driving unit at a different position in which the printed circuit board transferred from the second feeder flows; and a heating unit which is installed at a different position of the part separating unit and heats the printed circuit board which flows in the part separating unit wherein the part separating unit has a printed circuit board without parts and a part discharging path separated from the printed circuit board.

Publication: **KR 101511309 B1 20150414**

Applicant: IUCF-HYU (INDUSTRY-UNIVERSITY COOPERATION FOUNDATION HANYANG UNIVERSITY), KR
Inventor: PARK, JAI KOO, KR; KWON, SEOK JE, KR; KIM, SEONG MIN, KR; PARK, SEUNG SOO, KR; HAN, SEONG SOO, KR; SEO, A RAM, KR
Prio:
Appl.No: KR1020140047573
IPC: B02C 23/08 2006.01 (IA)



WOOD CRUSHER

The present invention relates to a wood crusher, wherein a rotary shaft having a cantilever form is capable of supporting a disc-shaped rotary cutting member such that the rotary shaft does not position on the front of the disc-shaped rotary cutting member, thereby preventing a failure occurring when a foreign substance inputted with a timber is wound around on the rotary shaft. The present invention is characterized in that the invention comprises: a body frame; a power generating means mounted on the body frame; a rotary power shaft connected by the power generation means and a power transmission means and supported by a bearing installed on a vertical structure formed on the main frame; a disc-shaped rotary cutting member coupled to the front end of the rotary power shaft through a coupling means and installing a plurality of cutters at constant angular intervals on the front; a chip outlet arranged on the upper portion of the disc-shaped rotary cutting member and discharging shredded wood chips; a wood input port installed on the front of the disc-shaped rotary cutting member and into which a timber is inputted; and a caterpillar track installed on the lower portion of the main frame.

Publication: [KR 101511920 B1 20150414](#)

Applicant: JEJU SPECIAL SELF-GOVERNING PROVINCE AGRICULTURAL RESEARCH EXTENSION SERVICE, KR

Inventor: LEE, GWANG SEOK, KR; JEONG, DAE CHEON, KR; YUR, YOUNG GIL, KR; MUN, YOUNG SANG, KR; YANG, YUN CHANG, KR; KIM, YONG U, KR; YANG, DONG CHEOL, KR

Prio:

Appl.No: KR1020140178940

IPC: B02C 18/26 2006.01 (IA)

(19)  KOREAN INTELLECTUAL PROPERTY OFFICE

KOREAN PATENT ABSTRACTS

(11) Registration number: 101511920 B1
(45) Issue date: 14.04.2015
(24) Registration date: 07.04.2015

(51) Int. Cl. B02C 18/26 (2006.01)

(21) Application number: 1020140178940 (72) Inventor: LEE, GWANG SEOK (KR); JEONG, DAE CHEON (KR); YUR, YOUNG GIL (KR); MUN, YOUNG SANG (KR); YANG, YUN CHANG (KR); KIM, YONG U (KR); YANG, DONG CHEOL (KR)

(22) Application date: 12.12.2014

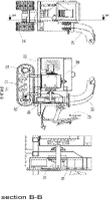
(73) Proprietor: JEJU SPECIAL SELF-GOVERNING PROVINCE AGRICULTURAL RESEARCH EXTENSION SERVICE (KR)

(50) Prio. Art. JP 02053515 A *
KR 10228923 B1 *
KR 10123795 B1 *
KR 20042943 Y1 *
* Documents cited by examiner

(54) WOOD CRUSHER

(57) Abstract:
The present invention relates to a wood crusher, wherein a rotary shaft having a cantilever form is capable of supporting a disc-shaped rotary cutting member such that the rotary shaft does not position on the front of the disc-shaped rotary cutting member, thereby preventing a failure occurring when a foreign substance inputted with a timber is wound around on the rotary shaft. The present invention is characterized in that the invention comprises: a body frame; a power generating means mounted on the body frame; a rotary power shaft connected by the power generation means and a power transmission means and supported by a bearing installed on a vertical structure formed on the main frame; a disc-shaped rotary cutting member coupled to the front end of the rotary power shaft through a coupling means and installing a plurality of cutters at constant angular intervals on the front; a chip outlet arranged on the upper portion of the disc-shaped rotary cutting member and discharging shredded wood chips; a wood input port installed on the front of the disc-shaped rotary cutting member and into which a timber is inputted; and a caterpillar track installed on the lower portion of the main frame.

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(AA) Cross section B-B

TWO-STAGED VERTICAL CENTRIFUGAL CLASSIFIER

The present invention relates to a two-staged vertical centrifugal classifier, which additionally crushes powders of raw materials and efficiently classifies raw materials into fine powders and thick powders, comprising an upper rotor which is penetrated into an upper part of a casing and is accordingly installed, and rotates air used for classification and accordingly lifts classified fine powders; a lower rotor which is installed at the lower part of the upper rotor in the casing with use of the concentric upper rotor; a raw material supplying chute which is installed on the upper part of the casing to supply the powder of raw materials to the upper part on a dispersing plate on the lower rotor; a classification room which is installed between the upper rotor and the lower rotor in the casing; a cyclone which is installed in the casing to enable a guide vane of the lower rotor to be inserted and to supply air used for classification to the classification room; a fine discharging hole which discharges classified fine powders out of the classifier; and a thicker discharging hole which discharges classified thick powders out of the classifier.

Publication: [KR 101513054 B1 20150417](#)

Applicant: IM, SANG HYUCK, KR

Inventor: IM, SANG HYUCK, KR

Prio:

Appl.No: KR1020140157025

IPC: B02C 23/08 2006.01 (IA)

(19)  KOREAN INTELLECTUAL PROPERTY OFFICE

KOREAN PATENT ABSTRACTS

(11) Registration number: 101513054 B1
(45) Issue date: 17.04.2015
(24) Registration date: 13.04.2015

(51) Int. Cl. B02C 23/08 (2006.01)
B04B 3/00 (2006.01)

(21) Application number: 1020140157025 (50) Prio. Art. JP 05077954 U *
KR 11244799 A *
KR 101907020201 B1 *
KR 101050640 B1 *
* Documents cited by examiner

(22) Application date: 12.11.2014

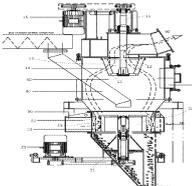
(73) Proprietor: IM, SANG HYUCK (KR)

(72) Inventor: IM, SANG HYUCK (KR)

(54) TWO-STAGED VERTICAL CENTRIFUGAL CLASSIFIER

(57) Abstract:
The present invention relates to a two-staged vertical centrifugal classifier, which additionally crushes powders of raw materials and efficiently classifies raw materials into fine powders and thick powders, comprising an upper rotor which is penetrated into an upper part of a casing and is accordingly installed, and rotates air used for classification and accordingly lifts classified fine powders; a lower rotor which is installed at the lower part of the upper rotor in the casing with use of the concentric upper rotor; a raw material supplying chute which is installed on the upper part of the casing to supply the powder of raw materials to the upper part on a dispersing plate on the lower rotor; a classification room which is installed between the upper rotor and the lower rotor in the casing; a cyclone which is installed in the casing to enable a guide vane of the lower rotor to be inserted and to supply air used for classification to the classification room; a fine discharging hole which discharges classified fine powders out of the classifier; and a thicker discharging hole which discharges classified thick powders out of the classifier.

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Rice knife group of germ-remained rice husking machine

The invention discloses a rice knife group of a germ-remained rice husking machine. The rice blade group of the germ-remained rice husking machine comprises a knife rest, wherein a fixing groove is formed in the knife rest; a resilient pad is arranged at a bottom of the fixing groove; the rice knife group is connected into the fixing groove and comprises positioning shafts, resilient positioning parts, a plurality of blades and partition parts, wherein the plurality of blades are arranged at certain intervals and adjacent two blades are partitioned through the partition part; the plurality of blades and the partition parts are serially connected onto the positioning shafts, the resilient positioning parts are respectively connected onto the two ends of the positioning shafts, and inner sides of the resilient positioning parts are connected with outer sides of the blades; the resilient positioning parts are connected into the fixing groove. When rice is husked to produce germ-remained rice, compared with the existing similar rice knife, the rice blade group of the germ-remained rice husking machine has the advantages of reasonable structure, easiness in assembling, high operation stability, less cracked rice, higher germ remaining rate and high durability.

Publication: [CN 104588148 A 20150506](#)

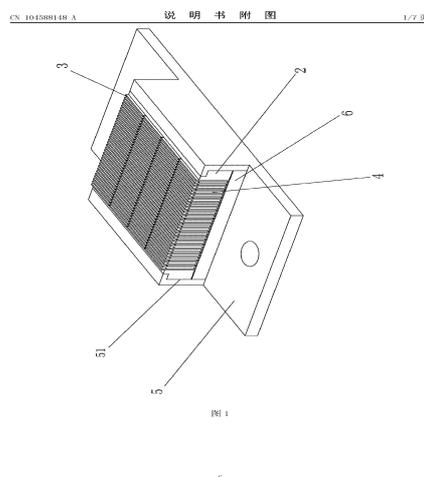
Applicant: DENG GUOXIAN

Inventor: DENG GUOXIAN

Prio:

Appl.No: CN201510065061

IPC: B02B 3/00



Wheat separation and scraping-rubbing equipment

The invention discloses wheat separation and scraping-rubbing equipment. A first motor is connected with a first pressure wheel and a second pressure wheel through a first belt pulley and a first belt, and regulators are arranged on the two sides of a body respectively, wherein a discharge opening is formed in the bottom of the body; a machine cover is arranged on the upper part of the body; a feed opening is formed in the top of the machine cover; pressure knives are arranged on the surfaces of the first and second pressure wheels; a cylindrical screen is arranged in a protective housing; a scraping-rubbing device is arranged in the cylindrical screen, and consists of a scraping brush device, a conveying device, an air blowing device and a rotating shaft; the scraping brush device, the conveying device and the air blowing device are arranged on the rotating shaft; a motor is connected with the rotating shaft through a second belt pulley and a second belt; an exhaust fan is arranged at the top of the protective housing; a material inlet is formed in the upper part of one side of the cylindrical screen, and is connected with a discharge opening of a separator; a finished product outlet is formed in the bottom of the other side of the cylindrical screen. The equipment is simple in structure, scientific and reasonable in design, easy to operate and high in production efficiency.

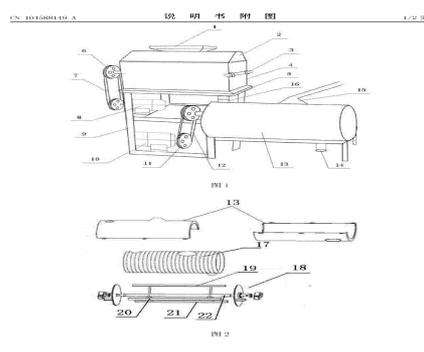
Publication: [CN 104588149 A 20150506](#)

Applicant: FENG XUHE

Inventor: FENG XUHE

Prio:

Appl.No: CN201510069918



IPC: B02B 3/00

Driving device of full-automatic rubber roller rice huller

The invention relates to a driving device of a full-automatic rubber roller rice huller and belongs to the technical field of machines. The driving device solves the problems that in the prior art, a driving device of the rubber roller rice huller is complex in structure, and full-automatic adjustment cannot be achieved. The driving device of the full-automatic rubber roller rice huller comprises two driving motors which are connected with a first rubber roller driving wheel and a second rubber roller driving wheel respectively, wherein the first rubber roller driving wheel and the second rubber roller driving wheel are connected with a roller shaft of a first rubber roller and a roller shaft of a second rubber roller through belts respectively. The device further comprises a control system and a rubber roller outer diameter detection module, the rubber roller outer diameter detection module inputs rubber roller outer diameter data to the control system, and the control system controls the rotating speeds of the two driving motors respectively. According to the driving device, the rubber roller outer diameter is detected in real time through the control system, the rotating speeds of the driving motors are controlled and can be switched regularly, it is guaranteed that the linear speed difference between the first rubber roller and the second rubber roller and the linear speed sum of the first rubber roller and the second rubber roller are within a set interval, and the optimal rice hulling effect is achieved.

Publication: **CN 104588150 A 20150506**

Applicant: ZHUJI GRAIN ENGINEERING MACHINERY CO LTD

Inventor: CHEN JIANQUAN; SHOU ZAIXING

Prio:

Appl.No: CN201410773309

IPC: B02B 3/04

CN 104588150 A 说明书附图 1/1 页

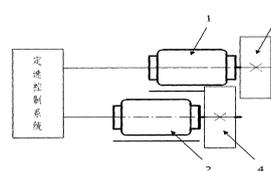


图 1



图 2

6

Coarse cereal polishing machine and coarse cereal polishing technology thereof

The invention provides a coarse cereal polishing machine and a coarse cereal polishing technology thereof, and belongs to the technical field of coarse cereal processing. The coarse cereal polishing machine comprises a polishing device and a water supply device, wherein the polishing device comprises an enclosure; a cylindrical polishing roller and a hollow main shaft are arranged in the enclosure; strip-shaped holes are formed in the polishing roller; the water supply device comprises a water source and a water pipe which is communicated with the water source; one end, far away from the water source, of the water pipe stretches into the hollow main shaft. The coarse cereal polishing technology comprises the following steps that the polishing device is started; the polishing device is filled with coarse cereals; the water supply device is started; the coarse cereals advance in the polishing roller under the drive of the hollow main shaft; the coarse cereals outflow. The coarse cereal polishing machine and the coarse cereal polishing technology thereof are mainly used for polishing seed of Job's tears, the polishing roller is cylindrical, the seed of Job's tears can smoothly advance, and the polishing efficiency is higher.

Publication: **CN 104588151 A 20150506**

Applicant: GUIZHOU JOB S TEARS SEED INDUSTRY DEV CO LTD

Inventor: CHEN TIANBING

Prio:

Appl.No: CN201510020369

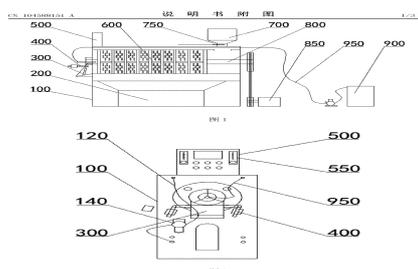


图 1

图 2

6

IPC: B02B 3/04

Solid feed crushing apparatus

The invention discloses a solid feed crushing apparatus, which comprises a handle, a crushing rod and a discharge basket; the crushing rod is vertically connected below the handle, the upper end of the discharge basket is openmouthed, the depth of the discharge basket is same with the length of the crushing rod. Compared with prior art, a work principle and beneficial effect of the solid feed crushing apparatus are characterized in that a bin door is opened, the solid feed is placed in the discharge basket, the bin door is closed, and the feed is crushed by the crushing rod, after crushing is completed, the powdery feed is filtered through a filter screen, feed with large particles can be left at the bottom of the discharge basket and continuously crushed; the solid feed crushing apparatus has the advantages of simple structure, easy operation and low production cost, and is suitable for popularization and usage for culture users.

Publication: **CN 104588152 A 20150506**

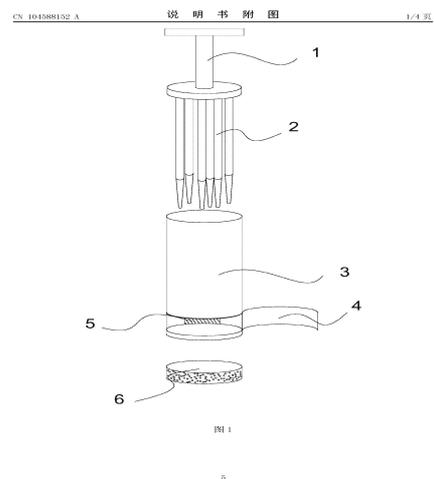
Applicant: TIANJIN JINDI FEED ADDITIVE CO LTD

Inventor: LIU SONGLIN

Prio:

Appl.No: CN201310530317

IPC: B02C 1/00



Multiple-cylinder cone crusher drive unit

The invention relates to the field of mining equipment, and particularly relates to a multiple-cylinder cone crusher drive unit. The multiple-cylinder cone crusher drive unit comprises a drive mechanism and an under-frame for installing the drive mechanism. The multiple-cylinder cone crusher drive unit is characterized in that the internal space design of the under-frame is reasonable, the structure of the drive mechanism is novel, and a lubricant passage way is integrated into an inner-cylinder lubricant storage cavity and lubricates the drive mechanism by infiltration, so as to simplify the structure of the drive unit.

Publication: **CN 104588153 A 20150506**

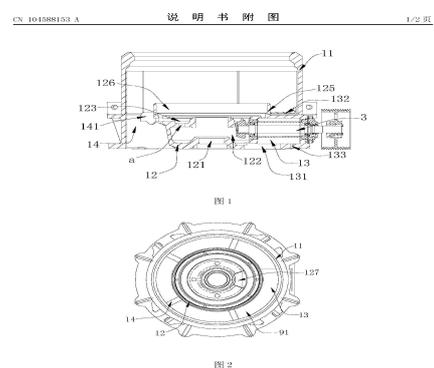
Applicant: ZHEJIANG ZHE KUANG HEAVY IND CO LTD

Inventor: CHEN BINGMIN; CHEN LIANFANG; CHEN LIHUA; LI GUOQIANG; ZHAO MENGJUN

Prio:

Appl.No: CN201510041838

IPC: B02C 2/02



Multi-cylinder cone crusher rack

The invention relates to the field of mining equipment, and particularly relates to a multi-cylinder cone crusher rack. The multi-cylinder cone crusher rack comprises a lower rack and an upper rack. The lower rack of the multi-cylinder cone crusher rack is simple in structure, and an internal oil path is reasonable in design; and the upper rack can adjust the axial height of a fixed cone, thereby changing the size of a crushing cavity.

Publication: [CN 104588154 A 20150506](#)

Applicant: ZHEJIANG ZHE KUANG HEAVY IND CO LTD
Inventor: CHEN BINGMIN; CHEN LIANFANG; CHEN LIHUA; LI GUOQIANG; ZHAO MENGJUN

Prio:
Appl.No: CN201510041847
IPC: B02C 2/02

CN 104588154 A 说明书附图 1/4页

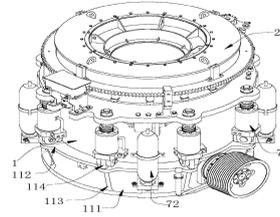


图1

10

Upper frame of multi-cylinder cone crusher

The invention relates to the field of mine equipment. An upper frame of a multi-cylinder cone crusher comprises a connecting frame and a fixed cone frame, wherein the fixed cone frame comprises a fixed cone body, a fixed cone lining plate, a fixed cone driving top plate and a fixed cone driving side plate, wherein the fixed cone lining plate is installed in the fixed cone body in a positioning manner; the outer side wall surface of the fixed cone lining plate is also provided with a fixed cone pin boss which is integrally connected with the outer side wall surface; the fixed cone pin boss is flexibly connected with and fixed on the fixed cone body via a fixed cone connecting structure; the outer side wall surface of the fixed cone body is in threaded connection with the inner side wall surface of the connecting frame; the outer side surface of the fixed cone driving side plate is provided with a driving ring large gear ring; the driving ring large gear ring and the fixed cone driving side plate are in peripheral positioning, and are not in axial positioning; the connecting frame is provided with a regulating motor and a large gear ring support base which connected in a drive mode; the large gear ring support base is used for axially positioning the driving ring large gear ring. The upper frame of the cone crusher can adjust the axial height of the fixed cone so as to change the size of the crushing cavity, and also has a shock absorption effect, so that the service life is prolonged.

Publication: [CN 104588155 A 20150506](#)

Applicant: ZHEJIANG ZHE KUANG HEAVY IND CO LTD
Inventor: CHEN BINGMIN; CHEN LIANFANG; CHEN LIHUA; LI GUOQIANG; ZHAO MENGJUN

Prio:
Appl.No: CN201510042293
IPC: B02C 2/02

CN 104588155 A 说明书附图 1/2页

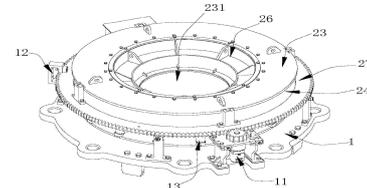


图1

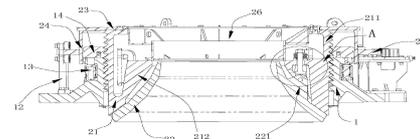


图2

6

Rolling bearing cone crusher

The invention relates to the field of mining equipment. A rolling bearing cone crusher comprises a rack, a transmission mechanism, an eccentric mechanism, a movable cone class and a movable cone reverse twisting resistant mechanism which are arranged in the rack; the eccentric mechanism comprises an eccentric axle sleeve, an upper axial thrust bearing and a lower axial thrust bearing; the eccentric axle sleeve comprises an axle sleeve inner ring, an axle sleeve outer ring and an axle sleeve ring; an upper bearing groove and a lower bearing groove are formed between the axle sleeve ring and the axle sleeve inner ring and between the axle sleeve ring and the axle sleeve outer ring; the upper axial thrust bearing and the lower axial thrust bearing are respectively installed in the upper bearing groove and the lower bearing groove; the axle sleeve inner ring is divided into an eccentric top and an eccentric bottom, a central through hole at the eccentric top and the central through hole at the eccentric bottom are communicated with each other through a coupling step hole, the coupling step hole is communicated with the upper bearing groove and the upper bearing groove through oil thinning channels, and the lower bearing groove is communicated with the upper bearing groove through the oil thinning channel. The eccentric mechanism of the rolling bearing cone crusher is good in positioning effect, and the bearing in the eccentric mechanism is convenient for lubricating.

Publication: [CN 104588156 A 20150506](#)

Applicant: ZHEJIANG ZHE KUANG HEAVY IND CO LTD

Inventor: CHEN BINGMIN; CHEN LIANFANG; CHEN LIHUA; LI GUOQIANG; ZHAO MENGJUN

Prio:

Appl.No: CN201510041801

IPC: B02C 2/04

CN 104588156 A 说明书附图 1/1 页

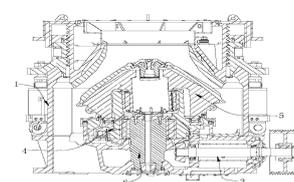


图 1

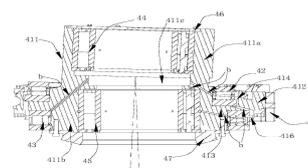


图 2

6

Multi-cylinder cone crusher

The invention relates to the field of mining equipment, and particularly relates to a multi-cylinder cone crusher. The multi-cylinder cone crusher comprises a rack, a drive mechanism, an eccentric mechanism, a moving cone set and a moving cone anti-reverse-rotating mechanism, wherein the drive mechanism, the eccentric mechanism, the moving cone set and the moving cone anti-reverse-rotating mechanism are arranged in the rack; and the drive mechanism is in drive connection with the eccentric mechanism, the lower end of the moving cone set is arranged in the eccentric mechanism, the moving cone anti-reverse-rotating mechanism is arranged below the moving cone set, and the upper end of the moving cone anti-reverse-rotating mechanism is connected with the lower end of the moving cone set. The moving cone set of the multi-cylinder cone crusher is stable, rotates directionally, and can prevent material slippage.

Publication: [CN 104588157 A 20150506](#)

Applicant: ZHEJIANG ZHE KUANG HEAVY IND CO LTD

Inventor: CHEN BINGMIN; CHEN LIANFANG; CHEN LIHUA; LI GUOQIANG; ZHAO MENGJUN

Prio:

Appl.No: CN201510041881

IPC: B02C 2/04

CN 104588157 A 说明书附图 1/3 页

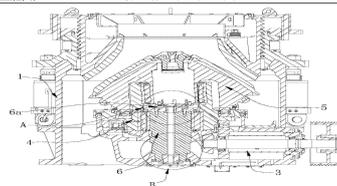


图 1

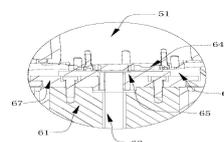


图 2

7

Cone crusher

The invention relates to the field of mining equipment and in particular relates to a cone crusher. The cone crusher comprises a rack and a movable cone group arranged in the rack, wherein the movable cone group consists of a movable cone shaft, a movable cone body which sleeves the outer side of the movable cone shaft and a movable cone liner which sleeves the outer side of the movable cone body; the rack consists of a fixed cone frame arranged at the upper side, the fixed cone frame consists of a fixed cone body and a fixed cone liner which is arranged in the fixed cone body, and a crushing cavity is formed between the fixed cone liner and the movable cone liner. The cone crusher is high in fixed cone connection strength and has the damping effect.

Publication: [CN 104588158 A 20150506](#)

Applicant: ZHEJIANG ZHE KUANG HEAVY IND CO LTD

Inventor: CHEN BINGMIN; CHEN LIANFANG; CHEN LIHUA; LI GUOQIANG; ZHAO MENGJUN

Prio:

Appl.No: CN201510041894

IPC: B02C 2/04

CN 104588158 A 说明书附图 1/3页

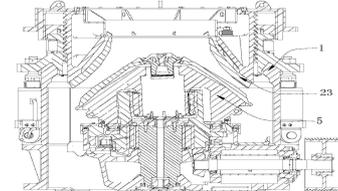


图 1

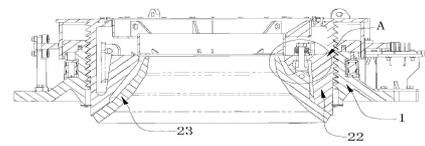


图 2

7

Eccentric mechanism of cone crusher

The invention relates to the field of mining equipment, and discloses an eccentric mechanism of a cone crusher. The eccentric mechanism comprises an eccentric shaft sleeve, an upper axial thrust bearing and a lower axial thrust bearing, wherein the eccentric shaft sleeve comprises a shaft sleeve inner ring, a shaft sleeve outer ring and a shaft sleeve ring; the upper end surface of the shaft sleeve ring, the shaft sleeve inner ring and the shaft sleeve outer ring form an upper bearing groove; the upper axial thrust bearing is installed in the upper bearing groove; the lower end surface of the shaft sleeve ring and the shaft sleeve inner ring form the lower bearing groove; the lower axial thrust bearing is installed in the lower bearing groove; the shaft sleeve inner ring comprises an eccentric top part and an eccentric bottom part; a central through hole of the eccentric top part and a central through hole of the eccentric bottom part are communicated via a coupling stepped hole which is communicated with the upper bearing groove, the lower bearing groove and the central through hole in the eccentric bottom part via a thin oil channel; the lower bearing groove is communicated with the central through hole in the eccentric bottom part and the upper bearing groove via a thin oil channel. The eccentric shaft sleeve in the eccentric mechanism is good in positioning effect, and the bearing on the eccentric shaft sleeve is convenient to lubricate.

Publication: [CN 104588159 A 20150506](#)

Applicant: ZHEJIANG ZHE KUANG HEAVY IND CO LTD

Inventor: CHEN BINGMIN; CHEN LIANFANG; CHEN LIHUA; LI GUOQIANG; ZHAO MENGJUN

Prio:

Appl.No: CN201510041941

IPC: B02C 2/04

CN 104588159 A 说明书附图 1/3页

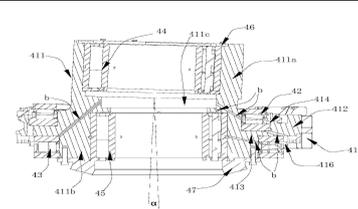


图 1

6

Multi-cylinder cone crusher

The invention relates to the field of mining equipment, and particularly relates to a multi-cylinder cone crusher. The multi-cylinder cone crusher comprises a rack, a drive mechanism, an eccentric mechanism, a moving cone set and a moving cone anti-reverse-rotating mechanism, wherein the drive mechanism, the eccentric mechanism, the moving cone set and the moving cone anti-reverse-rotating mechanism are arranged in the rack; and the drive mechanism is in drive connection with the eccentric mechanism, the lower end of the moving cone set is positioned and arranged in the eccentric mechanism, and the upper end of the moving cone anti-reverse-rotating mechanism is connected with the lower end of the moving cone set. The eccentric rotary oscillation of the moving cone set of the multi-cylinder cone crusher is stable.

Publication: [CN 104588160 A 20150506](#)

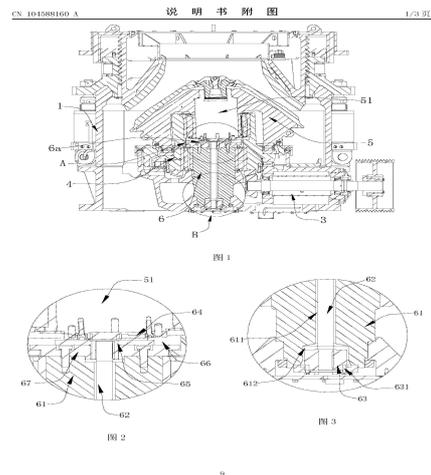
Applicant: ZHEJIANG ZHE KUANG HEAVY IND CO LTD

Inventor: CHEN BINGMIN; CHEN LIANFANG; CHEN LIHUA; LI GUOQIANG; ZHAO MENGJUN

Prio:

Appl.No: CN201510041968

IPC: B02C 2/04



Multiple-cylinder rolling bearing hydraulic cone crusher

The invention relates to the field of mining equipment, especially to a multiple-cylinder rolling bearing hydraulic cone crusher. The multiple-cylinder rolling bearing hydraulic cone crusher comprises the following components: a frame, a transmission mechanism, an eccentric mechanism, a moving cone set and a moving cone anti-reverse rotation mechanism. According to the invention, the frame comprises a lower frame and an upper frame; the transmission mechanism, the eccentric mechanism, the moving cone set and the moving cone anti-reverse rotation mechanism are all installed on the lower frame; the transmission mechanism is connected with the eccentric mechanism; the lower end of the moving cone set is arranged inside the eccentric mechanism; and the upper end of the moving cone anti-reverse rotation mechanism is connected with the lower end of the moving cone set. The multiple-cylinder rolling bearing hydraulic cone crusher is characterized in that the space of the lower frame is reasonably arranged and the axial angle of a fixed cone can be adjusted by the upper frame, so as to change the size of a crushing cavity. Eccentric rotation and swing of the moving cone set are also stable.

Publication: [CN 104588161 A 20150506](#)

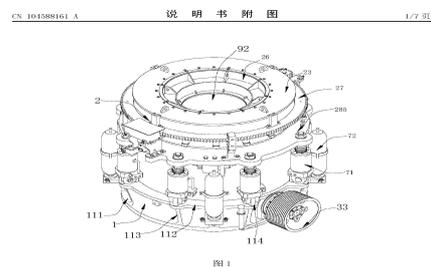
Applicant: ZHEJIANG ZHE KUANG HEAVY IND CO LTD

Inventor: CHEN BINGMIN; CHEN LIANFANG; CHEN LIHUA; LI GUOQIANG; ZHAO MENGJUN

Prio:

Appl.No: CN201510042213

IPC: B02C 2/04



High-efficiency durable roller press

The invention relates to a high-efficiency durable roller press, which comprises a feeding device, a conveying apparatus, a fixed roller and an action roller which are arranged on a frame, the conveying apparatus is connected by being driven by a first variable frequency motor, the fixed roller is fixed on the frame, the fixed roller is connected by being driven by a second variable frequency motor, the fixed roller is fixed at one end of a lever arm, the lever arm is fixed on the frame, the lever arm is connected to a hydraulic support pillar, and the first variable frequency motor, the second variable frequency motor and the hydraulic support pillar are connected to an electric control apparatus. Further, a speed reducer is arranged in the second variable frequency motor. Compared with prior art, an original mechanism is simplified, operation is convenient, maintenance is simple, integral controllable degree and synchronous coordination rate are high, vibration of machine body is reduced, and usage life of the machine body is increased.

Publication: [CN 104588162 A 20150506](#)

Applicant: JIANGSU HAIHENG BUILDING MATERIAL MACHINERY CO LTD

Inventor: ZHOU CHENG

Prio:

Appl.No: CN201310530292

IPC: B02C 4/02

CN 104588162 A 说明书附图 1/1 页

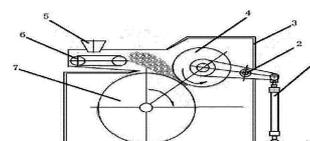


图 1

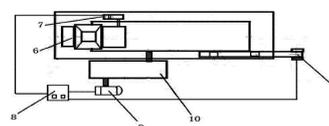


图 2

5

Crusher

The crusher provided by the invention comprises a rack, wherein a discharge port is formed at the bottom of the rack; a W-shaped feed port is formed at the top of the rack; three groups of impact rollers are arranged in the rack; gear wheels are arranged at the two ends of the impact rollers; the gear wheels at the two ends of two adjacent impact rollers are meshed with each other; the three groups of impact rollers are distributed in an inverted claw shape; the vertical distances from the middle group of impact rollers to the left and right groups of impact rollers are the same; in the three groups of impact rollers, the bottom impact roller of each group is sequentially connected with a speed reducer and a drive motor. Further, rotation direction of the three groups of impact rollers is same. The switch assemblies of each group of impact roller are arranged together. The crusher provided by the invention has a simple structure and a good crushing effect; materials are smoothly discharged through the discharge port from top to bottom and do not experience sticking and blocking easily.

Publication: [CN 104588163 A 20150506](#)

Applicant: JIANGSU HAIHENG BUILDING MATERIAL MACHINERY CO LTD

Inventor: WANG YUWEN

Prio:

Appl.No: CN201310530790

IPC: B02C 4/02

CN 104588163 A 说明书附图 1/1 页

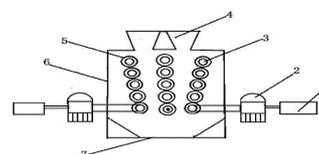


图 1

5

High pressure double-roller crusher

The invention relates to a high pressure double-roller crusher, which comprises a feeding device, a discharge device, a rack, a motor, and a regulation device. The motor is connected to one end of a first roller shaft through a power transmission device, the other end of the first roller shaft is connected to one end of a second roller shaft through a transmission device, so that the first roller shaft, the second roller shaft and compression rollers connected to them rotate in opposite directions synchronously. The regulation device is fixed on the rack, and consists of a hydraulic cylinder. The cylinder body of the hydraulic cylinder is fixed on the rack, the piston of the hydraulic cylinder is fixedly connected to a connecting piece, the connecting piece is in bearing connection with the second roller shaft, the oil cylinder on one hydraulic cylinder side far from the second roller shaft is internally provided with a pressure sensor, the oil inlet pipe of the oil cylinder is provided with an oil pump, the oil outlet pipe of the oil cylinder is provided with a valve, and the pressure sensor is in electric connection with the oil pump and the valve. One motor is used, a unilateral torque support arm is employed to bear torsion, and the fixed roller transmits the torque to the movable roller through a group of floating gears. The transmission way can save 25% of power consumption in cost, and reduces 40% of the floor space.

Publication: [CN 104588164 A 20150506](#)

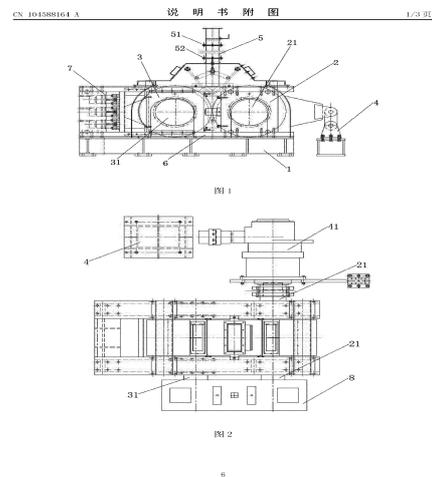
Applicant: ZHENGZHOU ZHONGDING HEAVY DUTY MACHINE MFG CO LTD

Inventor: GU ZHAOZONG; LIU XINSHI; ZHAO SHENGLI

Prio:

Appl.No: CN201410750147

IPC: B02C 4/02



Fluidizing rolling crusher capable of improving material crushing efficiency in multiples

The invention provides a fluidizing rolling crusher capable of doubling material crushing efficiency. The fluidizing rolling crusher comprises a machine body, a rolling device, an air blasting device and a driving device, wherein the machine body is provided with an inner cavity; the air blasting device blasts air upwards from the bottom surface of the inner cavity of the machine body; the rolling device is positioned above the air blasting direction of the air blasting device, the rolling device comprises a main roller, an auxiliary roller, an auxiliary roller support device and a loading unit; the main roller is arranged in the inner cavity of the machine body in a manner of rotating around the axial line of the main roller, and the auxiliary roller is arranged in the inner cavity of the machine body through an auxiliary roller support device; the auxiliary roller is arranged on the auxiliary roller support device in a manner of rotating around the axial line of the auxiliary roller; the peripheral surface of the auxiliary roller adds load on the auxiliary roller support device through the loading unit so that the auxiliary roller support device comes into a tight fit with the peripheral surface of the main roller; and the main roller is driven by the driving device to rotate. The fluidizing rolling crusher provided by the invention has the advantages that the material crushing efficiency can be doubled, the equipment miniaturization is realized, the manufacturing difficulty and manufacturing cost of equipment are reduced and the service life of the equipment is prolonged.

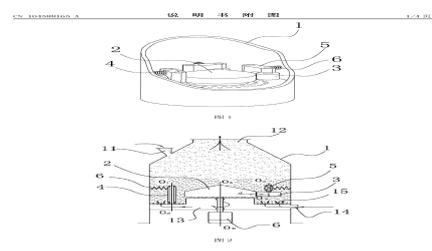
Publication: [CN 104588165 A 20150506](#)

Applicant: LIU KAIYI

Inventor: LIU KAIYI

Prio:

Appl.No: CN201510003810



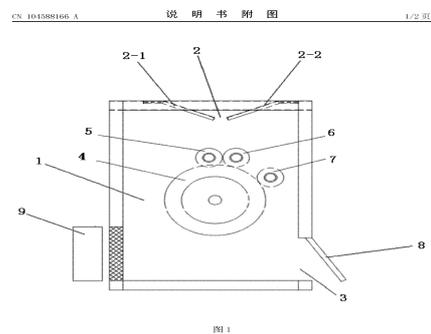
IPC: B02C 4/02

Down jacket dismantling device

The invention relates to a down jacket dismantling device which comprises a chassis, wherein a material inlet is formed in the upper end of the chassis and a material outlet is formed in the lower end of the chassis; one side of the chassis, opposite to the material outlet, is of a hollowed-out structure; a first shaft roller, a second shaft roller, a third shaft roller and a fourth shaft roller are arranged inside the chassis; a plurality of ratchet wheels sleeve the first shaft roller, the second shaft roller, the third shaft roller and the fourth shaft roller; the first shaft roller is arranged in the middle of the chassis; the second shaft roller and the third shaft roller are arranged above the first ratchet wheel and below the material inlet; and the fourth shaft roller is arranged on one side of the first shaft roller close to the material outlet. The down jacket dismantling device disclosed by the invention is simple in structure and compact in design; the outer fabric and down are respectively recovered, so that the recovery is thorough, the production efficiency is high, and a phenomenon that down fibers fly in the chassis during dismantling can be avoided; the ratchet wheels on the various shaft rollers can be replaced independently; and the dismantling device is convenient to use and convenient to popularize.

Publication: **CN 104588166 A 20150506**

Applicant: UNIV JIANGNAN
Inventor: GE MINGQIAO; YU TIANSHI; ZHENG JIA
Prio:
Appl.No: CN201510012854
IPC: B02C 4/08

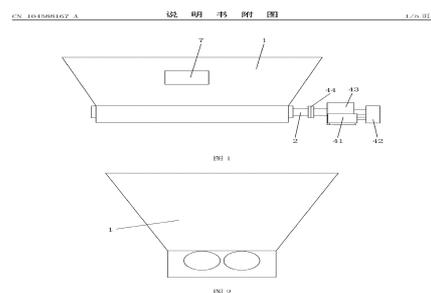


Crusher

The invention discloses a crusher. The crusher comprises a hopper, a driven crushing roller, a driven crushing roller as well as a driving device, wherein the driving device is used for driving the driving crushing roller to rotate; the driving crushing roller and the driven crushing roller can be rotationally installed in the hopper and are connected by a transmission mechanism, and both comprise roller shafts and a plurality of crushing gear rings connected to the roller shafts sequentially at intervals; each crushing gear ring is provided with a plurality of crushing teeth which are arranged uniformly around the axes of the roller shafts; all the crushing gear rings are sequentially divided into more than two sections along the axis direction of the roller shafts; the relative rotation angles of the crushing gear rings at the same section around the axes of the roller shafts are zero; the two adjacent sections of crushing gear rings have relative rotation angles around the axes of the roller shafts. The crusher has the advantages of simple structure, good crushing effect, high crushing efficiency, uniform stress, stability and reliability in running, capability of lowering the energy consumption and the like.

Publication: **CN 104588167 A 20150506**

Applicant: HUNAN NONFERROUS ENVIRONMENTAL
PROT BUILDING MATERIALS CO LTD
Inventor: CHEN JIANWU; CHEN ZHU
Prio:
Appl.No: CN201510048345



IPC: B02C 4/08

Coal gangue crushing and stirring device

The invention discloses a coal gangue crushing and stirring device including a hammer type crusher and a biaxial stirrer. A discharge port below the hammer type crusher is provided with a first raw material conveyor inclinedly arranged upwards, the upper end of the raw material conveyor is provided with a gyratory screen, a powder bin is arranged below the gyratory screen, one side of the gyratory screen is provided with a second raw material conveyor, the bottom of the powder bin is provided with the biaxial stirrer, and a third raw material conveyor is arranged below the biaxial stirrer. The crushing and stirring device allows the stirrer and the crusher to be arranged together, achieves automation operation of two treatment processes, can effectively improve the production efficiency, improves the production quality, reduces the labor intensity of operation personnel, and has the advantages of simple structure, reasonable design, low production cost, high production efficiency and strong applicability.

Publication: [CN 104588168 A 20150506](#)

Applicant: GUANGDE ZHONGYUAN NEW BUILDING MATERIAL CO LTD

Inventor: WU FUJUN

Prio:

Appl.No: CN201410686920

IPC: B02C 13/00

CN 104588168 A 说明书附图 1/3页

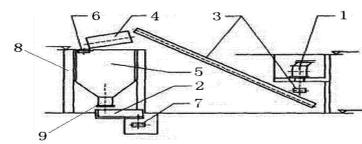


图 1

Semi-sealing coal crushing transfer device

The invention belongs to the technical field of coal machinery and particularly relates to a high-efficiency coal crushing machine, aiming at providing a coal crushing machine which has the advantages of simple structure, good anti-seismic property and complete crushing effect. According to the concrete technical scheme, a semi-sealing coal crushing transfer device comprises a left platform and a right platform, wherein the left platform is fixedly provided with a feeding hopper and a crushing barrel; the upper end opening of the feeding hopper is a feeding opening, the lower end opening of the feeding opening is a discharge opening, and the discharge opening is communicated with the inside of the crushing barrel; coal briquettes which need to be crushed are conveyed from the feeding opening to the crushing barrel and crushed through a crushing roller positioned in the crushing barrel; the crushing roller comprises a rolling bearing and a stepped bearing seat; the stepped bearing seat is a stepped cylinder-shaped steel body; one end of the stepped bearing seat is provided with a large open circular hole, and the other end of the stepped bearing seat is provided with a through hole; the rolling bearing is arranged in the stepped bearing seat; two ends of a support roller barrel are fixedly connected with the stepped bearing seat respectively; two ends of a support roller shaft are respectively arranged in the rolling bearing; and sleeves respectively sleeve the support roller shaft.

Publication: [CN 104588169 A 20150506](#)

Applicant: HUOZHOU COAL ELECTRICITY GROUP
HUOYUAN TONGXING INDUSTRY INVEST CO LTD

CN 104588169 A 说明书附图 1/3页

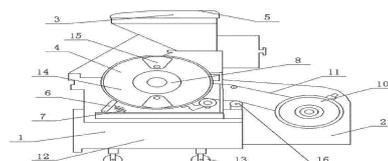


图 1

Inventor: CHEN YANQI; GAO GUANGJUN; GUO JING; HU HUIMIN; JIA WENHONG; KANG YUTING; LIU WENMING; SHAN YONGAN; SUN JINJUN; SUN SHENGYOU; WANG DINGWEI; YANG XIAOBIN; ZHAI PINGSHAN; ZHANG HUANYONG; ZHANG JING; ZHANG JINSHENG; ZHANG XIANGHUA; ZHANG XUEFENG; ZHANG YONGHONG

Prio:

Appl.No: CN201510002410

IPC: B02C 13/02

High-efficiency crushing machine for coal mine

The invention belongs to the technical field of coal machinery and aims at providing a coal crushing machine which has the advantages of simple structure, good anti-seismic property and complete crushing effect. According to the concrete scheme, a high-efficiency crushing machine for a coal mine comprises a left platform and a right platform, wherein the left platform is fixedly provided with a feeding hopper and a crushing barrel; the upper end opening of the feeding hopper is a feeding opening, the lower end opening of the feeding opening is a discharge opening, and the discharge opening is communicated with the inside of the crushing barrel; coal briquettes which need to be crushed are conveyed from the feeding opening to the crushing barrel and crushed through a crushing roller positioned in the crushing barrel; a plurality of adjusting devices are arranged at the bottom of the crushing barrel, and the plurality of adjusting devices are arranged on the outer wall of the crushing barrel side by side in a pressing manner; the lower end of each adjusting device is articulated with the bottom of the left platform through a hinge pin, and the upper end of each adjusting device is connected with the bottom of the left platform through a reset spring; and the adjusting devices tightly press the outer wall of the crushing barrel under the action of the reset springs, and the adjusting devices can prevent too high vibration frequency of the crushing barrel, thereby protecting the crushing barrel from being damaged.

Publication: [CN 104588170 A 20150506](#)

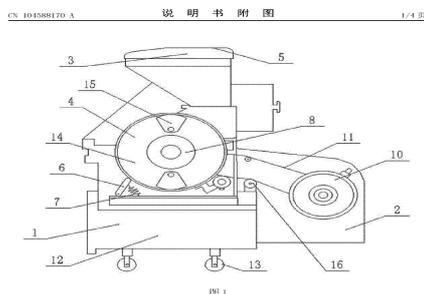
Applicant: HUOZHOU COAL ELECTRICITY GROUP
HUOYUAN TONGXING INDUSTRY INVEST CO LTD

Inventor: CHEN YANQI; GAO GUANGJUN; GUO JING; HU HUIMIN; JIA WENHONG; KANG YUTING; LIU WENMING; SHAN YONGAN; SUN JINJUN; SUN SHENGYOU; WANG DINGWEI; YANG XIAOBIN; ZHAI PINGSHAN; ZHANG HUANYONG; ZHANG JING; ZHANG JINSHENG; ZHANG XIANGHUA; ZHANG XUEFENG; ZHANG YONGHONG

Prio:

Appl.No: CN201510002430

IPC: B02C 13/02



Coal crushing machine

The invention belongs to the technical field of coal machinery and particularly relates to a high-efficiency coal crushing machine, aiming at providing a coal crushing machine which has the advantages of simple structure, good anti-seismic property and complete crushing effect. According to the concrete technical scheme, the coal crushing machine is characterized in that a plurality of adjusting devices are arranged at the bottom of the crushing barrel, and the plurality of adjusting devices are arranged on the outer wall of the crushing barrel side by side in a pressing manner; the lower end of each adjusting device is articulated with the bottom of the left platform through a hinge pin, and the upper end of each adjusting device is connected with the bottom of the left platform through a reset spring; the adjusting devices tightly press the outer wall of the crushing barrel under the action of the reset springs, and the adjusting devices can prevent the overhigh vibration frequency of the crushing barrel, thereby protect the crushing barrel from being damaged.

Publication: [CN 104588171 A 20150506](#)



Applicant: HUOZHOU COAL ELECTRICITY GROUP
HUOYUAN TONGXING INDUSTRY INVEST CO LTD

Inventor: CHEN YANQI; GAO GUANGJUN; GUO JING; HU HUIMIN; JIA WENHONG; KANG YUTING; LIU WENMING; SHAN YONGAN; SUN JINJUN; SUN SHENGYOU; WANG DINGWEI; YANG XIAOBIN; ZHAI PINGSHAN; ZHANG HUANYONG; ZHANG JING; ZHANG JINSHENG; ZHANG XIANGHUA; ZHANG XUEFENG; ZHANG YONGHONG

Prio:

Appl.No: CN201510002441

IPC: B02C 13/04

Roll type coal crushing device

The invention belongs to the technical field of coal machinery, and particularly relates to a high-efficiency coal crusher, aiming at providing a coal crusher which is simple in structure, good in seismic resistance and thorough in crushing. The concrete technical scheme is as follows: the roll type coal crushing device comprises a left platform and a right platform, wherein a feed hopper and a crushing barrel are fixed on the left platform; a feeding hole is an opening formed in the upper end of the feed hopper, and a discharge hole is an opening formed in the lower end of the feeding hole; the discharge hole is communicated with the interior of the crushing barrel; coal briquettes to be crushed are transported into the crushing barrel from the feeding hole and are crushed by a crush roller arranged in the crushing barrel; the bottom of the crushing barrel is provided with a plurality of adjusting devices; the plurality of adjusting devices are arranged on the outer wall of the crushing barrel in parallel in a pressing way; the lower end of each adjusting device is articulated with the bottom of the left platform by a pin shaft; the upper ends of the adjusting devices are connected with the bottom of the left platform respectively by a reset spring; the adjusting devices are pressed on the outer wall of the crushing barrel under the action of the reset springs; the adjusting devices can be used for preventing the overhigh vibration frequency of the crushing barrel.

Publication: [CN 104588172 A 20150506](#)

Applicant: HUOZHOU COAL ELECTRICITY GROUP
HUOYUAN TONGXING INDUSTRY INVEST CO LTD

Inventor: CHEN YANQI; GAO GUANGJUN; GUO JING; HU HUIMIN; JIA WENHONG; KANG YUTING; LIU WENMING; SHAN YONGAN; SUN JINJUN; SUN SHENGYOU; WANG DINGWEI; YANG XIAOBIN; ZHAI PINGSHAN; ZHANG HUANYONG; ZHANG JING; ZHANG JINSHENG; ZHANG XIANGHUA; ZHANG XUEFENG; ZHANG YONGHONG

Prio:

Appl.No: CN201510002447

IPC: B02C 13/04

CN 104588172 A 说明书附图 1/3页

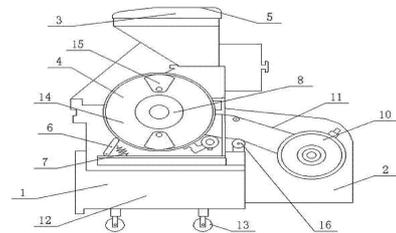


图 1

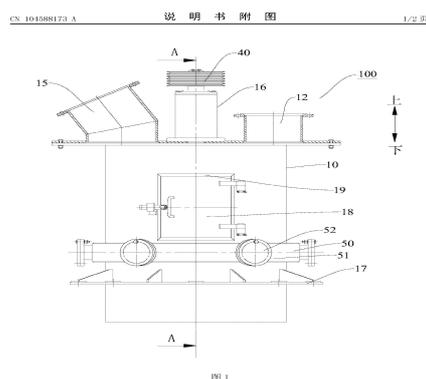
Device for breaking up and sorting smoke dust cakes

The invention discloses a device for breaking up and sorting smoke dust cakes, which comprises a shell, a rotating shaft, multiple breaking-up components and a driver, wherein a breaking-up cavity is arranged in the shell, and the shell is provided with a feed inlet, a discharge outlet, an air inlet and an air suction opening; the rotating shaft is rotationally arranged on the shell, and provided with a lower end and an upper end, the lower end extends to the inside of the breaking-up cavity, and the upper end is located on the outside of the breaking-up cavity; the multiple breaking-up components are arranged on the rotating shaft, and located in the breaking-up cavity; and the driver is connected with the rotating shaft so as to drive the rotating shaft to rotate. The device for breaking up and sorting smoke dust cakes, which is disclosed by the invention can achieve the rapid breaking up and sorting of smoke dust cakes.

Publication: [CN 104588173 A 20150506](#)

Applicant: CHINA ENFI ENGINEERING CORP
Inventor: JI KUI SHENG; JIA YUAN; LIU ZHANBIN; LU JINZHONG; YANG ZHIYONG

Prio:
Appl.No: CN201510033602
IPC: B02C 13/16



Vertical type roller mill

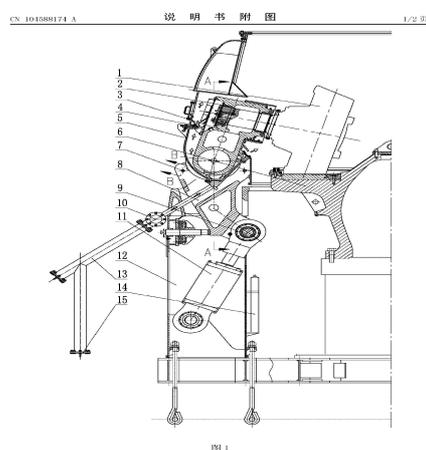
The invention relates to a vertical type roller mill. The vertical type roller mill comprises a grinding roller, wherein the grinding roller is mounted at the upper part of an upper rocker arm in a rolling and supporting mode. The vertical type roller mill is characterized in that the upper rocker arm and a rocker arm shaft are in an integrally casting structure, the rocker arm shaft is mounted on a bearing seat of a rack in the rolling and supporting mode, and the upper rocker arm is completely closed by a shell in a mill except protruding rocker arm shaft; an annular sealing sleeve is arranged on the shell in the mill, an interval I is reserved between the annular sealing sleeve and the rocker arm shaft and is sealed by a felt sealing ring; a middle shell sealing plate is also arranged on a middle shell, a 5-10mm interval II is reserved between the middle shell sealing plate and the upper rocker arm, the position, just below the rocker arm shaft, of the middle shell is communicated with a pipeline which is arranged inclined downwards, and an air inlet is formed in the pipeline. The vertical type roller mill has the advantages of good sealing performance and capability of lowering the air leakage rate of the mill.

Publication: [CN 104588174 A 20150506](#)

Applicant: SINOMA TECH & EQUIP GROUP CO; SINOMA TIANJIN POWDER TECHNOLOGY EQUIPMENT CO LTD

Inventor: LI XIANGYANG; LIN JIANKUN; LIU ZHEN; MA HUILAI; SHEN ZHANMIN; WANG SHUO; WU XIAO

Prio:
Appl.No: CN201510040764
IPC: B02C 15/04



Horizontal type sand mill

The invention discloses a horizontal type sand mill. The horizontal type sand mill comprises a cylinder body, a slurry inlet pipe arranged at one end of the cylinder body, a cold and hot water inlet formed in the lower side of the cylinder body, a spindle arranged in the cylinder body, a disc arranged on the spindle, a grinding medium adding hole formed in the upper side of the disc, a cold and hot water outlet formed in the cylinder body and parallel to the grinding medium adding hole, a product outlet formed in the right upper side of the cold and hot water outlet, a transmission belt pulley arranged at the right side of the cylinder body and a filter interval formed in the end part of the spindle, wherein the slurry inlet pipe and the cylinder body form an inclined structure. The horizontal type sand mill has the advantages of good processing quality and long service life.

Publication: [CN 104588175 A 20150506](#)

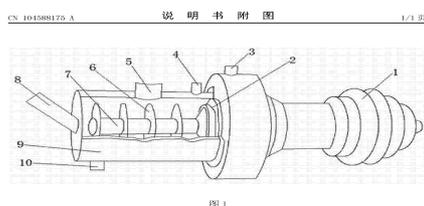
Applicant: YU WEI

Inventor: YU WEI

Prio:

Appl.No: CN201510021204

IPC: B02C 17/00



5

Extruding device for solid drugs

The invention discloses an extruding device for solid drugs. The device comprises a housing, a base and a grinding assembly which is arranged between the housing and the base for crushing the drugs. The extruding device further comprises a damping device which is arranged at the bottom of the base; the damping device comprises a guide rod which is fixedly arranged at the bottom of the base, a damping seat which is slidably connected with the tail part of the guide rod, a damping spring which is arranged between the lower bottom face of the base and the upper surface of the damping seat and a locking block which is fastened at the tail end of the guide rod. The damping spring sleeves the guide rod. The grinding assembly is arranged, so that the solid drugs can be crushed well; the damping spring is arranged below the base, so that vibration generated in the grinding process can be effectively reduced under the effect of the guide rod and the damping seat. The extruding device disclosed by the invention can effectively damp and is convenient in grinding and crushing the solid drugs.

Publication: [CN 104588176 A 20150506](#)

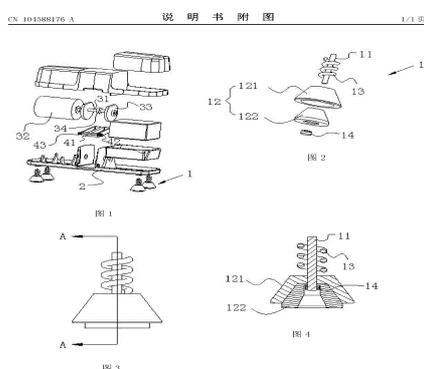
Applicant: SHENZHEN XIANGJIA MOULD CO LTD

Inventor: LI ZHIJIN; WU JIANHONG; ZHU ZHAOQI

Prio:

Appl.No: CN201510028955

IPC: B02C 17/00



6

Hanging double-frequency energy-saving mill

The invention discloses a hanging double-frequency energy-saving mill which comprises a base, a shell, grinding bodies, a vibrating device and a control system, wherein the shell is arranged on the base, the grinding bodies are arranged in the shell, the vibrating device drives the shell to vibrate, the top of the shell is provided with a feed hopper, the lower part of the shell is provided with a discharge hopper, multiple laminates are arranged in the shell along the vertical direction, each laminate is provided with a discharge outlet, the discharge outlet of the upper laminate is larger than the discharge outlet of the lower laminate, and the grinding body is filled in a space above each laminate. The mill disclosed by the invention has the characteristics of low energy consumption, high yield, and high efficiency.

Publication: [CN 104588177 A 20150506](#)

Applicant: FUJIAN XINCHUANG HUAJIAN SCIENCE & TECHNOLOGY CO LTD; LI SHENGBAI

Inventor: LI SHENGBAI; LI SHENGDING

Prio:

Appl.No: CN201510034340

IPC: B02C 17/10

CN 104588177 A 说明书附图 1/3页

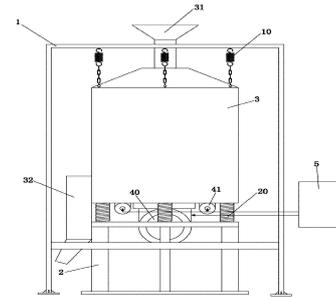


图 1

6

Safe high vibration strength elliptical vibromill

The invention discloses a safe high vibration strength elliptical vibromill which comprises a motor, a barrel rack, an upper barrel, a lower barrel, a frame, a base and an excitation dynamic damper. The safe high vibration strength elliptical vibromill is characterized in that by adopting the barrel with an elliptical movement locus, the motor is fixedly arranged on the frame, the motor is coupled with a main shaft of the excitation dynamic damper by virtue of a coupler; the barrel rack is mounted on the frame, the upper barrel is arranged on the top of the barrel rack and the lower barrel is arranged at the bottom of the frame; a steel ball, a steel rod or other grinding media are mounted in the barrel; the upper barrel and the lower barrel are arranged at eccentric position of the main shaft of the excitation dynamic damper by using a flange disc with a bearing by virtue of the barrel rack. The safe high vibration strength elliptical vibromill disclosed by the invention has the advantages of increasing the work efficiency by times, eliminating the vibratory load, moving elliptically, being high in vibrating strength, safe and reliable and the like.

Publication: [CN 104588178 A 20150506](#)

Applicant: GUANGXI ANN SCHORR SECURITY TECHNOLOGY CO LTD

Inventor: FENG XUEDONG

Prio:

Appl.No: CN201510023366

IPC: B02C 17/14

CN 104588178 A 说明书附图 1/3页

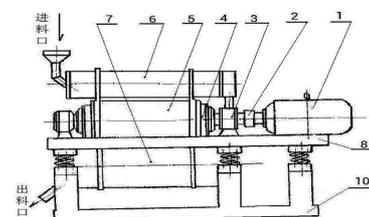


图 1

6

Mounting method for tube mill shell liner

The invention discloses a mounting method for a tube mill shell liner. Bolt holes are formed in a shell; a liner is fixed on the inner side of the shell through bolts, and the gap between the liner and the inner side of the shell is filled with a filling material. Through the mounting method, universality of mill shell liners with different diameters is realized on the premise that the original design requirements of a mill are met, the number of kinds of stored liner dies is reduced, the production cost and fund occupation of a casting factory are lowered, the universality of shell liner spare parts is improved, and production organization and efficiency improvement are facilitated. Besides, through the universal mounting method provided by the invention, the number of kinds of tube mill shell liner dies under similar working conditions can be reduced by more than 50%, the storage quantity of liner dies can be reduced effectively, the production cost and fund occupation of the casting factory are lowered, and production organization and efficiency improvement are facilitated.

Publication: [CN 104588179 A 20150506](#)

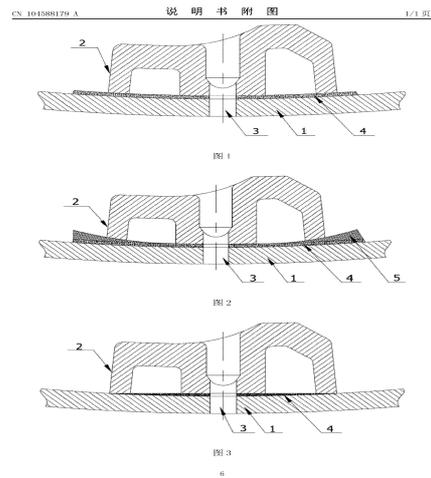
Applicant: ANHUI CONCH KAWASAKI EQUIPMENT MFG
CO LTD

Inventor: CAO QILAI; LI YANG; PAN HUJIANG; WANG LEI;
WU ZHENGFU

Prio:

Appl.No: CN201410841555

IPC: B02C 17/18



Cutter head fixing device of grinder

The invention relates to the technical field of a fixing device, and in particular relates to a cutter head fixing device of a grinder. The cutter head fixing device of the grinder is used for grinding the material handle of a plastic product. The cutter head fixing device of the grinder comprises a base, wherein two bearings are arranged in the base; a limiting plate used for limiting the positions of the two bearings is arranged at the connecting end of the base; a mounting plate is arranged at the other side of the limiting plate, and is fixedly connected with the base. The cutter head fixing device of the grinder is capable of stably fixing a cutter head, so that the stable operation of the cutter head can be guaranteed.

Publication: [CN 104588180 A 20150506](#)

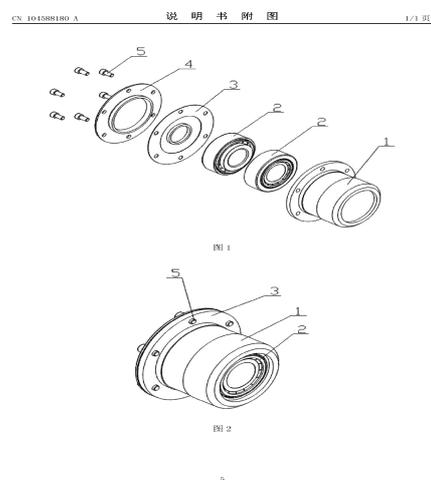
Applicant: ZHANG GUANGSHAN

Inventor: ZHANG GUANGSHAN

Prio:

Appl.No: CN201510001415

IPC: B02C 18/00



Primary crushing device for decomposing components of forestry and agricultural residues

The invention relates to a primary crushing device for decomposing components of forestry and agricultural residues. The primary crushing device comprises an L-shaped cylinder formed by a vertical cylinder body and a horizontal cylinder body, wherein the upper end of the vertical cylinder body is closed, a feed hopper is formed in the side wall of the vertical cylinder body, a plurality of ridges are formed in the inner wall at the lower side of the radial feed hopper, an inclined plane is arranged at the lower end of the connecting part of the vertical cylinder body and the horizontal cylinder body, a rotary shaft driven by a servo motor penetrates through an eccentric hole formed in the inclined plane and extends into the upper side in the vertical cylinder body, a plurality of blade groups are arranged on the rotary shaft, each blade group consists of a blade which is connected to the rotary shaft and eccentric hammers fixed at the single points of the ends of the two ends of the blade, and the lengths of the plurality of blade groups are equal are 1mm longer than the inside diameters formed by the inner surfaces of the ridges. According to the primary crushing device disclosed by the invention, when the blade groups on a power shaft rotate at a high speed, the eccentric hammers are driven to rotate and collide the ridges on the chamber wall to jointly finish shearing and crushing, and the crushing treatment process before component decomposition of the forestry and agricultural residues, including straws, in a plant fiber type can be finished.

Publication: [CN 104588181 A 20150506](#)

Applicant: TIANJIN TIANREN SHIJI TECHNOLOGY CO LTD

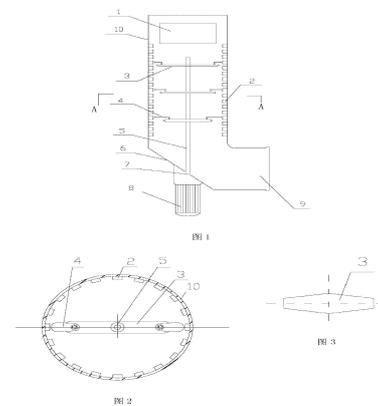
Inventor: CUI YONG

Prio:

Appl.No: CN201510026273

IPC: B02C 18/12

CN 104588181 A 说明书附图 1/1 页



Branch crushing machine

The invention discloses a branch crushing machine. A shell is communicated with a feeding tank and a discharge tank; an inclined angle of 40-45 degrees is formed between the feeding direction of the feeding tank and the horizontal plane. When being fed in, branches can slide and drop into the shell inside the feeding tank because of the gravity of self, the inclined angle is formed between the feeding direction of the branches and a rotating disc body, the branches are rapidly drawn into the shell under the cutting force of the rotating disc body which rotates in a high speed, the branches are cut for multiple times by virtue of cutting tools, and then the crushing effect is achieved; the situation that the feeding tank is blocked by the branches is avoided, and meanwhile the situation that the branches cannot be fed into the shell and need to be fed manually is avoided.

Publication: [CN 104588182 A 20150506](#)

Applicant: TIANJIN SINO FOREIGN BUILT CONVEYING MACHINERY CO LTD

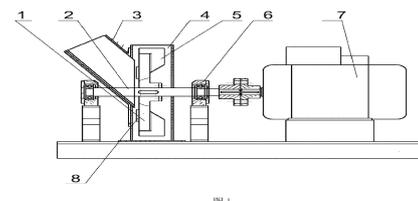
Inventor: WANG FENGZHONG; WANG LIANG; ZHANG PENG

Prio:

Appl.No: CN201310530954

IPC: B02C 18/14

CN 104588182 A 说明书附图 1/6 页



Soil crushing and screening mixed conveying system

The invention discloses a soil crushing and screening mixed conveying system comprising a soil conveyor (1) and a mixed material conveyor (2), wherein a soil crushing and screening machine (3) is arranged above the initiating end of the soil conveyor (1), the soil conveyor (1) is engaged with the mixed material conveyor (2), a plurality of feeders (4) are also sequentially arranged above the mixed material conveyor (2), and the tail end of the mixed material conveyor (2) extends to the upper side of a feed opening of a stirrer (5). According to the soil crushing and screening mixed conveying system disclosed by the invention, process stages such as soil crushing, screening, conveying, stirring and precise control can be synchronously completed, and the production effects of high production efficiency, low labor force cost and stable rice seedling raising soil quality can be achieved; and meanwhile, the soil crushing and screening mixed conveying system is small in floor area of equipment, and quick power connectors are adopted among sub-equipment to ensure that the soil crushing and screening mixed conveying system can move rapidly and field transfer can be facilitated.

Publication: [CN 104588183 A 20150506](#)

Applicant: CHONGQING ACAD AGRIC SCIENCES;
CHONGQING KAIRUI AGRICULTURAL DEV CO LTD

Inventor: CAI MING; CHEN ZHENGMING; GAO LIHONG;
LI PING; LI PING; LONG HANWEI; WANG YUHAI; WEI XIULI; XU JIN; ZHENG JISHU

Prio:
Appl.No: CN201410821805
IPC: B02C 18/14

CN 104588183 A 说明书附图 1/6页

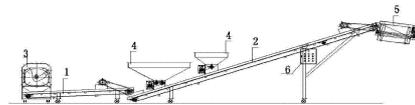


图 1

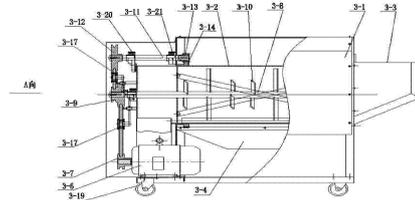


图 2

5

Branch crusher cutting tool

The invention discloses a branch crusher cutting tool. The surface of the cutting tool is provided with mounting holes used for connecting a main cutting rotating disc, and the structure of the cross section of the cutting tool is trapezoidal in shape; and the upper surface of the cutting tool is a parallelogrammic structure to make the knife edge of the cutting tool have a certain inclination in the cutting process, the cutting tool generates a force component to branches during cutting in the high speed rotating process, the branches slide on the knife edge under the action of the force component to rapidly break the branches, so the work efficiency of a branch crusher is improved, damages to the cutting tool are greatly reduced, and the service life of the cutting tool is prolonged.

Publication: [CN 104588184 A 20150506](#)

Applicant: TIANJIN SINO FOREIGN BUILT CONVEYING MACHINERY CO LTD

Inventor: WANG LIANG; ZHANG CHUNHE; ZHANG PENG

Prio:
Appl.No: CN201310534536
IPC: B02C 18/18

CN 104588184 A 说明书附图 1/1页

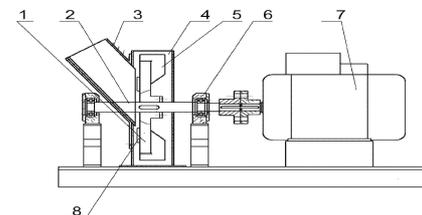


图 1

5

Branch crusher main cutting rotating disc

The invention discloses a branch crusher main cutting rotating disc. The branch crusher main cutting rotating disc comprises a circular rotating disc body, the center of the rotating disc body is provided with a fixed hole, and mounting grooves for mounting cutting knives are respectively arranged in the up, down, left and right directions of the fixed hole at intervals. The angles of the mounting grooves of the main cutting rotating disc are adjusted to make the arranged cutting tool have a certain work angle, so when the main cutting rotating disc rotates at a high speed, the cutting tool can easily work, thereby the work efficiency is greatly improved.

Publication: [CN 104588185 A 20150506](#)

Applicant: TIANJIN SINO FOREIGN BUILT CONVEYING MACHINERY CO LTD

Inventor: WANG FENGZHONG; ZHANG CHUNHE; ZHANG PENG

Prio:

Appl.No: CN201310534537

IPC: B02C 18/18

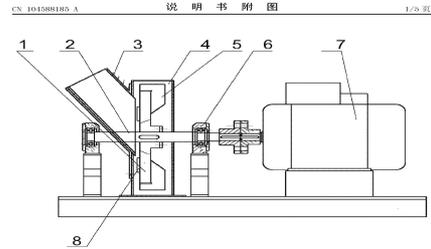


图 1

5

Efficient mincing machine

The invention discloses an efficient mincing machine. The efficient mincing machine comprises a shell, a driving device mounted in the shell, a mincing barrel arranged in front of the shell, and a mincing screw rod and a blade which are mounted in the mincing barrel, wherein a feeding barrel is arranged on the mincing barrel; and the mincing screw rod is provided with a sudden change type thread groove with a wide front part and a narrow rear part. The efficient mincing machine adopts the sudden change type thread groove design, and the processes of rough and fine machining is realized side by side; a mincing process is relatively smooth and has no winding; a food passing path is relatively short and the efficiency of the mincing machine is improved; and the residual foodstuff amount can be reduced after the utilization, and the wastes are reduced.

Publication: [CN 104588186 A 20150506](#)

Applicant: KINGFAI ELECTRICAL APPLIANCE IND CO LTD

Inventor: HUANG ZHIJIAN

Prio:

Appl.No: CN201510024705

IPC: B02C 18/30

CN 104588186 A 说明书附图 1/3页

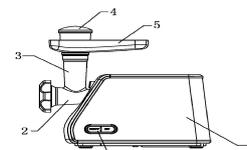


图 1

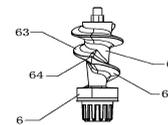


图 2



图 3

5

Efficient and energy-saving direct-drive type sand production machine

The invention relates to an efficient and energy-saving direct-drive type sand production machine, which comprises a sand production machine housing 1, a blade wheel 2, motors 3, motor brackets 5 and motor sealing pressing plates 6, wherein the blade wheel 2 is positioned inside the sand production machine housing 1 and is directly arranged on the shaft of the motor 3, the motor 3 is a full water cooling motor and is arranged inside the motor bracket 5, the motor bracket 5 comprises an outer shell 51, an upper end plate 52, a lower end plate 53, an inner shell 54, an upper support plate 55, a lower support plate 56, a material guide plate 57 and sealing plates 58, the left-right sealing plates 58, the material guide plate 57, the inner shell 54, the upper support plate 55, the lower support plates 56 and the outer shell 51 are combined to form the sealed space of the sealed motor 3, and the sealing plates 58, the separation plate 59 and the outer shell 51 are combined to form the third-stage sealing of the motor 3. According to the present invention, the blade wheel and motor coaxial direct-drive structure is adopted so as to provide advantages of high transmission efficiency, long motor service life and the like compared with the existing non-coaxial indirect-drive type sand production machine.

Publication: [CN 104588187 A 20150506](#)

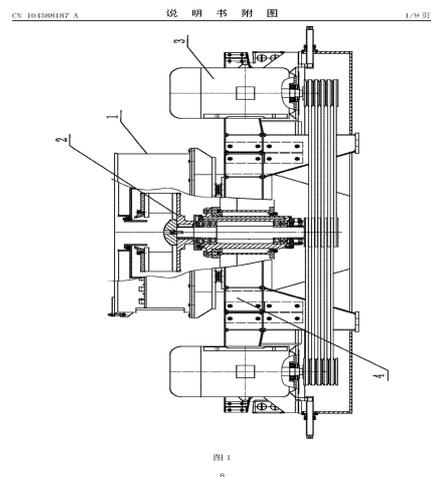
Applicant: HUNAN ZHAOYANG ELECTRO MECHANICAL CO LTD

Inventor: HE ZHIYONG; WANG HUA

Prio:

Appl.No: CN201410399695

IPC: B02C 19/00



Spherical object crushing device

The invention relates to a spherical object crushing device comprising an outer rotating disk composed of two circular pipes; a plurality of outer supporting cross beams are arranged at the middle of the two circular pipes on the outer rotating disk; an outer positioning ring is arranged between each two adjacent outer supporting cross beams; an outer vibration material disk is arranged at one side of the outer rotating disk; the outer vibration material disk conveys a spherical object through an outer material dropping pipeline; the other side of the outer rotating disk is provided with an outer supporting plate; an air cylinder is arranged below the outer supporting plate; the lower end of a piston rod of the air cylinder is provided with an outer positioning spring; a lower bearing disk which corresponds to the outer rotating disk and is driven to move up and down by the air cylinder is arranged below the outer rotating disk; a plurality of convex blocks are arranged on the lower bearing disk, and the convex blocks are in one-to-one correspondence to the outer positioning rings; a waste tank is arranged below the bearing disk. The spherical object crushing device has the advantages of simple structure and reasonable design, not only improves the work efficiency, but also can crush the spherical object at one time, is accurate in positioning, and cannot cause harm.

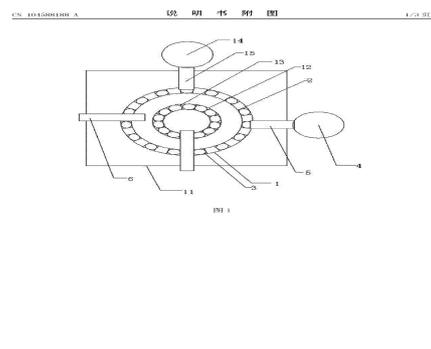
Publication: [CN 104588188 A 20150506](#)

Applicant: NI GUOQUAN

Inventor: NI GUOQUAN

Prio:

Appl.No: CN201410694126



IPC: B02C 19/00

Ore grinding process of high-purity magnesite

An ore grinding process of high-purity magnesite includes the following steps: 1, carrying out coarse crushing of a raw ore obtained from mining, then crushing, pouring into an autogenous mill, carrying out ore grinding, feeding the ground ore slurry into a grading device through a slag slurry pump, and grading; 2, carrying out sand returning of graded coarse particles back to the autogenous mill, and again carrying out ore grinding; and 3, obtaining a grading device overflow, namely the qualified ore slurry, feeding into a flotation machine, carrying out flotation operation, and removing impurity minerals. The technological process is used for treating the magnesite ore, not only are medium crushing and fine crushing operations of the magnesite cancelled and the production process is simplified, but also equipment investment and infrastructure investment are saved, the production cost of mineral separation is reduced, economic benefits are improved, the amount of steel balls is also reduced, and the amount of iron entering the flow path is reduced.

Publication: [CN 104588189 A 20150506](#)

Applicant: DANDONG MEIBAO MAGNESIUM CO LTD
Inventor: JIANG BIN; MA ZEQUAN; MENG XIANGJUN;
ZHANG WENXIN; ZHAO QING

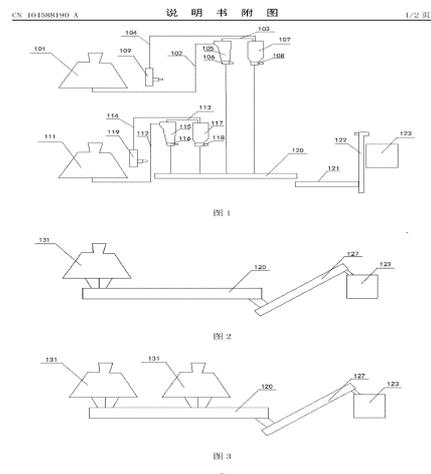
Prio:
Appl.No: CN201410694290
IPC: B02C 21/00

Crushing system

The invention relates to the field of material crushing, and particularly relates to a crushing system. The system comprises a crushing machine, a scrapper machine, a belt conveyer and a stock bin, wherein the crushing machine is connected with the scrapper machine, the scrapper machine is connected with the belt conveyer, and the belt conveyer is connected with the stock bin; an angle of 22-28 degrees is formed between the scrapper machine and the belt conveyer. According to the crushing system provided by the invention, a conveying belt and a lifter are replaced with the belt conveyer; the crushing system is simple in structure and relatively low in running cost.

Publication: [CN 104588190 A 20150506](#)

Applicant: YUNNAN YUJIABAO ARTIFICIAL WOOD CO LTD
Inventor: LUO YANG
Prio:
Appl.No: CN201410808759
IPC: B02C 21/00



Medium-speed abrasive flow field optimization method

The invention provides a medium-speed abrasive flow field optimization method. The method comprises the following steps: improving a powder conveying and drying module in a medium-speed mill, and adding a millstone center air inlet, a millstone upside inlet pipe and a central air inlet pipe on the original basis of the powder conveying and drying module, so that the lower flow field in the medium-speed mill can fill all the space in the mill, an original inertia area is completely activated, and the lower flow field in the medium-speed mill is optimized; and taking a dynamic rotary separator as a separator of a powder separation module, and improving the structure of a rotor body of the dynamic rotary separator, so that hot air can form a strong spiral ascending flow field between the rotor body and a mill shell, a strong centrifugal separation effect can be achieved by the formed upper flow field, and the upper flow field in the medium-speed mill is optimized. Compared with a traditional medium-speed mill, the medium-speed mill optimized by the method disclosed by the invention has the advantages that the flow field in the mill is more reasonable, so that the overall performance of the medium-speed mill is substantially improved compared with that of the traditional medium-speed mill.

Publication: [CN 104588191 A 20150506](#)

Applicant: SHANGHAI YIFENG ELECTRICAL AND MECHANICAL TECHNOLOGY DEV CO LTD
Inventor: CHEN GANG; CHENG HUA; HE FENGFA; LI DAZHENG

Prio:
Appl.No: CN201510016046
IPC: B02C 21/00

CN 104588191 A 说明书附图 1/10页

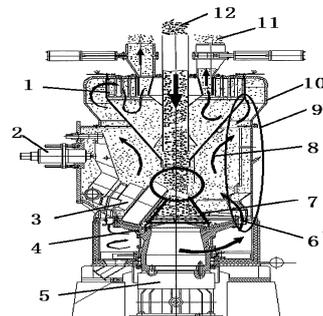


图 1

8

Manufacturing device integrating drying, grinding and powder selecting

The invention discloses a manufacturing device integrating drying, grinding and powder selecting. The manufacturing device integrating drying, grinding and powder selecting comprises the following components: a feeding system, a drying and grinding system connected with the feeding system, and a powder selecting system connected with the drying and grinding system. According to the invention, the drying and grinding system comprises a base, a drying and grinding box set on the base and a vibrator arranged at the bottom of the drying and grinding box; the drying and grinding box is connected with the base by a buffer cushion; a feeding hopper is set on the drying and grinding box and a plywood is arranged inside the drying and grinding box; the plywood is provided with a material feeding opening and filled with grinding bodies in the upper part; air inlets are formed in the drying and grinding box to let high-temperature air in; the material feeding opening is positioned under the plywood on the drying and grinding box; and the material feeding opening is connected with the powder selecting system by a first soft connecting mechanism. The invention is characterized by integrating drying, grinding and powder selecting, so as to shorten process route, decrease floor space, reduce labor force, increase production efficiency and cut down energy consumption.

Publication: [CN 104588192 A 20150506](#)

Applicant: FUJIAN XINCHUANG HUAJIAN SCIENCE & TECHNOLOGY CO LTD; LI SHENGBAI
Inventor: CHEN HENGPU; LI SHENGBAI; LI SHENGDING
Prio:
Appl.No: CN201510034318

CN 104588192 A 说明书附图 1/10页

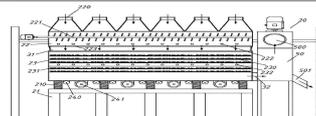


图 1

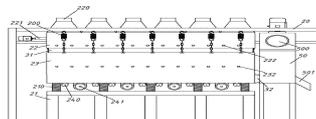


图 2

9

IPC: B02C 21/00

Micro powder production device and process for water granulated slags, steel slags and coal gangues

The invention discloses a micro powder production device for water granulated slags, steel slags and coal gangues, which sequentially comprises a crushing-feeding system, a drying system, an energy-saving mill, a product sorting system and a discharging system, wherein the crushing-feeding system is used for inputting raw materials, the drying system is used for drying the raw materials, the energy-saving mill is used for grinding the raw materials into micro powder, the product sorting system is used for sorting products, and the discharging system is used for outputting the products; and the energy-saving mill comprises a grinding box base, a grinding box and a vibrator, the grinding box is arranged on the grinding box base, the vibrator drives the grinding box to vibrate, the upper part of the grinding box is provided with a feed hopper, the lower part of the grinding box is provided with a discharge hopper, multiple laminates are vertically arranged in the grinding box, each laminate is uniformly provided with discharge outlets, the pore diameter of the discharge outlet of the upper laminate is greater than the pore diameter of the discharge outlet of the lower laminate, and a grinding body is filled in a space above each laminate. The invention also discloses a process corresponding to the device. The device and process which are disclosed by the invention, after being applied to production, have the characteristics of high discharge rate, high efficiency, and low energy consumption.

Publication: **CN 104588193 A 20150506**

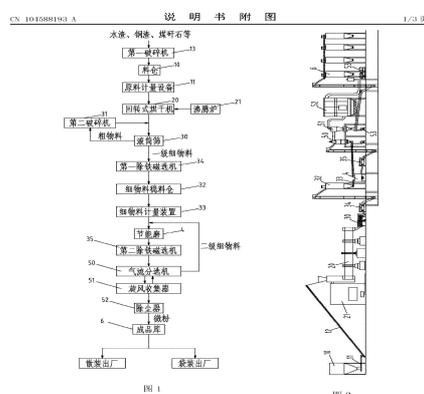
Applicant: FUJIAN XINCHUANG HUAJIAN SCIENCE & TECHNOLOGY CO LTD; LI SHENGBAI

Inventor: CHEN HENGPU; LI SHENGBAI; LI SHENGDING; LI SHENGXU; LI ZHENYOU; LIN SHENGLI; WU JIANSHEG

Prio:

Appl.No: CN201510034387

IPC: B02C 21/00



Crusher fixing bracket

The invention provides a crusher fixing bracket, and belongs to the technical field of crushing equipment. The crusher fixing bracket can be used for effectively solving the problem of instable fastness of the original crusher fixing brackets. The crusher fixing bracket structurally comprises a pair of fixing pieces with the same structure, and a first fixing hole and a second fixing hole are formed in each fixing piece; a supporting rod is arranged in the first fixing hole, and fixing holes are formed in both ends of the supporting rod; a fixing block is further arranged between the two fixing pieces, and a fixing support piece is arranged on the fixing block. The crusher fixing bracket provided by the invention is simple to operate, convenient to use and is suitable for a variety of occasions.

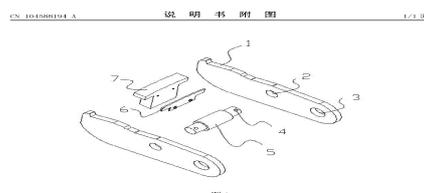
Publication: **CN 104588194 A 20150506**

Applicant: ZHOU YUHONG

Inventor: ZHOU YUHONG

Prio:

Appl.No: CN201510060368



IPC: B02C 23/00

Branch pulverizer pressure feed roller

The invention discloses a branch pulverizer pressure feed roller. The pressure feed roller is in a cylindrical structure, and 16 acute-angle grooves are uniformly arranged on the outer circumferential surface along the axial direction at intervals. By changing the structure of the prior art that the outer circumference is provided with projections or gears, the outer circumferential surface is provided with the 16 acute-angle grooves, so that branches can be better conveyed according to the rotation of the pressure feed roller, and the branches are unlikely to break; when the branches are transported, the thrusting force can be applied onto the messy branches for multiple times under the effect of the acute-angle grooves, so that the distribution direction of each branch is similarly identical, the speed and the direction of the branches entering the pulverizer can be enabled to be generally in consistency, and the pulverizer is prevented from being damaged.

Publication: [CN 104588195 A 20150506](#)

Applicant: TIANJIN SINO FOREIGN BUILT CONVEYING MACHINERY CO LTD

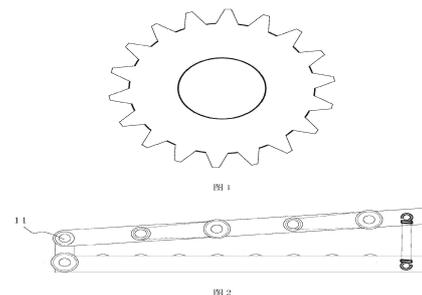
Inventor: LI HUIZHAN; ZHANG DAPENG; ZHANG PENG

Prio:

Appl.No: CN201310530301

IPC: B02C 23/02

CN 104588195 A 说明书附图 1/3页



6

Conveying roller for feeding system of branch crusher

The invention discloses a conveying roller for a feeding system of a branch crusher. The conveying roller comprises an upper pressing roller group and a horizontally-laid lower conveying roller group, wherein the rotation speeds of a plurality of upper pressing rollers of the upper pressing roller group are gradually reduced from a discharging opening to a feeding opening, so that the conveying speed after branches are fed is gradually increased, and blocking of the discharging opening can be effectively avoided; a tension spring is arranged at the feeding opening, so that the tension spring can be used for supporting the upper pressing roller group and the lower conveying roller group to form an included angle of at least 3 degrees. Therefore, the branches are well fed. The tension spring can be used for limiting the included angle formed by the upper pressing roller group and the lower conveying roller group to be 7 degrees at maximum, so that the situation that the conveying effect of the branches is influenced from unlimited increase of the included angle can be avoided.

Publication: [CN 104588196 A 20150506](#)

Applicant: TIANJIN SINO FOREIGN BUILT CONVEYING MACHINERY CO LTD

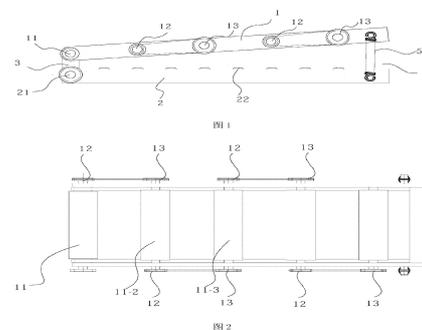
Inventor: LI HUIZHAN; ZHANG DAPENG; ZHANG PENG

Prio:

Appl.No: CN201310530302

IPC: B02C 23/02

CN 104588196 A 说明书附图 1/1页



6

Cyclic turning wheel crushing equipment

The invention relates to cyclic turning wheel crushing equipment. The cyclic turning wheel crushing equipment comprises an engine base, a crusher fixed on the engine base, and a turning wheel cyclic feeding mechanism, wherein the crusher is provided with a charge assembly, a material outlet and a driving assembly; the turning wheel cyclic feeding mechanism comprises a feeding turning wheel, a charge barrel, a material flow control annular sheet and a central rotation shaft; the material flow control annular sheet and the feeding wheel are movably connected with the central rotation shaft via a spoke connecting rod; the central rotation shaft is fixedly connected with the outer wall of the crusher. The cyclic turning wheel crushing equipment has the beneficial effects that the crushing equipment enables the finished product rate and the production efficiency of enterprises for products to be improved further.

Publication: [CN 104588197 A 20150506](#)

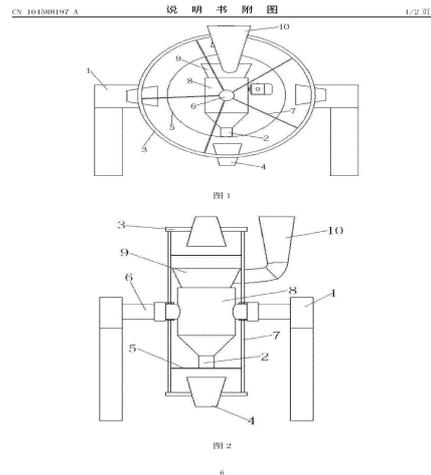
Applicant: JIANGSU HAICHEN SCIENCE AND TECHNOLOGY GROUP CO LTD

Inventor: LU ZHISHEN; XU HAIRONG

Prio:

Appl.No: CN201510049425

IPC: B02C 23/02



Full-automatic control method for rolling type flat cone roll crusher

The invention discloses a full-automatic control method for a rolling type flat cone roll crusher. The method comprises the following steps: lubricating the rolling type flat cone roll crusher; adjusting the gap between a conical roller part and a hollow shaft sleeve disc part by virtue of a control module according to the types of crushed materials; and executing different material crushing programs by virtue of the control module according to the material types, and executing different feeding programs according to different rotating speeds. According to the method disclosed by the invention, the corresponding crushing programs can be executed according to different types of materials, the quality of the crushed materials is improved, the equipment wear is reduced, and the service life of the equipment is prolonged.

Publication: [CN 104588198 A 20150506](#)

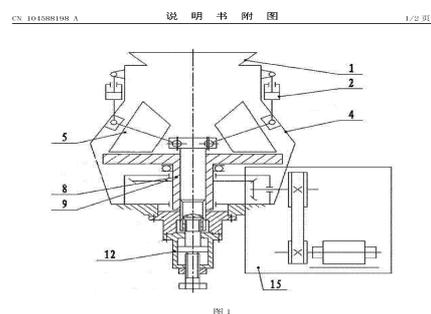
Applicant: UNIV ZHENGZHOU

Inventor: LI DALEI; LI LIANGGUO; LIU ZHIHUA; MA SHENGGANG; WANG HAIYI; WANG SHIYU; XIAO XIANGUO; YANG JIAN; ZHANG JIANLI; ZHANG ZONGLEI

Prio:

Appl.No: CN201510065021

IPC: B02C 25/00



Gyratory crusher main shaft sleeve

A gyratory crusher main shaft sleeve for friction fitting over an uppermost end of a crusher main shaft. The sleeve comprises an elongate axial wall for positioning in contact with an outward facing surface of the main shaft. The axial wall comprises a thickness that decreases in a direction from a second upper end to a first lower end wherein the internal facing surface of the sleeve extends transverse to a longitudinal axis of the sleeve so as to taper inwardly towards the axis in a direction from the first to the second end.

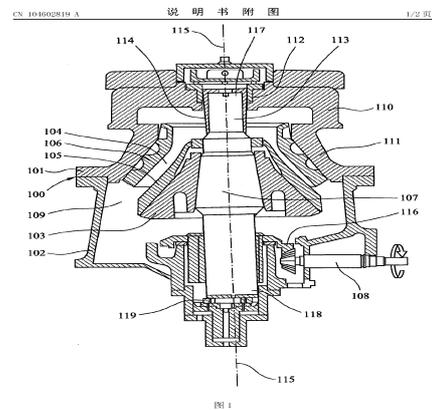
Publication: [CN 104602819 A 20150506](#)

Applicant: SANDVIK INTELLECTUAL PROPERTY
Inventor: AABERG NIKLAS; ERIKSSON BENGT-ARNE;
ROSDAHL FREDRIK

Prio: EP 20130620 2013062861, EP 20120802
12179089

Appl.No: CN201380041193

IPC: B02C 2/06



Soaking and washing device for rice

The invention discloses a soaking and washing device for rice. The device comprises a rack, a storage jar, an electrical machine, a motor, a rotating plate, a leaky bucket, a leaky plate, a controllable valve, a water pipe and a control switch. The storage jar is arranged at the upper end of the rack and connected with the rack in a welded mode, the electrical machine is arranged at the lower end of the bottom of the rack, the electrical machine is connected with the rack in a threaded mode, the motor is located at the bottom end of the interior of the storage jar and connected with the storage jar in a threaded mode, the rotating plate is located at the upper end of the motor and connected with the motor in a threaded mode, the leaky bucket is arranged at the upper end of the rotating plate and connected with the rotating plate in a clamping and buckling mode, the leaky plate is arranged at the upper end of the interior of the leaky bucket and connected with the leaky bucket in a movable mode, the controllable valve is located at the middle end of the outer wall of the storage jar and connected with the storage jar in a threaded mode, the water pipe is located at the left end of the outer side of the controllable valve and connected with the controllable valve in a threaded mode, and the control switch is located at the front end of the outer wall of the storage jar and connected with the storage jar in a threaded mode. The device greatly reduces the workload of staff members, and avoids the phenomenon that the humidity of the rice is unstable.

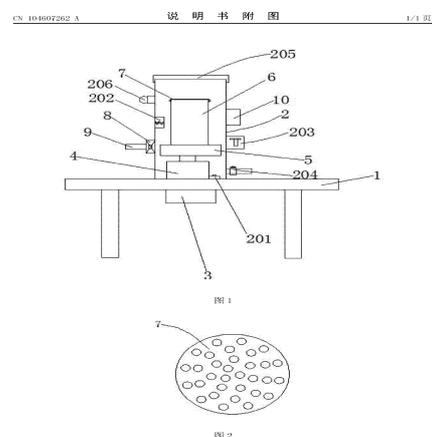
Publication: [CN 104607262 A 20150513](#)

Applicant: ANHUI TIANLI GRAIN AND OIL GROUP CO LTD
Inventor: ZHANG LE; ZHANG LEI; ZHANG SHIPING

Prio:

Appl.No: CN201510067557

IPC: B02B 1/06



Grain polishing machine device and operation control method for polishing machine feeding gate

The invention discloses a grain polishing machine device and an operation control method for a polishing machine feeding gate. The grain polishing machine device comprises a polishing machine, the feeding gate and a control device. The control device comprises a detection device used for detecting a load current of the polishing machine, a feedback device used for feedback of the stock of a hopper of the polishing machine and a gate control device which is used for setting a comparison current according to a feedback signal of the feedback device and controlling the operation of the feeding gate according to the deviation between the comparison current and the load current. By means of the grain polishing machine device and the operation control method for the polishing machine feeding gate, the operation of the feeding gate is controlled according to the deviation between the comparison current set according to the feedback signal and the load current detected by the detection device, and the technical problems that in the prior art, material fed into the machine can not be adjusted automatically through adopting purely manual pulling of the feeding gate, and the jamming accident is prone to occurring are solved; the automatic adjustment of the feeding gate of the polishing machine according to the stock of the material is achieved, and the material yield of the grain polishing machine is further stabilized.

Publication: [CN 104607263 A 20150513](#)

Applicant: HUNAN CHENZHOU GRAIN & OIL MACHINERY CO LTD

Inventor: HU ZHIXIANG; LI HONGBIAO; WU JIEJUN; YAN JUN; ZHOU HONGLI

Prio:

Appl.No: CN201510046691

IPC: B02B 3/00

CN 104607263 A 说明书附图 1/3 页

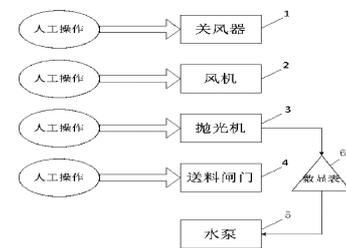


图 1

8

Rack structure for jaw crusher

The invention relates to the field of mining equipment. A rack structure for a jaw crusher comprises a rack base, and two rack body side plates oppositely arranged on the rack base, wherein the two rack body side plates are connected and fixed on the rack base through rack connection devices, each rack connection device comprises a tray fixed on the lower end part of each rack body side plate, and a rack body bottom corner fixed on the rack base, the rack body bottom corner is connected and fixed with the tray through a rack body bolt, and two bottom corner rubber springs are located and installed on the rack body bolt; a pull rod through hole is formed in each rack body side plate, and a shaft sleeve and a U-shaped clapboard are arranged on the port of the pull rod through hole; the two rack body side plates are connected and fixed through a rack pull rod, the outer end part of the rack pull rod sequentially penetrates through the U-shaped clapboard, the pull rod through hole and the shaft sleeve and then is in threaded connection with a pull rod nut, and the rack pull rod is located with and separated from the inner sidewall surface of the pull rod through hole by the U-shaped clapboard and the shaft sleeve. The rack structure for the jaw crusher has the advantages of high connection strength and good damping effect.

Publication: [CN 104607264 A 20150513](#)

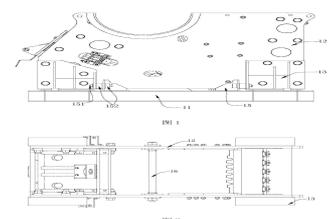
Applicant: ZHEJIANG ZHE KUANG HEAVY IND CO LTD

Inventor: CHEN BINGMIN; CHEN LIANFANG; CHEN LIHUA; LI GUOQIANG; ZHAO MENGJUN

Prio:

Appl.No: CN201510083966

CN 104607264 A 说明书附图 1/3 页



8

IPC: B02C 1/02

Jaw type structural stone material crushing machine

The invention relates to the field of mine equipment, and particularly relates to a jaw type structural stone material crushing machine. The jaw type structural stone material crushing machine comprises a stander, a driving unit, a mobile jaw group, a discharge opening regulating mechanism and a mobile jaw tensioning buffer mechanism, wherein the driving unit, the mobile jaw group, the discharge opening regulating mechanism and the mobile jaw tensioning buffer mechanism are arranged on the stander; the stander comprises a main stander body, a fixed jaw frame and a toggle plate frame; the fixed jaw frame is arranged on the front end inside the main stander body, and the toggle plate frame is arranged on the rear end inside the main stander body; the mobile jaw group is arranged on the main stander body positioned between the fixed jaw frame and the toggle plate frame; the driving unit is connected with the mobile jaw group in a transmission way; and a crushing cavity is positioned between the mobile jaw group and the fixed jaw frame. According to the jaw type structural stone material crushing machine, the discharge opening regulating mechanism is simple in structure, convenient to install and convenient to regulate, and the mobile jaw tensioning buffer mechanism is novel in structure and has good tensioning and buffer effects.

Publication: [CN 104607265 A 20150513](#)

Applicant: ZHEJIANG ZHE KUANG HEAVY IND CO LTD
Inventor: CHEN BINGMIN; CHEN LIANFANG; CHEN LIHUA; LI GUOQIANG; ZHAO MENGJUN

Prio:
Appl.No: CN201510083686
IPC: B02C 1/04

CN 104607265 A 说明书附图 1/2页

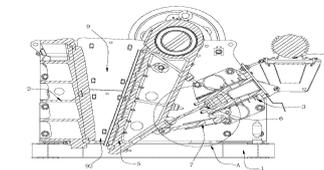


图 1

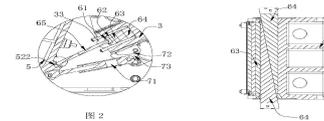


图 2

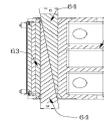


图 3

6

Novel jaw crusher

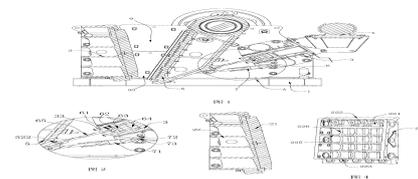
The invention relates to the field of mine equipment, and particularly relates to a novel jaw crusher. The novel jaw crusher comprises a stander, a driving unit, a mobile jaw group, a discharge opening regulating mechanism and a mobile jaw tensioning buffer mechanism, wherein the driving unit, the mobile jaw group, the discharge opening regulating mechanism and the mobile jaw tensioning buffer mechanism are arranged on the stander; the stander comprises a main stander body, a fixed jaw frame and a toggle plate frame; the fixed jaw frame is arranged on the front end inside the main stander body, and the toggle plate frame is arranged on the rear end inside the main stander body; the mobile jaw group is arranged on the main stander body positioned between the fixed jaw frame and the toggle plate frame; a crushing cavity is positioned between the mobile jaw group and the fixed jaw frame; the driving unit is connected with the mobile jaw group in a transmission way; and the discharge opening regulating mechanism and the mobile jaw tensioning buffer mechanism are both arranged on the toggle plate frame, the front end part of the discharge opening regulating mechanism supports against the mobile jaw group, and the front end part of the mobile jaw tensioning buffer mechanism is connected with the mobile jaw group. The novel jaw crusher disclosed by the invention has the advantages of convenience in regulation and stability in swing of the mobile jaw group and good shock-absorbing effect of a machine body.

Publication: [CN 104607266 A 20150513](#)

Applicant: ZHEJIANG ZHE KUANG HEAVY IND CO LTD
Inventor: CHEN BINGMIN; CHEN LIANFANG; CHEN LIHUA; LI GUOQIANG; ZHAO MENGJUN

Prio:
Appl.No: CN201510083968

CN 104607266 A 说明书附图 1/2页



6

IPC: B02C 1/04

Full-automatic rice dry-grinding device

The invention discloses a rice dry-grinding device. The rice dry-grinding device comprises a rack, an electric motor, a dry-grinding chamber, a feeding hopper, a control switch, an extruding shaft, a screen, a fan, a material storage chamber and a discharging hole; according to the full-automatic rice dry-grinding device, rice is fed into the feeding hopper, when a weight monitor monitors the limited weight, the control switch drives a feeding plate to be opened, the rice falls into the dry-grinding chamber, the control switch drives the electric motor to work simultaneously, the electric motor drives the extruding shaft to rotate through a conveyer belt, the rice in the dry-grinding chamber is ground by the extruding shaft and rice flour is formed; and besides, the control switch drives the fan to work to adsorb rice flour on the screen, the required rice flour falls into the material storage chamber through the screen, and then is discharged through the discharging hole; and the rice dry-grinding device has the skillful structure and has the strong function, and the workload of workers can be greatly alleviated due to organic combination.

Publication: **CN 104607267 A 20150513**

Applicant: ANHUI TIANLI GRAIN AND OIL GROUP CO LTD

Inventor: ZHANG LE; ZHANG LEI; ZHANG SHIPING

Prio:

Appl.No: CN201510067602

IPC: B02C 4/00

CN 104607267 A 说明书附图 1/1 页

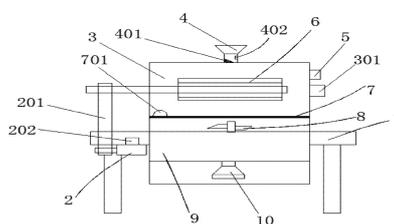


图 1

6

Tablet smashing device

The invention relates to a tablet smashing device. The tablet smashing device comprises a base, a bracket device positioned above the base, a tablet dividing plate positioned on the bracket device, a frame body positioned in the bracket device, a feed hopper positioned above the frame, a smashing wheel positioned in the frame body, a scrubbing wheel positioned below the smashing wheel, a material receiving device positioned outside the frame body and a material receiving tank positioned below the material receiving device, wherein the bracket device comprises a first bracket and a second bracket; the cross section of the tablet dividing plate is triangular; the feed hopper comprises a left material dividing plate and a right material dividing plate; a supporting block is arranged right below the feed hopper; the material receiving device comprises a supporting frame, a material receiving pipe, a filter plate, a first pipeline and a fan; the frame body comprises an upper body part and a lower body part below the upper body part; the upper surface of the supporting block is inclined, the upper surface of the supporting block is fixedly connected with the lower surface of the feed hopper, a groove which is cuboid is formed in the lower surface of the supporting plate, and the upper end of the upper body part is accommodated in the groove.

Publication: **CN 104607268 A 20150513**

Applicant: HUANG BIN

Inventor: HUANG BIN

Prio:

Appl.No: CN201510056157

CN 104607268 A 说明书附图 1/1 页

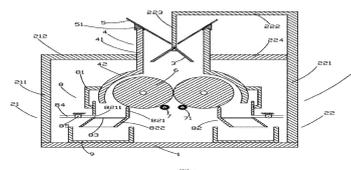


图 1

6

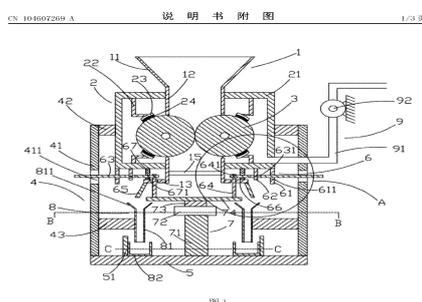
IPC: B02C 4/02

Drug crushing device

The invention discloses a drug crushing device. The drug crushing device comprises a feeding device, a frame body device positioned at the periphery of the feeding device, a crushing wheel positioned inside the frame body device, a bracket device positioned below the frame body device, a base positioned below the bracket device, a baffle plate device positioned below the frame body device, and a rotary device positioned below the baffle plate device, wherein the frame body device comprises a frame body, an L-shaped rod, a bent plate and bristles; the feeding device comprises a feeding hopper arranged above, a feeding tube, a connecting plate and a filter plate; the bracket device comprises a vertical part, a first horizontal part and a second horizontal part; the baffle plate device comprises a first supporting rod, a second supporting rod, a rotary rod, a baffle plate, an inclined plate, a horizontal plate and a supporting plate; the rotary device comprises a supporting column, a motor, a rotary shaft and a rotary plate; a material collecting ring comprises a feeding end at the upper end, a material distributing end positioned below the feeding end and a partition plate positioned inside the material distributing end. The drug crushing device is good in crushing effect and capable of realizing uniform distributing and accurate quantifying.

Publication: **CN 104607269 A 20150513**

Applicant: CHENGDU FUYANG TECHNOLOGY DEV CO LTD
Inventor: CHE GUORONG
Prio:
Appl.No: CN201510064638
IPC: B02C 4/02

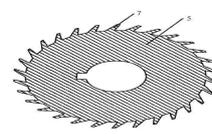
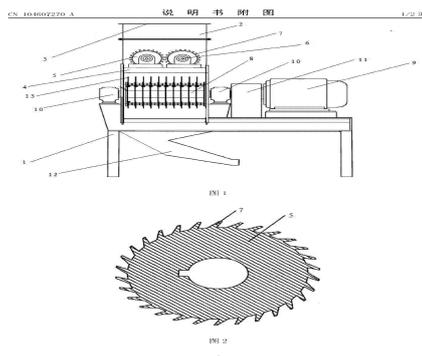


Pulverizer

The invention provides a pulverizer which comprises a rack, wherein a panel is arranged on the rack, an opening is formed in one side of the panel, the opening position is communicated with a lower opening of a pulverizing barrel, a feed port is formed in the upper end of the pulverizing barrel, and a primary pulverizing device and a secondary pulverizing device are arranged in the pulverizing barrel from top to bottom sequentially; the primary pulverizing device comprises a support plate and pulverizing rollers; a drive device comprises a second motor and a second coupler; the secondary pulverizing device comprises a stirring shaft and a first motor; a damping device comprises a shock absorption cushion and a bottom plate. The pulverizer has the benefits as follows: the damping device is arranged between the motors and the rack and can reduce impact caused by vibration when the pulverizer runs, and accordingly, the whole pulverizer operates stably and is convenient to operate; meanwhile, the service life of the pulverizer can be prolonged, and the pulverizing effect is better after plastics enter the pulverizer by means of the primary smashing device and the secondary smashing device.

Publication: **CN 104607270 A 20150513**

Applicant: TIANJIN HAIHUA AUTOMOBILE PLASTIC PRODUCTS CO LTD
Inventor: DU QINGLAI
Prio:
Appl.No: CN201510026726



IPC: B02C 4/08

Pulverizer as well as grinding mechanism and grinding method thereof

The invention discloses a pulverizer as well as a grinding mechanism and a grinding method thereof. The grinding mechanism comprises a movable abrasive disc and a static abrasive disc which are matched with each other for grinding, wherein a clearance for enabling the movable abrasive disc and the static abrasive disc to rotate and not to be in contact with each other is formed between the movable abrasive disc and the static abrasive disc. According to the invention, the movable abrasive disc and the static abrasive disc are enabled to rotate at the clearance, and the movable abrasive disc and the static abrasive disc are prevented from being in contact friction with each other in the grinding process, so that no metal filing is generated and the physical health is facilitated. In addition, as the movable abrasive disc and the static abrasive disc cannot be in contact friction with each other during high-speed rotation, the heating and high temperature of the grinding mechanism in the grinding process are avoided, and the nutrition of nutrition powder does not lose; besides, as the movable abrasive disc and the static abrasive disc cannot be in contact friction with each other during the grinding process, the heating and high temperature of the grinding mechanism in the grinding process are avoided, sugar-containing powder is not burnt and does not block the grinding mechanism, and the noise is low; moreover, the movable abrasive disc and the static abrasive disc are not worn easily when the grinding mechanism performs grinding, so that the service life of the grinding mechanism is prolonged, and the maintenance cost is also reduced.

Publication: [CN 104607271 A 20150513](#)

Applicant: SHENZHEN HENGDE INNOVATIVE TECHNOLOGY CO LTD

Inventor: WANG XINGZHI

Prio:

Appl.No: CN201510034551

IPC: B02C 7/06

CN 104607271 A 说明书附图 1/10页

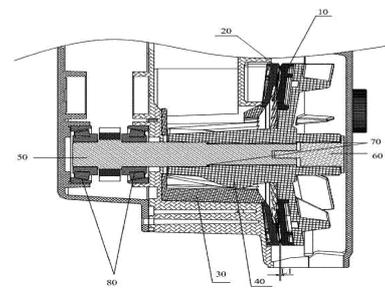


图 1

9

Low-temperature disc mill

The invention relates to the field of grinding and smashing of a disc type mill, and provides a low-temperature disc mill. The grains are completely refined in the milling process and the feeding efficiency is accelerated. The technical scheme is as follows: the disc mill comprises a frame body, an upper millstone and a lower millstone, wherein the upper millstone and the lower millstone are opposite to each other, opposite surfaces of the upper millstone and the lower millstone form a tapered pre-milling cavity with gradually shrunk aperture and planar structures capable of further refining the grains; the grains are primarily smashed through the pre-milling cavity to form small particles, and then the particles enter between two planar structures to be further refined; the low-temperature disc mill is mainly used for processing the grains, the grains can be gradually refined in the process of passing through the milling region, a good refining effect can be obtained, and the processing efficiency can be greatly promoted.

Publication: [CN 104607272 A 20150513](#)

Applicant: LI TAIPING

Inventor: LI TAIPING

Prio:

Appl.No: CN201510070082

CN 104607272 A 说明书附图 1/10页

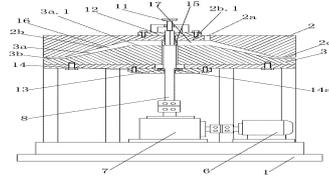


图 1



图 2

10

IPC: B02C 7/08

Anterior reduction material purification impact flour extraction method

The invention discloses an anterior reduction material purification impact flour extraction method, which includes the steps of: purifying a first peel mill and second peel mill ground material by a flour cleaning machine, then sending the purified material to a first core mill to conduct rough grinding, performing flour extraction and grading by a square plansifter, then sending the purified and graded material to an impact grinder DM1.1 to conduct impact and grinding; carrying out sifting grading and flour extraction on the impacted and ground material, then sending the material to the first core mill to perform fine grinding and flour extraction; and employing the same process in a second core mill and a third core mill. The flour extraction method provided by the invention can separate peel, core and flour, after separation, the flour is sent into a flour collection device, the peel and core are sent into a matched double roller type flour mill respectively to conduct shelling and reduction, the peel mills grind peel, the core mills grind the core, the peel and core are ground separately, and the peel and core are separate, so that the flour quality is greatly improved, the flour extraction rate is increased by 2-3% compared with similar units, and the flour yield is enhanced by 50%. Also, the equipment is easy to operate and repair, the unit arrangement is compact, the floor area is small, and the infrastructure investment is small.

Publication: **CN 104607273 A 20150513**

Applicant: XINJIANG TIANSHAN FLOUR GROUP CO LTD

Inventor: WANG QIANMING

Prio:

Appl.No: CN201410484799

IPC: B02C 9/04

CN 104607273 A 说明书附图 1/3 页

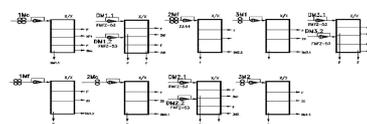


图 1

New crusher

The invention provides a new crusher including a frame, a protection shell, a transmission device, a crushing device and a walking device, the split type protection shell is externally arranged on the walking device and the transmission device, and the split type protection shell is installed on the frame by fixed bolts. The new crusher is energy-saving, and good in stability and safety, the crushing effect is greatly improved, due to work in harsh environment, the split type protection shell is externally arranged on the walking device and the transmission device, and the new crusher is convenient to load and unload and convenient to maintain.

Publication: **CN 104607274 A 20150513**

Applicant: TIANJIN GENERAL PRINCIPLE MACHINERY

NEW TECHNOLOGY

Inventor: ZHANG XIANGBIN

Prio:

Appl.No: CN201310538881

IPC: B02C 13/02

CN 104607274 A 说明书附图 1/3 页

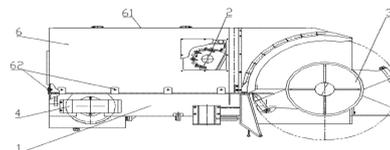


图 1

Crusher crushing device

The invention discloses a crusher crushing device, which comprises a frame, a transmission system and a roller, wherein the transmission system comprises a chain, a driving wheel and a driven wheel, the driving wheel drives the driven wheel to rotate through the chain, the shaft of the driving wheel is fixed on the frame by a first bearing seat, the shaft of the driven wheel is fixed on the frame by a second bearing seat, the two ends of the roller are respectively connected with the driven wheel of the transmission system so as to drive the roller to rotate, the base plate of the first bearing seat is vertical to the connection line between the axis of the driving wheel and the driven wheel, the roller thickness is 30mm, the outer wall of the roller is provided with a plurality of crushing hammers arranged along the circumferential direction, and included angles of adjacent crushing hammers along the circumferential direction are equal. The crusher crushing device improves the working efficiency, increases the service life of a crusher, and reduces the safety hazard, and the structure is simple, safe and reliable.

Publication: [CN 104607275 A 20150513](#)

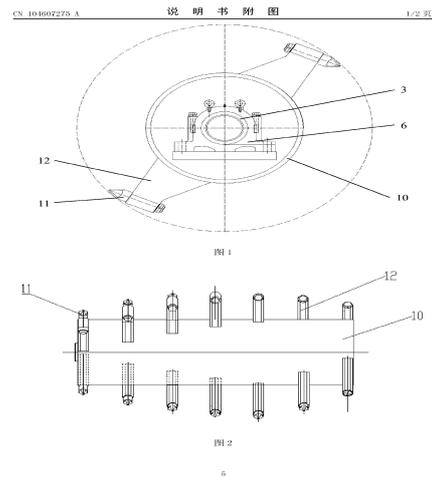
Applicant: TIANJIN GENERAL PRINCIPLE MACHINERY
NEW TECHNOLOGY

Inventor: ZHANG XIANGBIN

Prio:

Appl.No: CN201310538883

IPC: B02C 13/02



Impact crusher

The invention discloses an impact crusher. The impact crusher comprises a machine body consisting of an upper machine body and a lower machine body, wherein a rotor is arranged in the machine body; a cover plate is connected to the inner sides of the upper machine body and the lower machine body; an impact plate body set of which one end is movably connected to the cover plate and the other end is connected to the inner side of the machine body through a discharging granularity adjusting mechanism is at least arranged on the cover plate; an opening allowing the impact plate set to be replaced and a head cover matched with the opening are arranged on the cover plate, one end of the head cover is movably connected to the cover plate, and the other end of the head cover is connected to the inner side of the machine body through an uncovering mechanism. The impact crusher can quickly adjust the positions of impact plates to further adjust the discharging gap, brings more convenience for replacing the impact plates, improves the crushing efficiency, and reduces the accident risk.

Publication: [CN 104607276 A 20150513](#)

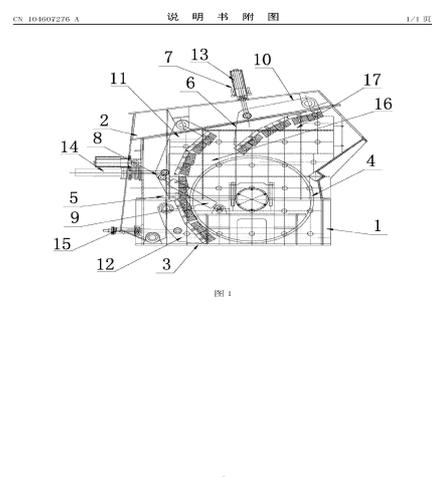
Applicant: SICHUAN TIEYING MACHINERY MFG CO LTD

Inventor: HE XINGJIAN

Prio:

Appl.No: CN201510034323

IPC: B02C 13/02



Walking crusher

A walking crusher comprises a frame, a walking device, a transmission device and a crushing device, the walking device comprises a driving gear and a walking wheel, the driving gear is connected with the output shaft of a speed reducer shaft from so as to drive the walking wheel to move along a guide rail, the transmission device comprises a driving wheel, a driven wheel and a chain, the driving wheel drives the driven wheel to rotate by the chain, the driving wheel is fixed on the frame by a bearing seat, a bottom plate of the bearing seat is vertical to a connection line of axes of the driving wheel and the driven wheel, the crushing device comprises a roller and a plurality of crushing hammers, the two ends of the roller are connected with the driven wheel of the transmission system, two rows of the crushing hammers are spirally distributed on the outer wall of the circumference of the roller, included angles of adjacent crushing hammers, distributed on the circumference are equal. The walking crusher has the advantages of good crushing effect, high stability and safety, simple structure and reasonable design.

Publication: [CN 104607277 A 20150513](#)

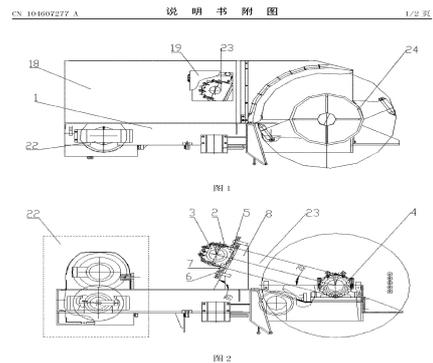
Applicant: TIANJIN GENERAL PRINCIPLE MACHINERY
NEW TECHNOLOGY

Inventor: ZHANG XIANGBIN

Prio:

Appl.No: CN201310538583

IPC: B02C 13/06



6

Crusher

A crusher includes a walking device and a crushing device, the crushing device comprises a motor, a speed reducer, a frame, a driven wheel, a driving wheel, a tensioning wheel, a chain and a roller; the motor is mounted on the frame, the speed reducer drives the driving wheel to rotate, the output shaft of the speed reducer is provided with a bearing seat, the bearing seat is obliquely placed, a plane of the base is vertical to a connection line of the center of the driving wheel and he corresponding driven wheel; two columns of crushing hammers are spirally distributed on the outer wall of the roller, wherein the axis is used as the axe, included angles of two adjacent crushing hammers, distributed on the circumference of the outer wall are equal, the crusher avoids the shear of bearing base fastening bolts, caused by horizontal component of the acting force of the chain to the driving wheel, weakens vibration when the machine works, and prolongs the service life of the crusher.

Publication: [CN 104607278 A 20150513](#)

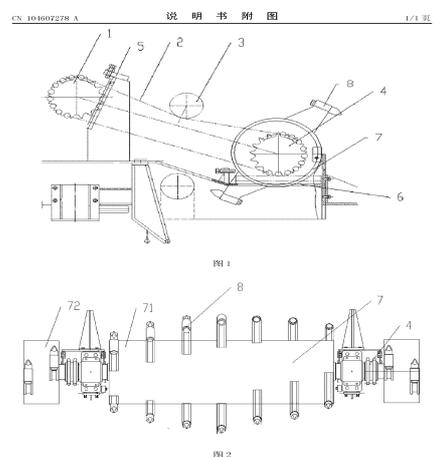
Applicant: TIANJIN GENERAL PRINCIPLE MACHINERY
NEW TECHNOLOGY

Inventor: ZHANG XIANGBIN

Prio:

Appl.No: CN201310538885

IPC: B02C 13/06



6

Support roller-containing powder preparation device for ceramics and use method thereof

The invention discloses a support roller-containing powder preparation device for ceramics. The device comprises an external fixed barrel body (8), an internal rotatable barrel body (7) and a grinding execution shaft assembly (9), wherein the external fixed barrel body (8) is provided with two end walls (81) respectively located at the left end and the right end and a connecting wall (810) connected between the two end walls (81), each of the end walls (81) is provided with a plurality of inner support rollers (84) distributed along a peripheral direction, a loading port (82) with an upward opening and a power outlet (83) with a downward opening are formed in the connecting wall (810), the loading port (82) and the powder outlet (83) extend along the longitudinal direction of the barrel body, the connecting wall (810) is divided into a left connecting wall (86) and a right connecting wall (85) between the loading port (82) and the powder outlet (83) in the peripheral direction.

Publication: [CN 104607279 A 20150513](#)

Applicant: LI CHANGJUAN

Inventor: LI CHANGJUAN

Prio:

Appl.No: CN201510073066

IPC: B02C 13/14

CN 104607279 A 说明书附图 1/2 页

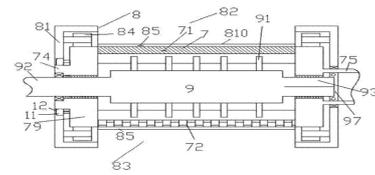


图 1

6

Crusher

The present invention provides a crusher, including a frame, a shielding cover, a walking device, a transmission device and a crushing device, the split type shielding cover is externally arranged on the walking device and the transmission device, and the split type shielding cover is provided with at least two skylights. The crusher is energy-saving, and good in stability and safety, the work conditions of each part in the shield shielding cover can be observed at any time, simple maintenance and inspection of the internal structure can be performed by opening of the skylights, when the internal structure is in a fault, the whole shielding cover is removed in order to facilitate maintenance, the structure is simple, and the design is reasonable.

Publication: [CN 104607280 A 20150513](#)

Applicant: TIANJIN GENERAL PRINCIPLE MACHINERY

NEW TECHNOLOGY

Inventor: ZHANG XIANGBIN

Prio:

Appl.No: CN201310538882

IPC: B02C 13/26

CN 104607280 A 说明书附图 1/2 页

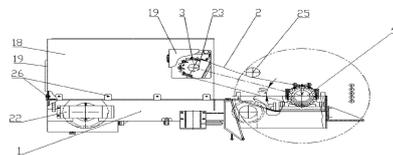


图 1

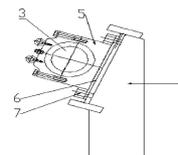


图 2

6

Crusher transmission system

A crusher transmission system comprises a frame, a transmission device and a crushing device, the transmission device comprises a driving wheel, a driven wheel, a chain and a tension wheel, a driving motor drives the driving wheel through a speed reducer so as to drive the driven wheel by the chain, a bottom plate of the bearing seat of the driving wheel is vertical to a connection line of axes of the driving wheel and the driven wheel, the crushing device comprises a main roller, two side rollers and a plurality of crushing hammers, two rows of the crushing hammers are spirally distributed on the outer wall of the circumference of the main roller, included angles of adjacent crushing hammers, on the circumference are equal, and the side rollers are also provided with the crushing hammers. The crusher transmission system has the advantages of simple structure, reasonable design, large crushing range, good crushing effect, good safety and long service life.

Publication: [CN 104607281 A 20150513](#)

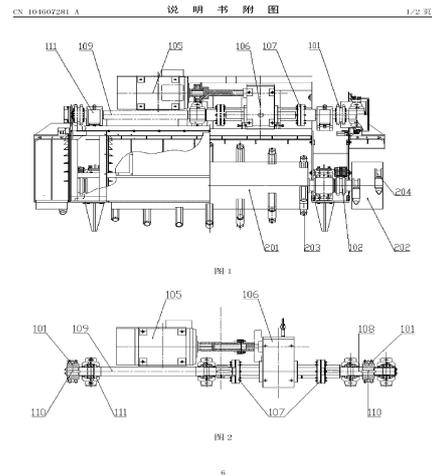
Applicant: TIANJIN GENERAL PRINCIPLE MACHINERY
NEW TECHNOLOGY

Inventor: ZHANG XIANGBIN

Prio:

Appl.No: CN201310538585

IPC: B02C 13/30



Replacement method for vertical mill main speed reducer in cement raw material grinding system

The invention discloses a replacement method for a vertical mill main speed reducer in a cement raw material grinding system. The replacement method is characterized by comprising the following steps: (1) jacking up a grinding roller in a mill, installing a protective sleeve, drawing a cross central line in the mill, and aligning the intersection with the central point of a millstone; (2) marking longitudinal and transverse parting midpoints of the speed reducer on a foundation slab, and measuring a sealing gap between the speed reducer and a bottom plate of a material scraping bin, with 8 points on the uniform side (b);/(b) (3) removing attachment bolts for the millstone and the speed reducer; (4) uniformly jacking up the millstone by using three 200-ton hydraulic jacks; and (5) removing an anchor bolt of the speed reducer, filling the speed reducer with a rolling rod by using a jack and the like. The replacement method has the beneficial effects that as the key replacement technology for the mill main speed reducer is developed on the basis of making reference to the experience in installation of the main speed reducer, the technology well solves the difficulty of replacement of the raw material main speed reducer, ensures the maintenance quality of the vertical mill, shortens the construction period, and reduces the construction cost.

Publication: [CN 104607282 A 20150513](#)

Applicant: ANHUI WUHU CONCH CONSTRUCTION AND
INSTALLATION ENGINEERING CO LTD

Inventor: LIU CHANGRUN

Prio:

Appl.No: CN201510060399

IPC: B02C 15/00

Intelligent cement mill

The invention discloses an intelligent cement mill and relates to a cement mill. The intelligent cement mill comprises a feeding device (1), a rotation device (3), a discharging device (4) and a transmission system (6), wherein slide shoe bearings (2) are respectively arranged at two ends of the rotation device (3); the feeding device (1) and the discharging device (4) are respectively arranged on two sides of the two slide shoe bearings (2); a pure hydrostatic bearing lubrication station (5) is respectively arranged on one side of a lower part of each of the two slide shoe bearings (2); the rotation device (3) is connected with a transmission shaft at one end of the transmission system (6); the other end of the transmission system (6) is connected with a speed adjusting system (7) by virtue of a lead. The intelligent cement mill effectively solves the problem of excess temperature of the material in the mill of the common tube mill; the milling capability can be greatly improved, thereby reducing the power consumption of the mill and increasing the output of the mill; the development requirements on continuous operation, high efficiency, energy conservation and environment-friendly operation of the large cement mill can be met to a great extent.

Publication: [CN 104607283 A 20150513](#)

Applicant: LUOYANG CITIC HIC AUTOMATION ENGINEERING CO LTD

Inventor: CAO LIGANG; GANG MEILIN; LIU DAHUA; WANG WENJU; WANG YIDONG; WANG ZHIFENG; YANG JICHANG; ZHAO SHUJIE

Prio:

Appl.No: CN201510010773

IPC: B02C 17/06

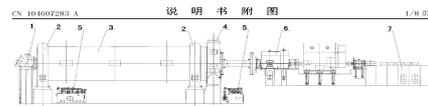


图 1

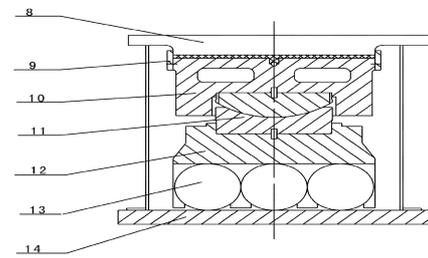


图 2

9

Mechanical activation and wet vulcanization treatment method of waste cathode ray tube cone glass

The invention belongs to the technical field of electronic waste treatment, and particularly relates to a mechanical and chemical vulcanization treatment method of waste cathode ray tube cone glass. The mechanical and chemical vulcanization treatment method comprises the following steps: firstly, roughly crushing the waste CRT cone glass by using a crusher to obtain CRT cone glass granules with the granule size of 0.1-1.0 mm; secondly, putting the roughly-crushed cone glass granules, a vulcanizing agent (such as sodium sulfide) and stainless steel milling balls according to certain proportions into a mechanical and chemical reactor (a ball milling jar) for mechanical and chemical reaction; thirdly, dissolving and leaching a ball-milled product after the mechanical and chemical reaction by using a ferric trichloride solution at a certain concentration; finally, cryogenically cooling leachate, and separating out lead chloride crystals to achieve resource recycle of metal lead in the CRT cone glass. According to the mechanical and chemical vulcanization treatment method, an acid leaching solution and an alkali leaching solution are not used and environment pollution is avoided; the mechanical and chemical vulcanization treatment method can be applicable to harmless treatment of other lead-containing glass or lead-containing wastes.

Publication: [CN 104607284 A 20150513](#)

Applicant: SHANGHAI XINJINQIAO ENVIRONMENTAL PROT CO LTD; UNIV SHANGHAI 2ND POLYTECHNIC

Inventor: BAI JIANFENG; HUANG CHEN; SHEN YANJUN; WANG JINGWEI; YUAN WENYI; ZHANG CHENGLONG

Prio:

Appl.No: CN201410848298

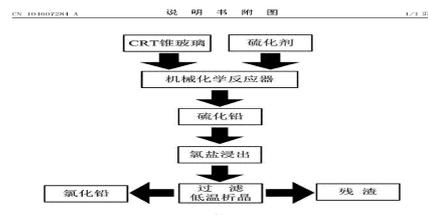


图 1

9

IPC: B02C 17/08

Novel ball grinding mill

The invention relates to a novel ball grinding mill comprising a steel shell, a liner plate I, a liner plate II, a feed pipe, grinding balls, a porous baffle plate and a discharge pipe, wherein the liner plate I is bonded together with the steel shell, and the inside of the feed pipe and the discharge pipe; the porous baffle plate is installed at the center of a ball grinding mill body; the ball grinding mill body is divided into a ball grinding area A and a ball grinding area B; the liner plate II is also movably installed outside the liner plate I of the ball grinding area to be beneficial to assembly and disassembly; the grinding balls are arranged in the ball grinding area; the periphery of the part of the discharge pipe extending into the shell is porous; the liner plates are polypropylene plates; and the grinding balls are ceramic grinding balls. The novel ball grinding mill is good in grinding effect, and has wear-resistant and corrosion-resistant effects.

Publication: **CN 104607285 A 20150513**

Applicant: JIANGXI XINJINYE IND CO LTD

Inventor: YE LIPING

Prio:

Appl.No: CN201510049266

IPC: B02C 17/10

CN 104607285 A 说明书附图 1/3页

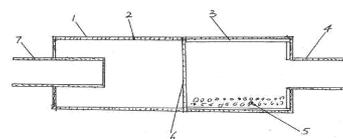


图 1

Palm fiber crushing device

The invention relates to a palm fiber crushing device which comprises a fixed pin crushing disc and a rotation pin crushing disc, wherein at least four groups of pin belts longitudinally penetrating through a disc body are mounted on one side of the fixed pin crushing disc; the tail ends of the pin belts are tapered; double blades longitudinally penetrating through a disc body and at least three groups of pin belts longitudinally penetrating through the disc body are mounted on the side, opposite to the fixed pin crushing disc, of the rotation pin crushing disc; the tail ends of the pin belts are tapered; the other side of the rotation pin crushing disc is connected with a motor via a transmission mechanism; the device overcomes the technical problems that the traditional untwisting equipment cannot cope with a palm rope with too tight palm rope fiber entanglement and crushed palm rope fibers does not meet production requirements generally; the palm rope fibers are decomposed repeatedly at a high speed by the tapered pin belts between the fixed pin crushing disc and the rotation pin crushing disc; the completely crushed fibers are blown out of a discharge port by wind produced by the blades; and the working efficiency of a palm rope untwisting machine is greatly improved.

Publication: **CN 104607286 A 20150513**

Applicant: TIANJIN SHANGDE WIRE UNWINDING MACHINERY CO LTD

Inventor: LIANG HAILUN

Prio:

Appl.No: CN201410820390

IPC: B02C 18/12

CN 104607286 A 说明书附图 1/3页

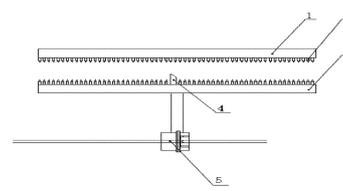


图 1

Method and device for shredding sheet material

The invention relates to a method for shredding sheet-shaped material, preferably for shredding stacked sheets of paper. In addition, the invention relates to a device for performing said method. According to the method according to the invention, a stack of paper is placed onto a support, the sheets are grasped individually from the stack and, whilst realizing a sheet loop, are guided one after another through a through-opening in the support to a cutting system, and are shredded in the cutting system, wherein, when the loops are formed, the sheets are merely deformed elastically and consequently reversibly such that by realizing a free end each sheet loop is opened again before it reaches the cutting system, and is cut up, unfolded, into regular particles over its entire length.

Publication: [CN 104607287 A 20150513](#)

Applicant: SCHWELLING HERMANN
Inventor: SCHWELLING HERMANN
Prio: DE 20130925 102013015968
Appl.No: CN201410756157
IPC: B02C 18/14

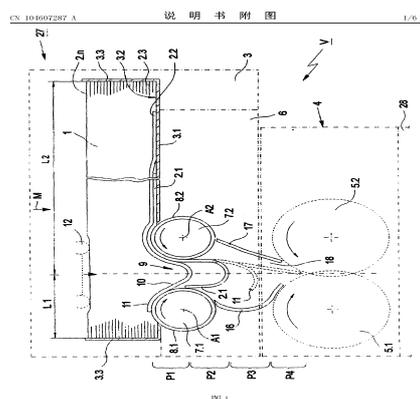


图 1

15

A lottery ticket recovery device

The invention relates to a lottery ticket recovery device. The lottery ticket recovery device comprises a code scanner, paper shredding bins, a waste material bin, an alarming device, power-driven rotary tables, rotary shafts, knife blades, and paper shredding machines. The code scanner and the alarming device are on the paper shredding bins. A plurality of the paper shredding machines are disposed in the paper shredding bins and comprise the power-driven rotary tables, the rotary shafts and the knife blades. The power-driven rotary tables are disposed in the walls of the paper shredding bins. The rotary shafts are in the two paper shredding bins. A plurality of the knife blades are at the rotary shafts. The waste material bin is below the paper shredding bins. The lottery ticket recovery device is provided to overcome the defects that paper resource recovery utilizing lottery tickets is absent.

Publication: [CN 104607288 A 20150513](#)

Applicant: HEFEI CAIXIANG INFORMATION TECHNOLOGY CO LTD
Inventor: XUE SHIKAI
Prio:
Appl.No: CN201410792037
IPC: B02C 18/14

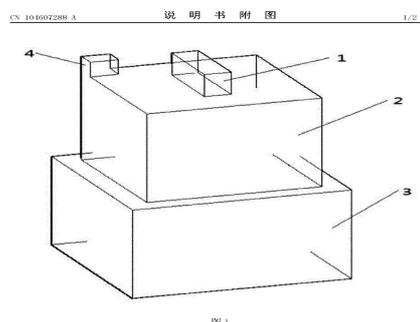


图 1

5

Comprehensive efficient organic waste crusher

The invention relates to a comprehensive efficient organic waste crusher. The comprehensive efficient organic waste crusher comprises a first synchronizing shaft, a second synchronizing shaft, a plurality of paired shear knives, a rack and a driving device, wherein the driving device is used for driving the shear knives mounted on the first synchronizing shaft and the second synchronizing shaft to synchronously rotate; each shear knife comprises a knife disc and saw teeth arranged on the outer edge of the knife disc; the outer edge of each knife disc among the corresponding saw teeth is a shear blade; the paired shear knives are arranged in an overlapped and staggered mode and are symmetrical by using the center lines of the first synchronizing shaft and the second synchronizing shaft as a symmetric axis; when the first synchronizing shaft and the second synchronizing shaft drive the paired shear knives to rotate towards the inner sides of the first synchronizing shaft and the second synchronizing shaft synchronously, shearing edges are formed among the shear blades of the paired shear knives, and waste is extruded towards the shearing edges through the saw teeth. The comprehensive efficient organic waste crusher has the benefits that the equipment is high in crushing capacity and good in crushing consistency, the noise and energy consumption compared with those of a traditional hammer type crusher are greatly reduced, and the equipment can be suitable for the crushing of various organic waste with different degrees of humidity.

Publication: [CN 104607289 A 20150513](#)

Applicant: JIANGSU HUA HONG NEW ENERGY CO LTD

Inventor: ZHANG YUEQING

Prio:

Appl.No: CN201510036918

IPC: B02C 18/14

CN 104607289 A 说明书附图 1/2页

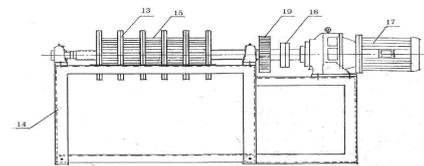


图 1

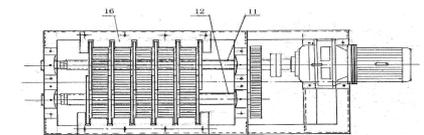


图 2

6

Garbage crusher

The invention disclose a garbage crusher which can overcome the defect that a blade, a motor and the like are easily damaged hugely when the blade encounters relatively great crushing resistance. The garbage crusher mainly comprises a machine body, wherein a crushing mechanism is arranged in the machine body, the crushing mechanism is connected with a driving mechanism, and the crushing mechanism comprises a main shaft which is mounted in the machine body, and a blade body which is mounted on the main shaft; the machine body is internally provided with a rotary groove corresponding to the blade body; the blade body is eccentrically mounted on the main shaft, and the width of the blade body in the peripheral direction of the main shaft is gradually reduced smaller as the blade body is gradually close to the main shaft; a first edge and a second edge are mounted on two sides of the blade body in the peripheral direction of the main shaft, the connections of the first edge, the second edge and the blade body are in smooth transition, and the distance from the second edge to the central line of the main shaft is less than that from the first edge to the central line of the main shaft. The crushing mechanism comprises a motor which is connected with the main shaft by virtue of a transmission box, and the motor is provided with an automatic reversing device.

Publication: [CN 104607290 A 20150513](#)

Applicant: ZHEJIANG ZOKSEN ENVIRO ENERGY EQUIPMENT CO LTD

Inventor: QIAN YAOLING

Prio:

Appl.No: CN201510055886

CN 104607290 A 说明书附图 1/2页

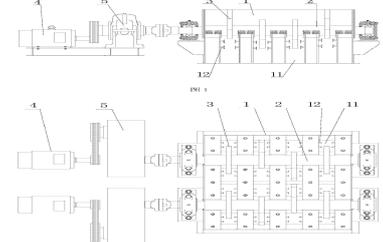


图 1

6

IPC: B02C 18/14

Rice husk crusher

The invention discloses a rice husk crusher. The rice husk crusher comprises a rack, a charge hopper, a charge pipe, a crushing chamber, a drive shaft, a crushing blade, an adjustable screen, an electromotor, a control switch, a storage chamber and a material outlet. According to the rice husk crusher, collected rice husk is input into the charge hopper; the control switch drives the electromotor to begin to operate; the electromotor drives the drive shaft to rotate by a conveying belt; the rice husk in the charge hopper enters the crushing chamber via the charge pipe; the crushing blade in the crushing chamber crushes the rice husk; when the rice husk is crushed to reach the adjustable screen fineness, the rice husk falls off into the storage chamber via the adjustable screen, through rotation of fan blades in the material outlet, suction and pressing effects are achieved; the rice husk in the storage chamber flows out rapidly so as to prevent the material outlet from being blocked. The rice husk crusher is ingenious in structure, and powerful in function, and crushes rice husk.

Publication: [CN 104607291 A 20150513](#)

Applicant: ANHUI TIANLI GRAIN AND OIL GROUP CO LTD

Inventor: ZHANG LEI; ZHANG LEI; ZHANG SHIPING

Prio:

Appl.No: CN201510067573

IPC: B02C 18/14

CN 104607291 A 说明书附图 1/3页

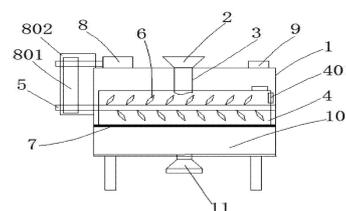


图 1

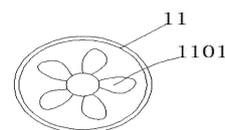


图 2

6

Crushed particle size control method of fine ammonium perchlorate

The invention provides a crushed particle size control method of fine ammonium perchlorate. An original intermittent feeding manner is replaced with a continuous feeding manner, and continuous feeding is performed through a feeding system, therefore, the materials in a grinding chamber are kept relatively constant, and the problems of material blocking caused by excess materials in the grinding chamber, and larger particle sizes caused by too few materials in the grinding chamber are solved; through a method for adding bottom materials in the grinding chamber, the problem of relatively large size of products due to fewer materials in the grinding chamber in the preliminary stage is solved, and the particle size fluctuation range of the whole batch of products is further controlled, so that the crushed particle size difference of fine ammonium perchlorate of one batch is reduced from a value which is equal to or smaller than 2.0 micrometers to a value which is equal to or smaller than 0.6 micrometer.

Publication: [CN 104607292 A 20150513](#)

Applicant: XI AN AEROSPACE CHEMICAL PROPULTION PLANT

Inventor: FENG XIANGYI; LEI GENG; LIU QING; LIU XINJUN; YANG SHUYAN; YI JIANJUN; ZHANG KAI; ZHANG YAN

Prio:

Appl.No: CN201410814123

IPC: B02C 19/06

Production technology of Nd-Fe-B (neodymium-iron-boron) permanent-magnet material and corresponding jet-milling crusher

The invention relates to a production technology of an Nd-Fe-B (neodymium-iron-boron) permanent-magnet material and a corresponding jet-milling crusher. The technology sequentially comprises steps as follows: mixing, smelting, hydrogen decrepitation, jet-milling, shaping and sintering, wherein smelted cast sheets become particles in the range of 45-355 μm due to the hydrogen decrepitation technology. The technology is characterized in that the particles of overlarge sizes are sieved and separated out by the aid of a screen of 60-80 meshes firstly during blanking in the jet-milling step, and then the particles enter a milling chamber. According to the production technology and the corresponding jet-milling crusher, the particles of ideal sizes are separated by the aid of a sieving structure, the milling speed is increased, and liquid-phase sintering is facilitated.

Publication: [CN 104607293 A 20150513](#)

Applicant: NINGBO HUAHUI MAGNETIC INDUSTRY CO LTD

Inventor: QIAN YONG

Prio:

Appl.No: CN201510025597

IPC: B02C 19/06

CN 104607293 A 说明书附图 1/3页

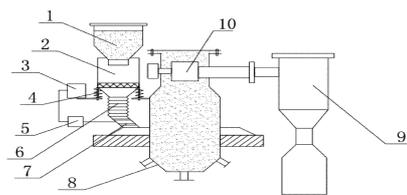


图 1

8

Waste-glass pulverizer with second-stage crushing device

The invention provides a waste-glass pulverizer with a second-stage crushing device, and belongs to the technical field of machines. The waste-glass pulverizer solves the technical problems that a conventional waste-glass pulverizer cannot crush waste glass to a degree of enabling crushed glass to be usable as a concrete aggregate, chippings splash when crushing is performed, and the like. The waste-glass pulverizer with the second-stage crushing device comprises a frame, the frame is fixedly provided with a feed hopper, a first-stage crushing device, the second-stage crushing device and a third-stage crushing device, the frame is fixedly provided with a first conveying belt and a second conveying belt, the first conveying belt is disposed between the first-stage crushing device and the second-stage crushing device, and the second conveying belt is disposed between the second-stage crushing device and the third-stage crushing device. The waste-glass pulverizer possesses the advantages that the pulverizer is capable of reasonably effectively crushing waste glass, guarantees the final glass powder to have uniform particle and to be useable as the concrete aggregate, and guarantees product quality.

Publication: [CN 104607294 A 20150513](#)

Applicant: YANG DENGHU

Inventor: YANG DENGHU

Prio:

Appl.No: CN201410745140

IPC: B02C 21/00

CN 104607294 A 说明书附图 1/3页

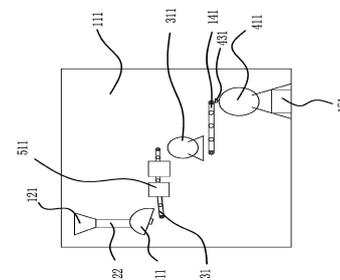


图 1

11

Waste-glass pulverizer with flushing and drying device

The invention provides a waste-glass pulverizer with a flushing and drying device, and belongs to the technical field of machines. The waste-glass pulverizer solves the technical problems that a conventional waste-glass pulverizer cannot crush waste glass to a degree of enabling crushed glass to be usable as a concrete aggregate, chippings splash when crushing is performed, and the like. The waste-glass pulverizer with the flushing and drying device comprises a frame, the frame is fixedly provided with a feed hopper, a first-stage crushing device, a second-stage crushing device and a third-stage crushing device, the frame is fixedly provided with a first conveying belt and a second conveying belt, the first conveying belt is disposed between the first-stage crushing device and the second-stage crushing device, the second conveying belt is disposed between the second-stage crushing device and the third-stage crushing device, and the frame also is provided with the flushing and drying device. The waste-glass pulverizer possesses the advantages that the pulverizer is capable of reasonably effectively crushing waste glass, guarantees the final glass powder to have uniform particle and to be useable as the concrete aggregate, and guarantees product quality.

Publication: [CN 104607295 A 20150513](#)

Applicant: YANG DENGHU
Inventor: YANG DENGHU
Prio:
Appl.No: CN201410745172
IPC: B02C 21/00

CN 104607295 A 说明书附图 1/3 页

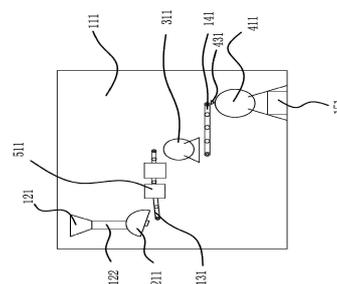


图 1

11

Ilmenite beneficiation method and equipment

The invention provides an ilmenite beneficiation method and equipment, and is suitable for comprehensive utilization of low grade ilmenite resources. The method and the equipment provided by the invention can be used for separating materials by fully using three kinds of physical differences of useful components in ilmenite magnetic iron and ferrotitanium and useless gangues, such as magnetism, density and surface hydrophilicity, as well as the property of the stage degree of dissociation. In the whole separating process, by using a magnetic-gravity separation-flotation combined process, the magnetic iron which is the strongest in magnetism is separated by using a magnetic separating method firstly, and then the ferrotitanium is selected by using a method of gravity separation combined with strong magnetic combined flotation. In the whole separating process, a graded ore grinding and graded beneficiation method is adopted, and in the process of separating the ferrotitanium, ore is secondarily ground, so that the ferrotitanium containing part of impurities after strong magnetism in the first stage is further dissociated, and therefore, relatively good beneficiation indexes are obtained.

Publication: [CN 104607296 A 20150513](#)

Applicant: LONGI MAGNET CO LTD
Inventor: TANG QI; WANG JUE; WANG XIANG; WU YONGBO; ZHANG CHENGCHEN
Prio:
Appl.No: CN201510056646
IPC: B02C 21/00

CN 104607296 A 说明书附图 1/3 页

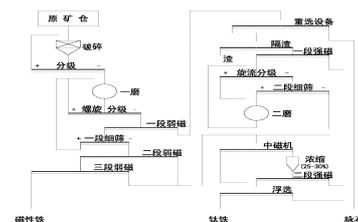


图 1

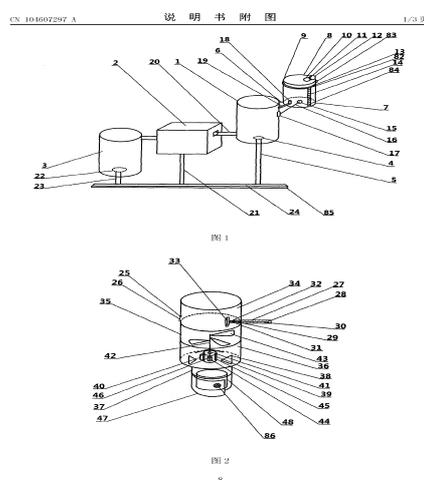
10

Traditional Chinese medicine milling device

The invention relates to a traditional Chinese medicine milling device, and belongs to the technical field of medical apparatuses and instruments. According to the technical scheme adopted by the invention, the traditional Chinese medicine milling device comprises a traditional Chinese medicine cleaner, a traditional Chinese medicine dryer and a traditional Chinese medicine milling machine. The traditional Chinese medicine milling device is characterized in that a traditional Chinese medicine cleaner bracket pressure-reducing plate is arranged at the lower side of the traditional Chinese medicine cleaner, wherein a traditional Chinese medicine cleaner bracket is arranged at the lower side of the traditional Chinese medicine cleaner bracket pressure-reducing plate; a water storage tank bracket is arranged at the right side of the traditional Chinese medicine cleaner; a water storage tank is arranged at the right side of the water storage tank bracket; a water storage tank upper cover is arranged at the upper side of the water storage tank; a water storage tank upper cover hinged shaft is arranged at the left lower side of the water storage tank upper cover. The traditional Chinese medicine milling device is complete in function, convenient to use, simple and convenient to operate, and time-saving and labor-saving when medical staff performs traditional Chinese medicine milling work, so that the working difficulty of the medical staff is relieved.

Publication: [CN 104607297 A 20150513](#)

Applicant: ZHANG XUEJU
Inventor: ZHANG XUEJU
Prio:
Appl.No: CN201510057119
IPC: B02C 21/00

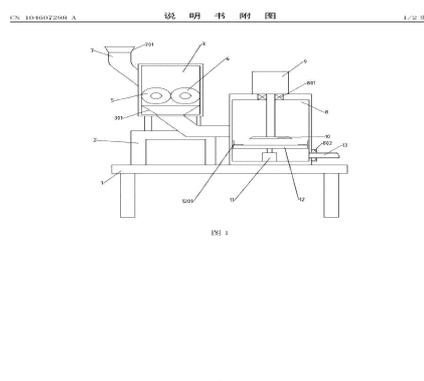


Calcium carbonate crushing device

The invention discloses a calcium carbonate crushing device. The calcium carbonate crushing device comprises a workbench, a bracket, a box body, a motor, a drive crushing gear, a driven crushing gear, a feeding tube, a finishing tank body, a finishing motor, a cutter, a shaking motor, a screen and a discharge tube. Compared with the prior art, calcium carbonate blocks are poured into the tank body through the feeding tube, the motor is started to drive the drive crushing gear; under the co-action of the driven crushing gear, the calcium carbonate blocks are crushed into small particles, and the preliminarily-crushed calcium carbonate enters the finishing tank body; the finishing motor drives the cutter to rotate at a high speed for further crushing the calcium carbonate blocks; the shaking motor drives the screen to vibrate under high frequency, the powdered calcium carbonate is discharged to the bottom of the finishing tank body and discharged through the discharge tube; and coarsely-crushed calcium carbonate not easily causes damages to equipment during finishing, so that the crushing time is shorted by coarse and finish crushing, and the efficiency is improved.

Publication: [CN 104607298 A 20150513](#)

Applicant: CHIZHOU BORUIDE CALCIUM INDUSTRY CO LTD
Inventor: LIU WENHONG; YE QING; ZHENG XIAOBIN
Prio:
Appl.No: CN201510063893



IPC: B02C 21/00

Calcium carbonate grinding equipment with coarse grinding device

The invention discloses calcium carbonate grinding equipment. The calcium carbonate grinding equipment comprises a workbench, a bracket, a tank body, a motor, a rotating millstone, a fixed millstone, a feeding pipe, a precision cutting tank body, a precision cutting motor, a cutter, a dithering motor, a screen and a discharging pipe. Compared with the prior art, blocky calcium carbonate is poured into the tank body through the feeding pipe, the motor is started to drive the rotating millstone; under the joint action of the fixed millstone, the blocky calcium carbonate is ground to be in the shape of relatively small particles; the calcium carbonate after preliminary grinding enters the precision cutting tank body, the precision cutting motor drives the cutter to rotate at high speed to further grind the granular calcium carbonate, the dithering motor drives the screen to vibrate at high frequency, and the powdered calcium carbonate is discharged to the bottom of the precision cutting tank body and discharged through the discharging pipe. The calcium carbonate after coarse grinding is not easy to cause damage to the equipment during precision cutting, and through coarse grinding and precision grinding, the grinding time is shortened, and the efficiency is improved.

Publication: **CN 104607299 A 20150513**

Applicant: CHIZHOU BORUIDE CALCIUM INDUSTRY CO LTD

Inventor: LIU WENHONG; YE QING; ZHENG XIAOBIN

Prio:

Appl.No: CN201510064197

IPC: B02C 21/00

CN 104607299 A 说明书附图 1/3 页

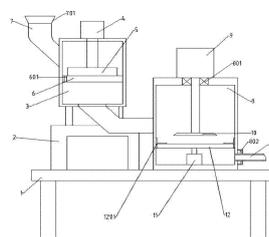


图 1

6

Crusher driving device

The invention provides a crusher driving device including a frame, a driving wheel, a driven wheel and a chain, the chain is around the driving wheel and the driven wheel to form an annular closed shape, the shaft of the driving wheel is fixed on the frame by a first bearing seat, the shaft of the driven wheel is fixed on the frame by a second bearing seat, the first bearing seat is arranged on the frame, and is provided with a certain angle with the horizontal plane, the second bearing seat is horizontally arranged on the frame, and the base plate of the first bearing seat is vertical to the connection line between the axis of the driving wheel and the driven wheel. The crusher driving device increases the service life of a crusher, and reduces the safety hazard, and the structure is simple, safe and reliable.

Publication: **CN 104607300 A 20150513**

Applicant: TIANJIN GENERAL PRINCIPLE MACHINERY NEW TECHNOLOGY

Inventor: ZHANG XIANGBIN

Prio:

Appl.No: CN201310538584

IPC: B02C 23/00

CN 104607300 A 说明书附图 1/2 页

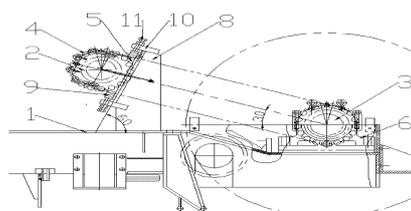


图 1

6

Method for determining best grinding feed size

The invention relates to a method for determining the best grinding feed size, which belongs to the field of ore grinding in ore selection. The method disclosed by the invention comprises the following steps: firstly, measuring the ore feed size of a fine crusher and the ore discharge size of a rough grinding machine; substituting the measured values F_{k1} and P_{k2} into the calculation formula of the best ore grinding feed size so as to calculate the grinding feed size when the total energy consumption on crushing and grinding ore is the lowest. The particle size of a product determined by the method disclosed by the invention can realize 1-4mm, so that the energy consumption on crushing and grinding ore is greatly lowered, and the theory that the total consumption on crushing and grinding the ore by the method disclosed by the invention is the lowest is further proved; the defects of calculating the grinding feed size by an empirical formula are overcome; the best ore grinding feed size calculated by the method disclosed by the invention is universal when applied to mines of different ore kinds and different scales, the theoretical foundation is provided for the energy conservation in ore crushing and ore grinding, and a direction is pointed for ore dressing plants to select equipment.

Publication: [CN 104607301 A 20150513](#)

Applicant: TONGLING NONFERROUS METALS GROUP CO LTD; UNIV KUNMING SCIENCE & TECH

Inventor: DENG HEMIAO; HU XINFU; LI JINYOU; QIN HONGXUN; WANG CAIXIA; WANG TAIPING; WANG ZHOUHE; XIAO QINGFEI; ZHAO HONGFEN

Prio:

Appl.No: CN201410814747

IPC: B02C 23/00

CN 104607301 A 说明书附图 1/1 31

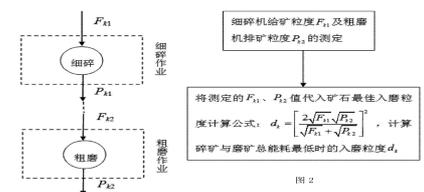


图 1

Pulverizer and discharging method thereof

The invention discloses a pulverizer and a discharging method thereof. The pulverizer comprises an intermittent discharging mechanism and a driving mechanism, wherein the intermittent discharging mechanism is used for controlling the discharging speed; the driving mechanism is used for driving the intermittent discharging mechanism to rotate by a preset angle at a preset interval; the intermittent discharging mechanism is positioned between a hopper outlet and a grinding mechanism of the pulverizer and is connected with the driving mechanism. According to the invention, the intermittent discharging mechanism discharges raw materials intermittently at the preset interval to control the discharging speed of the raw materials with large specific gravity and small particles and to enable all the raw materials to be uniformly mixed in the discharging process and enter the grinding mechanism to be ground, so that nutrition powder is balanced in nutrition and does not layer. In addition, the intermittent discharging manner enables the grinding mechanism to be uniform in workload and not to generate high temperature in the grinding process, so that a sugar material is not burnt and discharged smoothly, and the nutrition of the nutrition powder does not lose.

Publication: [CN 104607302 A 20150513](#)

Applicant: SHENZHEN HENGDE INNOVATIVE TECHNOLOGY CO LTD

Inventor: WANG XINGZHI

Prio:

Appl.No: CN201510034576

CN 104607302 A 说明书附图 1/6 31

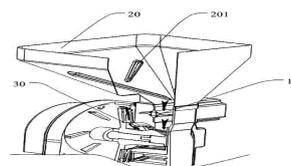


图 1

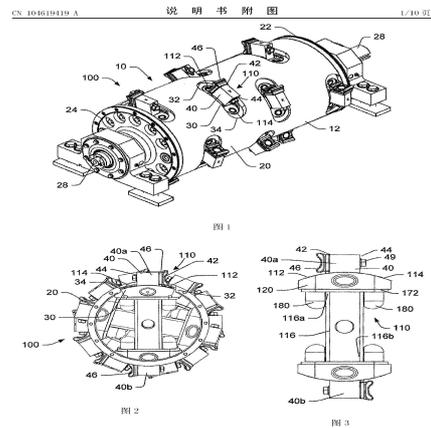
IPC: B02C 23/02

HAMMER SUPPORT SYSTEM FOR ROTARY TOOL

A hammer support system for a rotary tool has a hammer receiver including a first alignment opening having a first curved alignment surface. A first wedge part has a curved surface, and a second wedge part is configured to interact with the first wedge part. A fastener is provided for drawing down the first wedge part against the second wedge part such that the curved surface of the first wedge part engages the first curved alignment surface to self-align the first and second wedge parts as the first wedge part is drawn down by the fastener.

Publication: [CN 104619419 A 20150513](#)

Applicant: VERMEER MFG CO
Inventor: BREJA JOSEPH EDWARD; ROOZEBOOM KEITH LEON
Prio: US 20130910 201361875920, US 20140624 201414313368, US 20140910 2014054954
Appl.No: CN201480002250
IPC: B02C 13/04



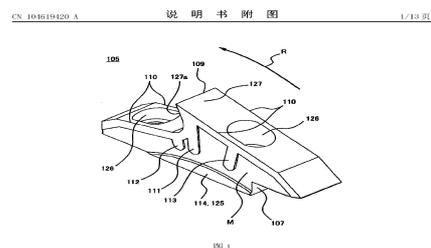
13

Regenerated cutting blade and shearing crusher

The present invention efficiently regenerates a cutting blade by reducing the cost and labor therefor. A cutting blade (105) is provided with a fixing part (125) and a blade part (127) that projects outward from the fixing part (125). The blade part (127) has a distal end edge part (109) pointing in the rotation direction, and side edge parts (110) on a side-surface outer edge part that includes the blade part (127). The distal-end edge part (109) and the side edge parts (110) are regenerated by build-up welding, and have three build-up welds (111, 112, 113) formed on the side surfaces by regeneration. The build-up welds (111, 112, 113), which extend from the side edge parts (110) toward the center of rotation or toward the central direction, prevent crushed material from slipping through.

Publication: [CN 104619420 A 20150513](#)

Applicant: KINKI KK
Inventor: HONDA YASUHIKO; NAGAI ISAO; UENO NAOKI; WADA NAOYA
Prio: JP 20120828 2012071643
Appl.No: CN201280075544
IPC: B02C 18/18



12

Automatic adjustment buckwheat husking machine husking gap method and device

An automatic adjustment buckwheat husking machine husking gap method and device comprises the steps that locking or unlocking is conducted on an upper sand disk through an electric drive pusher, a locking gear and a gear ring, and accuracy control on the gaps of a sand disk is conducted by utilizing the transmission of a stepping motor and a gear pair; the control on the gaps of the sand disk and the locking or the unlocking of the upper sand disk are totally controlled by a single-chip microcomputer; a milled rice rate image identification system is mounted on a husking machine subsequent device, when the image identification system detects that milled rice rate is reduced to below a normal range, the single-chip microcomputer will send out a control signal to enable the electric drive pusher drive the locking gear to rotate to finish unlocking, then the stepping motor drives the gear to rotate to realize the adjustment of the upper sand disk height, after the height adjustment is finished, the electric drive pusher is received a signal again to drive the locking gear to rotate to finish a locking operation, and a gap adjustment process is finished; if the milled rice rate still cannot meet the demand, and then the movements are repeated until the milled rice rate returns to the normal range. The automatic adjustment husking machine gap is realized and the production efficiency is improved.

Publication: [CN 104624279 A 20150520](#)

Applicant: UNIV INNER MONGOLIA AGRI
Inventor: CHANG RONG; CHEN WEI; CUI YACHAO; DENG XIQUAN; DU WENLIANG; HAN HENG; LIU GUANGSHUO; LYU SHAOZHONG; ZHENG DONGHONG

Prio:
Appl.No: CN201510000565
IPC: B02B 3/00

CN 104624279 A 说明书附图 1/2页

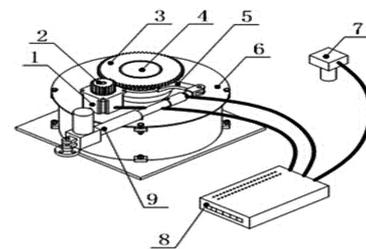


图 1

6

Driving device of rubber roll husker

The invention relates to a driving device of a rubber roll husker and belongs to the technical field of machines. The driving device of the rubber roll husker solves the problem that the manufacturing cost of an existing rubber roll husker is high. The driving device of the rubber roll husker comprises a driving motor and a gear box, an output shaft of the driving motor is connected with a coupling, a driving gear shaft connected with the coupling is arranged in the gear box, a driving gear is arranged on the driving gear shaft, a driven gear shaft is further arranged in the gear box, a first rubber roll driving wheel is arranged at the output end of the driving gear shaft, a second rubber roll driving wheel is arranged at the output end of the driven gear shaft, the first rubber roll driving wheel and the second rubber roll driving wheel are connected with a shaft of a first rubber roll and a shaft of a second rubber roll through belts respectively, and the driving motor is a variable frequency motor and is controlled through a frequency converter. The driving device of the rubber roll husker improves the machining effect of the husker and avoids the problems that a traditional complex gear box is complex in structure, and linear speed differential can hardly be controlled precisely.

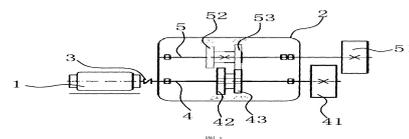
Publication: [CN 104624280 A 20150520](#)

Applicant: ZHUJI GRAIN ENGINEERING MACHINERY CO LTD

Inventor: CHEN JIANQUAN; SHOU ZAIXING

Prio:
Appl.No: CN201410773306

CN 104624280 A 说明书附图 1/1页



6

IPC: B02B 3/04

Production method for color-reversion-resisting chilled fresh food tailored flour

The invention discloses a production method for color-reversion-resisting chilled fresh food tailored flour. The production method includes the steps that Zhengmai 7698, Aikang 58, Taikong 6 and Huapei 8 are selected and matched in proportion; sieving, stone removal, winnowing, threshing and secondary sieving are carried out on the mixed wheat to clear out impurities; water is added to the wheat, and then the water content of the wheat reaches 15%; ranking flour is manufactured according to a conventional method and separated to obtain bran pieces, wheat dross, wheat cores and semolina; through grinding, flour flow with the ash content of 0.5-0.8, the whiteness larger than or equal to 80%, the protein of 11-12% and the broken starch of 9-12% is selected out; screening, insect killing and metering are carried out on the flour flow, and the flour flow is conveyed to a screen mesh bulk stock bin to be mixed and then conveyed to a packaging bin to be packaged. The production method has the advantages that the suitable wheat varieties are selected, endosperm, which is prone to color reversion and close to cortexes and the aleurone layers, in wheat grains is separated out, the color reversion degree of the flour is reduced to the maximum extent, the color, luster and interior quality of the flour are effectively controlled, and the production method is more suitable for producing and processing chilled fresh food.

Publication: [CN 104624281 A 20150520](#)

Applicant: UNIV HENAN TECHNOLOGY
Inventor: BIAN KE; LIN JIANGTAO; MA SHIQIANG; WANG WEI; WEN JIPING

Prio:
Appl.No: CN201410838905
IPC: B02B 5/02

Processing method for nutritional rice

The invention relates to a processing method for nutritional rice. The processing method for nutritional rice comprises the following steps of selecting rice, removing impurities, preparing solutions, soaking, drying, shelling rice, separating rice and husks, milling rice, cooling rice, polishing and packing into a bag. According to the processing method for the nutritional rice, the rice without impurities is put into alkaline water and soaking is conducted to make 64 percent of nutrition in cortices and rice embryos enters into the interior portion of the rice, so that the nonoccurrence of the loss of the nutritional ingredients caused by finishing machining is guaranteed. The alkaline water soaking is adopted, the glossiness of the rice after the finishing machining is guaranteed, and sensory effects of round as pearls and smooth as jade and translucence are achieved. After the process of separating rice and husk is conducted, the separated rice is put into a rice bin and standing for 24 hours, so that the rate of broken rice is controlled in a minimum range.

Publication: [CN 104624282 A 20150520](#)

Applicant: GUIZHOU QIANBEI GRANARY METERS CO LTD
Inventor: WANG XUHUI; WANG YI
Prio:
Appl.No: CN201510027168
IPC: B02B 5/02

Vibrating feeding device for rice huller

The invention relates to a vibrating feeding device for a rice huller and belongs to the technical field of machinery. The vibrating feeding device for the rice huller solves the problem that the vibrating feeding device for the rice huller is poor in usage stability in the prior art. The vibrating feeding device for the rice huller comprises a chute frame, a vibrating armature is arranged on the back face of the chute frame, an electromagnet and an electromagnetic coil are arranged on the rack of the rice huller, a vibrating gap is arranged between the electromagnet and the vibrating armature, and an one-way alternating current voltage regulation module is arranged between the electromagnetic coil and a power source. The vibrating feeding device for the rice huller adopts a single phase alternating current voltage regulation module to control the voltage of the electromagnetic coil to enable the vibrating frequency of an electromagnetic vibrator to change, so that the goal of regulating vibrating strength is achieved, the structure is simple, the service life is long, and the stability is high.

Publication: [CN 104624283 A 20150520](#)

Applicant: ZHUJI GRAIN ENGINEERING MACHINERY CO LTD

Inventor: CHEN JIANQUAN; SHOU ZAIXING

Prio:

Appl.No: CN201410773308

IPC: B02B 7/02

CN 104624283 A 说明书附图 1/2页

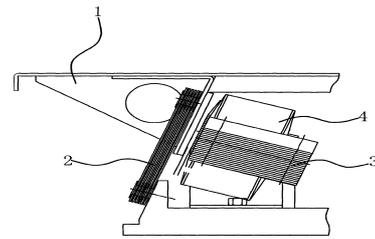


图 1

5

Feeding device of rice mill

The invention discloses a feeding device of a rice mill. The feeding device comprises a feeding hopper, a support, a storage box, a feed inlet, a feeding pipe, a suction pump, a discharge outlet, a valve, a control switch, a discharge pipe and a stock bin. Compared with the prior art, the feeding device has the advantages that when a first weighing detector detects that the internal weight of the storage box is lower than a set value, the control switch drives the suction pump to start working, and rice is sucked into through the feeding pipe and stored in the storage box; when a weighing controller detects that the internal weight of the storage box reaches a limit value, the control switch drives the suction pump to stop working; meanwhile when a second weighing detector detects that internal weight of the feeding hopper is lowered than a set value, the control switch drives the valve to open, and rice enters the feeding hopper through the discharge pipe; when the weighing controller detects that the internal weight of the feeding hopper reaches a limit value, the control switch drives the valve to close; the device is ingenious in structure and powerful in function, labor work load is reduced greatly, and industry production output is increased.

Publication: [CN 104624284 A 20150520](#)

Applicant: ANHUI TIANLI OILS GROUP CO LTD

Inventor: ZHANG LE; ZHANG LEI; ZHANG SHIPING

Prio:

Appl.No: CN201510067588

IPC: B02B 7/02

CN 104624284 A 说明书附图 1/3页

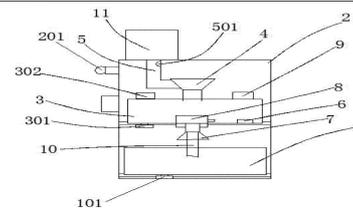


图 1

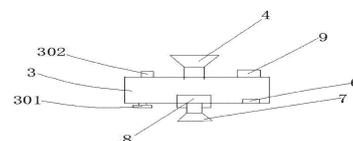


图 2

6

Stone jaw crusher

The invention relates to the field of mining equipment, and particularly relates to a stone jaw crusher which comprises a rack, and a driving unit, a moving jaw group, a discharge opening adjusting mechanism and a moving jaw tensioning buffer mechanism which are arranged on the rack, wherein the rack comprises a main rack body, a fixed jaw rack arranged at the front end of the inside of the main rack body, and a toggle plate rack arranged at the rear end of the inside of the main rack body, and the moving jaw group is arranged on the main rack body between the fixed jaw rack and the toggle plate rack; a crushing cavity is arranged between the moving jaw group and the fixed jaw rack, and the driving unit is in transmission connection with the moving jaw group; the discharge opening adjusting mechanism and the moving jaw tensioning buffer mechanism are arranged on the toggle plate rack, and the front end part of the discharge opening adjusting mechanism props against the moving jaw group; and the front end part of the moving jaw tensioning buffer mechanism is connected with the moving jaw group. The discharge opening adjusting mechanism of the jaw crusher is simple in structure, and is convenient to install and adjust.

Publication: [CN 104624285 A 20150520](#)

Applicant: ZHEJIANG ZHE KUANG HEAVY IND CO LTD

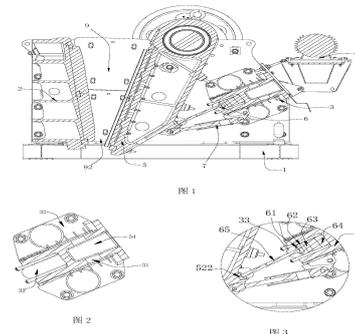
Inventor: CHEN BINGMIN; CHEN LIANFANG; CHEN LIHUA; LI GUOQIANG; ZHAO MENGJUN

Prio:

Appl.No: CN201510083664

IPC: B02C 1/02

CN 104624285 A 说明书附图 1/1页



6

Novel jaw crusher

The invention relates to the field of mining equipment, and particularly relates to a novel jaw crusher. The novel jaw crusher comprises a rack and a moving jaw group arranged on the rack, wherein the rack comprises a main rack body, a fixed jaw rack arranged at the front end of the inside of the main rack body, and a toggle plate rack arranged at the back end of the inside of the main rack body, and the moving jaw group is arranged on the main rack body between the fixed jaw rack and the toggle plate rack; a crushing cavity is arranged between the moving jaw group and the fixed jaw rack. The novel jaw crusher has the advantages of good damping effect and long service life of rack.

Publication: [CN 104624286 A 20150520](#)

Applicant: ZHEJIANG ZHE KUANG HEAVY IND CO LTD

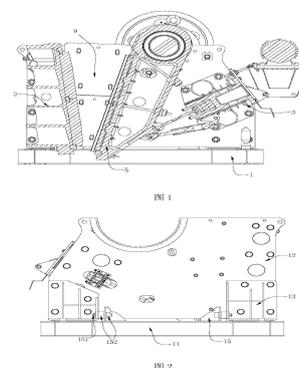
Inventor: CHEN BINGMIN; CHEN LIANFANG; CHEN LIHUA; LI GUOQIANG; ZHAO MENGJUN

Prio:

Appl.No: CN201510083983

IPC: B02C 1/02

CN 104624286 A 说明书附图 1/1页



12

Jaw crusher

The invention relates to the field of mine equipment, and particularly relates to a jaw crusher. The jaw crusher comprises a rack, and a driving unit, a movable jaw group, a discharge outlet regulation mechanism and a movable jaw tensioning and cushioning mechanism which are arranged on the rack; the rack consists of a rack main body, a fixed jaw frame arranged on the inner front end of the rack main body, and a toggle plate frame arranged on the inner rear end of the rack main body, the movable jaw group is arranged on the rack main body between the fixed jaw frame and the toggle plate frame, and a crushing cavity is formed between the movable jaw group and the fixed jaw frame; the driving unit and the movable jaw group are in transmission connection, both the discharge outlet regulation mechanism and the movable jaw tensioning and cushioning mechanism are arranged on the toggle plate frame, the front end of the discharge outlet regulation mechanism props against the movable jaw group, and the front end of the movable jaw tensioning and cushioning mechanism is connected with the movable jaw group. The movable jaw group of the jaw crusher has a good damping effect, and the discharge outlet regulation mechanism is simple in structure, and convenient to assemble and regulate.

Publication: [CN 104624287 A 20150520](#)

Applicant: ZHEJIANG ZHE KUANG HEAVY IND CO LTD

Inventor: CHEN BINGMIN; CHEN LIANFANG; CHEN LIHUA; LI GUOQIANG; ZHAO MENGJUN

Prio:

Appl.No: CN201510083922

IPC: B02C 1/04

CN 104624287 A 说明书附图 1/3页

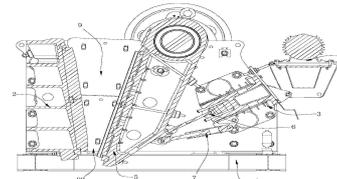


图1

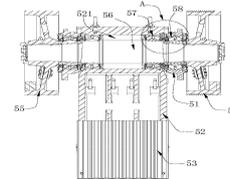


图2

9

Jaw crusher

The invention relates to the field of mine equipment, and particularly relates to a jaw crusher. The jaw crusher comprises a stander, a driving unit, a mobile jaw unit, a discharge opening regulating mechanism and a mobile jaw tensioning buffer mechanism, wherein the driving unit, the mobile jaw unit, the discharge opening regulating mechanism and the mobile jaw tensioning buffer mechanism are arranged on the stander; the stander comprises a main stander body, a fixed jaw frame and a toggle plate frame; the fixed jaw frame is arranged on the front end inside the main stander body, and the toggle plate frame is arranged on the rear end inside the main stander body; the mobile jaw unit is arranged on the main stander body positioned between the fixed jaw frame and the toggle plate frame; the driving unit is connected with the mobile jaw unit in a transmission way; and the discharge opening regulating mechanism and the mobile jaw tensioning buffer mechanism are both arranged on the toggle plate frame, the front end part of the discharge opening regulating mechanism supports against the mobile jaw unit, and the front end part of the mobile jaw tensioning buffer mechanism is connected with the mobile jaw unit. According to the jaw crusher, the stander has the advantages of high connecting strength, good shock-absorbing effect and low possibility in damage.

Publication: [CN 104624288 A 20150520](#)

Applicant: ZHEJIANG ZHE KUANG HEAVY IND CO LTD

Inventor: CHEN BINGMIN; CHEN LIANFANG; CHEN LIHUA; LI GUOQIANG; ZHAO MENGJUN

Prio:

Appl.No: CN201510083939

CN 104624288 A 说明书附图 1/3页

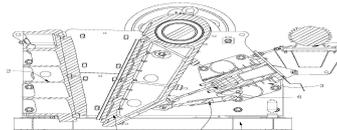


图1

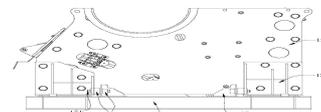


图2

7

IPC: B02C 1/04

Rotary jaw type crushing machine

The invention relates to a rotary jaw type crushing machine. The rotary jaw type crushing machine mainly comprises a rack, an eccentric shaft, a pull rod spring, a toggle plate, a fixed jaw plate and a movable jaw plate, wherein the upper end of the movable jaw plate sleeves the eccentric shaft, the pivot position of the movable jaw plate is fixed by virtue of the toggle plate, and the lower end of the movable jaw plate is controlled by virtue of the pull rod spring; a toothed plate is arranged on the movable jaw plate; an annular clamping slot is formed in the surface of the movable jaw plate, an annular snap joint is fixedly assembled on the lower surface of the toothed plate, the toothed plate can rotate around the rotational axis of toothed plate and relative to the surface of the movable jaw plate; and wedge-shaped teeth are formed in the circumferential direction of the upper surface of the toothed plate in a rotational symmetrical manner. The rotary jaw type crushing machine has the advantages that ores are extruded and the position of the movable jaw plate is automatically adjusted at the same time, so that the whole surface of the movable jaw plate can be used for processing the ores, service life of the movable jaw plate is effectively prolonged, and maintenance frequency of the rotary jaw type crushing machine is reduced.

Publication: **CN 104624289 A 20150520**

Applicant: SUZHOU SHENGPULA NEW MATERIAL TECHNOLOGY CO LTD

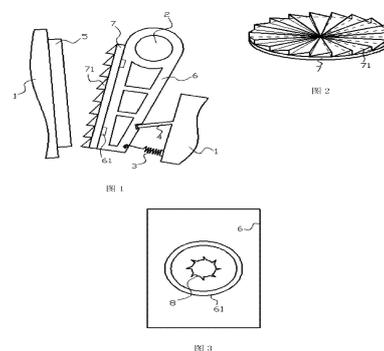
Inventor: FEI JINHUA

Prio:

Appl.No: CN201510112400

IPC: B02C 1/04

CN 104624289 A 说明书附图 1/13页



Ore crushing roller

The invention relates to the mineral field, and more particularly relates to an ore crushing roller. The ore crushing roller comprises a roller shaft, a crushing roller and a crushing disc, wherein the crushing disc is provided with hammer heads, the hammer heads are main working parts, and the quality, shape and material of the hammer heads can be changed according to different production requirements, so that the hammer heads have a great influence on the production capacity, and according to the hammer heads, in the process of production, two or three of the ore crushing rollers are cooperatively used so as to achieve a better crushing effect and a higher efficiency in comparison with a pair of traditional thick-straight rollers, and a motor of an ore crushing machine drives a rotor to rotate in a crushing cavity at a high speed. Materials are fed into the machine from an upper feed inlet, and then are hit, impacted, sheared and ground by the hammer heads moving at a high speed so as to be crushed, and the clearance among the hammer heads can be adjusted according to the requirements of users so as to change the particle size of the discharged materials, so that the different needs of different users can be met. The ore crushing roller is implemented through the manner that the hammer heads rotating at a high speed are collided with the materials so as to crush the materials; and the ore crushing roller has the characteristics of simple structure, large ratio of crushing, high production efficiency, and the like.

Publication: **CN 104624290 A 20150520**

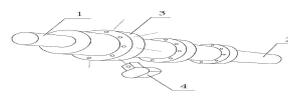
Applicant: TIANJIN KEHUI ENTPR INCUBATOR CO LTD

Inventor: XU HAO

Prio:

Appl.No: CN201310571490

CN 104624290 A 说明书附图 1/13页



IPC: B02C 4/30

Low-temperature organic flour processing method

The invention discloses a low-temperature organic flour processing method. The low-temperature organic flour processing method comprises the three processing steps of checking unprocessed grains, cleaning the unprocessed grains and pulverizing the unprocessed grains; the process of checking the unprocessed grains comprises the sub-step of carrying out conventional check and activity check on the unprocessed grains; the process of cleaning the unprocessed grains comprises the sub-step of removing impurities in the qualified unprocessed grains by using common screening equipment and a special colour selector for wheat; and the process of pulverizing the unprocessed grains comprises the sub-step of grinding and pulverizing the unprocessed grains without impurities in a low-temperature production environment, and finally, packaging prepared flour by using a freshness protection bag. The whole course of the flour processing technology is carried out at low temperature; and furthermore, wheat is prevented from being grinded excessively by extending the length of a flour grinding path, and therefore, the reserving ratio of nutritional ingredients of wheat and the reserving ratio of original wheat flavour of wheat flour are greatly increased.

Publication: [CN 104624291 A 20150520](#)

Applicant: MENG JINGHUA

Inventor: MENG JINGHUA

Prio:

Appl.No: CN201410737255

IPC: B02C 9/04

Powder preparation device for ceramic manufacturing and using method thereof

The invention discloses a powder preparation device for ceramic manufacturing. The powder preparation device comprises an external fixed cylinder (8), an inner rotatable cylinder (7) and a crushing actuating shaft assembly (9), wherein the external fixed cylinder (8) is provided with two end walls (81) which are positioned at the left and right ends, and a connecting wall (810) positioned between the two end walls (81); multiple supporting rollers (84) which are distributed along the peripheral direction are arranged in each of the two end walls (81); a loading hole (82) with an upward opening and a powder outlet (83) with a downward opening are formed in the connecting wall (810) and extend along the longitudinal direction of the external fixed cylinder; and the connecting wall (810) comprises a left connecting wall (86) and a right connecting wall (85) between the loading hole (82) and the powder outlet (83) in the peripheral direction.

Publication: [CN 104624292 A 20150520](#)

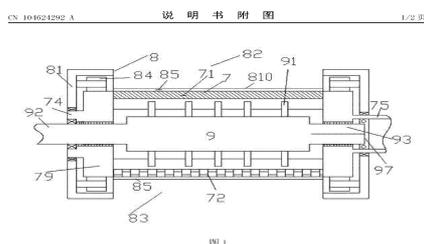
Applicant: JINHUA FOUR DIMENSIONAL SPACE AUTO ACCESSORIES CO LTD

Inventor: SUN XUDONG

Prio:

Appl.No: CN201510074592

IPC: B02C 13/02



6

Lump coal crusher

The invention belongs to the technical field of coal machinery and particularly relates to an efficient lump coal crusher. The lump coal crusher is simple in structure and good in seismic performance and crushes lump coal completely. According to the special technical scheme, the lump coal crusher comprises a left platform and a right platform, wherein a feeding funnel and a crushing barrel are fixedly arranged on the left platform; the upper end opening of the feeding funnel is a feeding opening and the lower end opening of the feeding opening is a discharge opening; the discharge opening is communicated with the interior of the crushing barrel; lump coal to be crushed is conveyed into the crushing barrel from the feeding opening to be crushed by virtue of a crushing roller in the crushing barrel; a plurality of adjusting devices are arranged at the bottom of the crushing barrel and are pressed and mounted on the outer wall of the crushing barrel in parallel; the lower end of each adjusting device is hinged to the bottom of the left platform through a hinge roll; the upper end of each adjusting device is connected with the bottom of the left platform through a reset spring; each adjusting device is tightly compressed on the outer wall of the crushing barrel under the action of the corresponding reset spring; each adjusting device can prevent over-high vibrating frequency of the crushing barrel.

Publication: [CN 104624293 A 20150520](#)

Applicant: HUOZHOU COAL ELECTRICITY GROUP
HUOYUNTONG NEW IND INVEST CO LTD

Inventor: CHEN YANQI; GAO GUANGJUN; GUO JING; HU HUIMIN; JIA WENHONG; KANG YUTING; LIU WENMING; SHAN YONGAN; SUN JINJUN; SUN SHENGYOU; WANG DINGWEI; YANG XIAOBIN; ZHAI PINGSHAN; ZHANG HUANYONG; ZHANG JING; ZHANG JINSHENG; ZHANG XIANGHUA; ZHANG XUEFENG; ZHANG YONGHONG

Prio:

Appl.No: CN201510002454

IPC: B02C 13/04

CN 104624293 A 说明书附图 1/3页

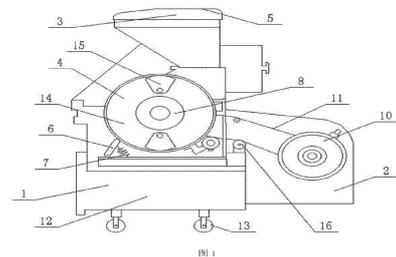


图 1

6

Transportable ceramic manufacturing powder preparing device and use method thereof

The invention relates to a transportable ceramic manufacturing powder preparing device. The transportable ceramic manufacturing powder preparing device comprises a shockproof base (52), an external fixed cylinder (8), an internal rotatable cylinder (7) and a smashing shaft assembly (9); the external fixed cylinder (8) is arranged on the shockproof base (52) and is provided with two end walls (81) and connection walls (810), wherein the two end walls (81) are arranged on the left end and the right end, respectively, and the connection walls (810) are arranged between the two end walls (81); each of the two end walls (81) is provided with a plurality of support rolls (84) which are distributed along the circumference; each connection wall (810) is provided with a feed hole (82) with an upward opening and a powder discharge hole (83) with a downward opening, and the feed holes (82) and the powder discharge holes (83) extend longitudinally along the wall of the external fixing cylinder (8); and the connection walls (810) comprise a left connection wall (86) and a right connection wall (85) between the feed holes (82) and the powder discharge holes (83) in the peripheral direction.

Publication: [CN 104624294 A 20150520](#)

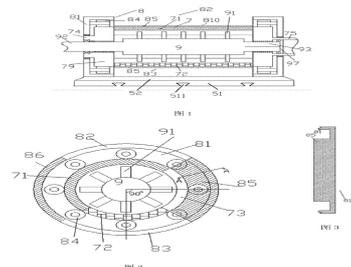
Applicant: LOU GUOHUA

Inventor: LOU GUOHUA

Prio:

Appl.No: CN201510074466

CN 104624294 A 说明书附图 1/3页



6

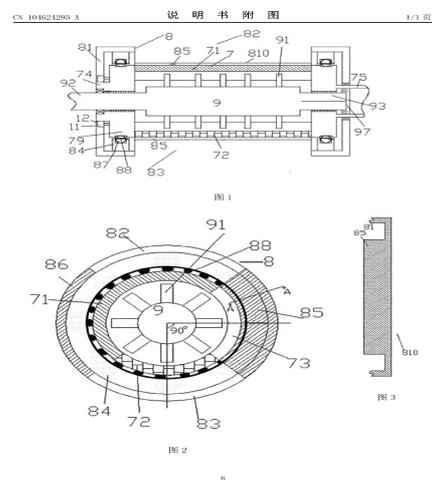
IPC: B02C 13/06

Ball- and roller-containing powder preparation device for ceramic manufacturing and using method of device

The invention discloses a ball- and roller-containing powder preparation device for ceramic manufacturing. The powder preparation device comprises an external fixed cylinder (8), an inner rotatable cylinder (7) and a crushing actuating shaft assembly (9), wherein the external fixed cylinder (8) is provided with two end walls (81) which are positioned at the left and right ends, and a connecting wall (810) positioned between the two end walls (81); an annular supporting seat (84) is arranged in each of the two end walls (81); a ball groove is formed in each supporting seat (84); a ball (87) is rotationally arranged in each ball groove by virtue of a ball cover plate (88); a through hole of which the diameter is smaller than the diameter of the ball is formed in the ball cover plate (88); the ball (87) is positioned by virtue of the through hole; a loading opening (82) with an upward opening and a powder outlet (83) with a downward opening are formed in the connecting wall (810); the loading opening (82) and the powder outlet (83) extend along the longitudinal direction of the cylinder; and the connecting wall (810) respectively comprises a left connecting wall (86) and a right connecting wall (85) between the loading opening (82) and the powder outlet (83) in the peripheral direction.

Publication: **CN 104624295 A 20150520**

Applicant: FANG XIAOGANG
Inventor: FANG XIAOGANG
Prio:
Appl.No: CN201510074266
IPC: B02C 13/13

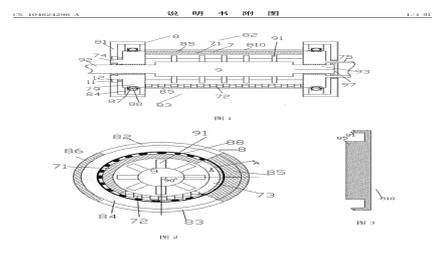


Ball-containing powder preparation device for ceramic manufacturing and use method of device

The invention discloses a ball-containing powder preparation device for ceramic manufacturing. The device comprises an external fixing barrel (8), an internal rotatable barrel (7) and a smashing implementation shaft assembly (9), wherein the external fixing barrel (8) is provided with two end walls (81) positioned at the left end and the right end and a connection wall (810) positioned between the two end walls (81); an annular supporting seat (84) is arranged in each of the two end walls (81); ball grooves are formed in the supporting seats (84); internal balls (87) are rotationally mounted in the ball grooves through ball cover plates (88); through holes with the diameters less than those of the balls are formed in the ball cover plates (88); the internal balls (87) are positioned through the through holes; a loading opening (82) facing upward and a powder outlet (83) facing downward (83) are formed in the connection wall (810), and stretch along the longitudinal direction of the barrel; and the connection wall (810) is provided with a left connection wall (86) and a right connection wall (85) between the loading port (82) and the powder outlet (83) in the circumferential direction.

Publication: **CN 104624296 A 20150520**

Applicant: BAO YUQING
Inventor: BAO YUQING
Prio:
Appl.No: CN201510074418



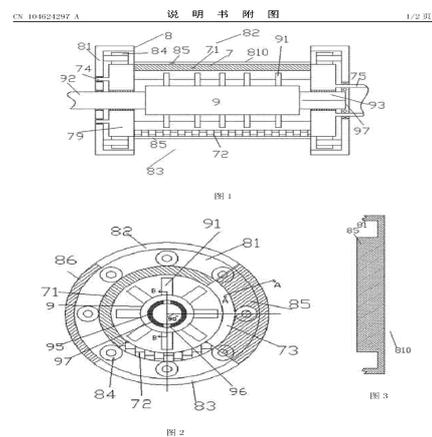
IPC: B02C 13/13

Preparation device for powder convenient to load and used for manufacturing ceramics, as well as using method thereof

The invention provides a preparation device for powder convenient to load and used for manufacturing ceramics. The preparation device comprises an external fixed tube (8), an internal rotatable tube (7) and a grinding execution shaft assembly (9), wherein the external fixed tube (8) is provided with two end walls (81) respectively positioned on the left end and the right end, and a connecting wall (810) positioned between the two end walls (81), a plurality of supporting rollers (84) which are distributed along the circumferential direction are arranged in each of the two end walls (81), a loading opening (82) opening upward and a powder outlet (83) opening downward are formed in the connecting wall (810), the loading opening (82) and the powder outlet (83) extend along the longitudinal direction of the tube, and the connecting wall (810) consists of a left connecting wall (86) and a right connecting wall (85) between the loading opening (82) and the powder outlet (83) in the circumferential direction.

Publication: **CN 104624297 A 20150520**

Applicant: LI YANGBIN
Inventor: LI YANGBIN
Prio:
Appl.No: CN201510074553
IPC: B02C 13/13

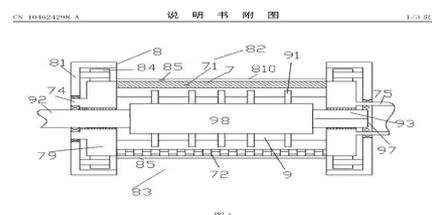


Convenient-to-install powder preparation device for ceramic manufacturing and use method of powder preparation device

The invention relates to a convenient-to-install powder preparation device for ceramic manufacturing. The powder preparation device comprises an external fixed cylinder (8), an internal rotatable cylinder (7) and a crushing execution shaft module (9), wherein the external fixed cylinder (8) is provided with two end walls (81) respectively positioned at the left and right ends, and a connecting wall (810) positioned between the two end walls (81), and a plurality of support roller wheels (84) which are distributed along the circumferential direction are arranged in each end wall (81); a loading hole (82) with an upward opening and a powder outlet (83) with a downward opening are formed in the connecting wall (810) and extend along the longitudinal direction of the cylinder, and a left connecting wall (86) and a right connecting wall (85) are respectively arranged between the loading opening (82) and the powder outlet (83) of the connecting wall (810) in the circumferential direction.

Publication: **CN 104624298 A 20150520**

Applicant: TONGXIANG JINGCHUANG MACHINERY EQUIPMENT CO LTD
Inventor: THE INVENTOR HAS WAIVED THE RIGHT TO BE MENTIONED
Prio:
Appl.No: CN201510074601
IPC: B02C 13/13



Ultrafine pulverizer

The invention discloses an ultrafine pulverizer. A gear ring of a pulverizing mechanism of the ultrafine pulverizer is formed by connecting and splicing a plurality of identical gear ring arc sections end to end; inclined teeth inclining towards the axial direction of the gear ring are arranged in the arc sections of the gear ring; alloy strips are arranged on the inclined teeth by oxygen welding; a plurality of grooves are formed in the alloy strips; a dentoid structure is arranged on one side, facing to the gear ring, of each hammerhead; the dentoid structures are inclined teeth inclining towards the normal direction of a wearproof tray; and the inclination directions of the inclined teeth on the hammerheads are opposite to those of the inclined teeth on the gear ring. According to the ultrafine pulverizer, with the adoption of the inclined tooth structures of the gear ring and the hammerheads, the impact of a high-speed air flow on materials in the pulverizer is improved, and the collision and the friction among materials are increased, so that the pulverizing efficiency and effect are improved effectively; the yield by the pulverizer is increased; the abrasion performances of the hammerheads and the gear ring are improved with the adoption of the alloy materials; the service life of the hammerheads and the gear ring is further prolonged; and the maintenance cost is reduced.

Publication: [CN 104624299 A 20150520](#)

Applicant: MEISHAN LIDAHUARUI MACHINERY CO LTD

Inventor: JIANG WEI; LIU YE; XIE BAILIAN

Prio:

Appl.No: CN201510072882

IPC: B02C 13/14

CN 104624299 A 说明书附图 1/10页

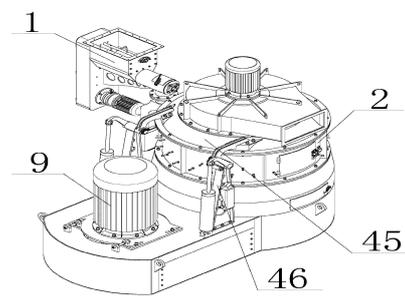


图 1

11

Split assembly type rotor structure

The invention discloses a split assembly type rotor structure. The split assembly type rotor structure comprises a main shaft, hammer frame plates and rotors. The split assembly type rotor structure is characterized in that the middle part of the outer wall of the main shaft is provided with a hammer frame plate installation part the central part of which is provided with a key slot in a milling mode; two ends of the hammer frame plate installation part are respectively provided with a group of locking nut installation part; the centers of the hammer frame plates are provided with main shaft installation holes; four equidistant rotor installation holes are formed in the hammer frame plates at the peripheries of the main shaft installation holes; the rotors are installed on the hammer frame plates via the rotor installation holes. By the arrangement and the structure optimization, the main shaft and the rotors are installed in a separated mode; the split assembly type rotor structure is convenient to install, and is convenient to maintain; the maintenance cost is reduced. The split assembly type rotor structure is high in safety performance, and the service lives of the rotors are prolonged.

Publication: [CN 104624300 A 20150520](#)

Applicant: ZHUCHENG CITY SHENGAO MACHINE CO LTD

Inventor: QU JINMING; WANG JUNRU; YANG ZHIYONG

Prio:

Appl.No: CN201510063256

CN 104624300 A 说明书附图 1/10页

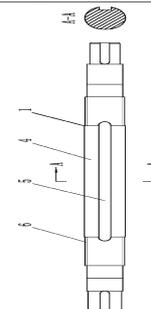


图 1

11

IPC: B02C 13/26

Sieve plate for vertical crusher

The invention discloses a sieve plate for a vertical crusher. The sieve plate is integrally of a ring-shaped body structure which is fixedly arranged in a crushing cylinder of the crusher in cooperation with the rotary moving trajectory of a hammerhead of the crusher. The ring-shaped body structure comprises a first fixed frame (1) and a second fixed frame (2), wherein the second fixed frame (2) is located below the first fixed frame (1) and corresponding to the first fixed frame (1), multiple sieve plate units (3) are vertically arranged between the first and second fixed frames, a material discharge space is arranged between adjacent sieve plate units, each sieve plate unit is provided with a working surface arranged opposite to the rotary moving trajectory of the hammerhead of the crusher, and in a same horizontal plane, the distance (h1) between the front end of the working surface and the midpoint of a projection of the ring-shaped body structure on the horizontal plane is not equal to the distance (h2) between the rear end of the working surface and the midpoint of the projection of the ring-shaped body structure on the horizontal plane. The sieve plate disclosed by the invention can be arranged on the side face of the hammerhead of the crusher, and can effectively improve the efficiency of the crusher and reduce the energy consumption.

Publication: **CN 104624301 A 20150520**

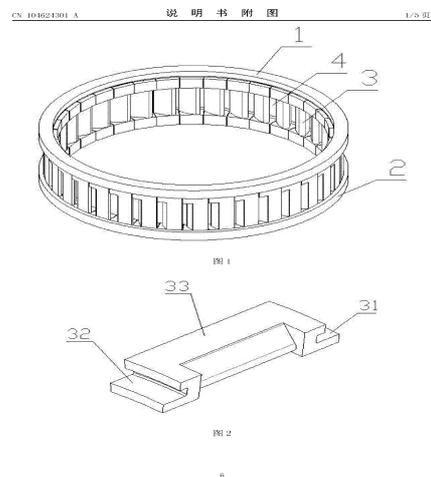
Applicant: WANG HAIQING

Inventor: WANG HAIQING

Prio:

Appl.No: CN201510115960

IPC: B02C 13/284

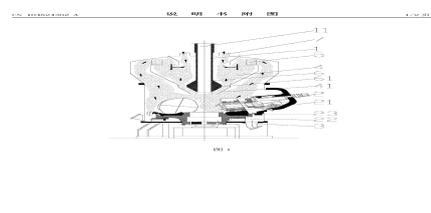


Coal powder preparation system

The invention provides a coal powder preparation system. The coal powder preparation system comprises a coal falling device, a grinding machine, an air inlet, a powder returning cabin, a separation blade and a coal outlet, wherein the grinding machine is used for grinding coal blocks entering from the coal falling device into coal powder; the air inlet provides primary air to form coal air; the separation blade is used for separating the coal air into standard coal air and large-particle coal powder; the powder returning cabin is used for collecting the large-particle coal powder into the powder returning cabin; a powder returning adjusting head is arranged at the position, close to a powder returning opening, of the bottom of a powder returning adjusting device; and the powder returning adjusting device can move along the axial direction of the coal falling device and the powder returning amount of the powder returning cabin is adjusted through the powder returning adjusting head. The powder returning adjusting device is arranged so that the powder returning amount of the powder returning cabin is adjusted through the powder returning adjusting head; and when the power load is suddenly increased, a gap between the powder returning adjusting head and the powder returning opening of the powder returning cabin is adjusted by the powder returning adjusting head, and enough coal powder can be provided in time to be subjected to secondary grinding by the grinding machine to form the coal powder meeting the combustion requirements of a boiler, so that the combustion power of the boiler is improved.

Publication: **CN 104624302 A 20150520**

Applicant: ELECTRIC POWER RES INST STATE GRID
ZHEJIANG ELECTR; STATE GRID CORP CHINA



Inventor: CAI JIECONG; CHEN XIAOBO; LI FENGRUI;
MAO JIANBO; WANG LEI; WU CHANGMIAO;
XIONG JIANGUO; YING MINGLIANG; ZHANG
MING

Prio:

Appl.No: CN201410768957

IPC: B02C 15/00

Novel hoop roller mill

The invention relates to a hoop roller mill and provides a novel hoop roller mill. The novel hoop roller mill comprises a hoop roller mill main machine, a grader, a fan, a dust collector, a feeding screw, an unloader, a current acquisition module, a processing module, a control module, an agent feeding device and an interlocking module, wherein the current acquisition module is used for acquiring real-time working currents of the hoop roller mill main machine, the grader, the fan, the dust collector, the feeding screw and the unloader and transmitting the real-time working currents to the processing module; the processing module is used for comparing the real-time working currents with the preset current value, acquiring control information according to comparison results and transmitting the control information to the control module; the control module is used for controlling the agent feeding device according to the control information and is also used for controlling the interlocking module; the agent feeding device is used for feeding or stopping feeding according to the control information; and the interlocking module is used for switching off the hoop roller mill main machine, the grader, the fan, the dust collector, the feeding screw and the unloader according to the preset startup and shutdown sequence in an interlocking manner. The scheme is suitable for Yifeng 198 hoop roller mills.

Publication: [CN 104624303 A 20150520](#)

Applicant: SICHUAN SHIMIAN JUFENG POWDER CO LTD

Inventor: CHEN SHAOQING; HUANG YUNHUA; LI
JINGBO; LI LONGSHAN; LI YANJI; LIU WU;
YANG XINQIANG

Prio:

Appl.No: CN201410829207

IPC: B02C 15/00

CN 104624303 A 说明书附图 1/1 页

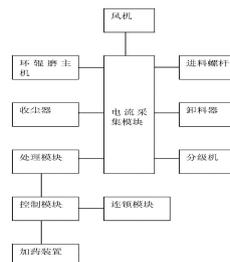


图 1

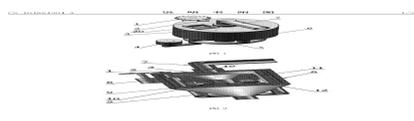
7

Impact shear grinding rock crusher

The invention relates to an impact shear grinding rock crusher. The crusher comprises a gear A, a gear B, a top cover, an air blower, an air pipe, a shell, an exhaust pipe, a power source, a millstone, a lower screen, a rotating wheel, a roller, a power shaft, a balance shaft A, a balance shaft B, a balance shaft C, a funnel, an anti-injection cover, an upper screen, a feed opening and a feeding hole, and is characterized in that the gear A is arranged on the power source; the gear B is arranged on the power shaft; the top cover covers the shell; the air blower arranged at one end of the air pipe intermittently blows air into the funnel space by virtue of the air pipe; the air pipe is a flow channel of the blown air; the shell is used for preventing materials from splashing around; the exhaust pipe is arranged on the top cover; the upper screen is arranged between the exhaust pipe and the top cover; the roller is arranged below the rotating wheel; the power shaft is arranged in the shell and performs power transfer with the rotating wheel by virtue of the gear; and the balance shaft A, the balance shaft B and the balance shaft C are used for balancing the horizontal extrusion force applied to the rotating wheel by virtue of the power shaft.

Publication: [CN 104624304 A 20150520](#)

Applicant: UNIV SOUTHWEST PETROLEUM



Inventor: CHEN YUSONG; LIU CHENG; ZHANG LAN;
ZHANG NANLIN; ZHAO LIQIANG

Prio:

Appl.No: CN201510003746

IPC: B02C 15/00

Closed type ore mill

The invention relates to a closed type ore mill. The closed type ore mill comprises a machine body, a power device and a material receiving slot, wherein the machine body comprises a sealing cover; a discharge hole is formed in the bottom of the sealing cover; the discharge hole is in sealing connection with the material receiving slot. Charging is performed on a front surface of the machine body, and after ore milling is performed in the machine body, ore powder is discharged from an overflow opening in a rear surface side wall of the machine body; a screen is arranged on the overflow opening, so that large-particle ore powder can be blocked; the sealing cover is mounted on the machine body, a discharge hole is formed in a position, opposite to the overflow opening, in the rear surface of the sealing cover; ore powder discharged from the overflow opening flows into the material receiving slot from the discharge hole; the sealing cover can effectively prevent raising dust in an ore milling process; meanwhile, a soundproof filler is filled in a gap position between an ore milling barrel and the sealing cover, so that noises in an ore milling process are effectively reduced, and the environment in the ore milling process is greatly improved. The closed type ore mill provided by the invention can prevent raising dust, can reduce the noises in the ore milling process and can greatly improve the operation environment in the ore milling process.

Publication: [CN 104624305 A 20150520](#)

Applicant: UNIV GUANGXI

Inventor: WANG CHAOQUN

Prio:

Appl.No: CN201410760011

IPC: B02C 17/10

CN 104624305 A 说明书附图 1/1 页

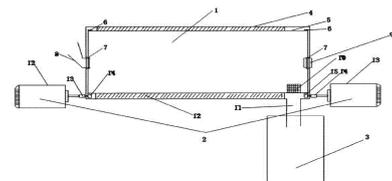


图 1

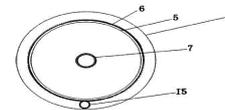


图 2

5

Tower mill heavy load starting auxiliary device and heavy load starting method

The invention discloses a tower mill heavy load starting auxiliary device and belongs to wet fine grinding equipments. The device further comprises tunnel boring machines, a high-pressure flushing mechanism, sealing pieces and an electric controlling device, wherein at least four tunnel boring machines composed of drilling bits, electrical motors and water inlets are arranged around the outer side of a lower part of the cylinder body; the drilling bits with water outlets stretch into the cylinder body; the drilling bits and the cylinder body are sealed by the sealing pieces; an water outlet pipe of the high-pressure flushing mechanism is connected with the water inlets; and a driving mechanism, the tunnel boring machines and the high-pressure flushing mechanism are respectively in electrical connection with the electric controlling device. The device utilizes a feeding hydraulic drill and a high-pressure flushing mechanism to perform drill stirring and section softening on clotted minerals inside a tower mill, so as to wholly loose the clotted minerals inside the tower mill to effectively reduce starting resistance of a driving motor; mineral pulp discharge is not required, so as to save manpower and material resources; manual transportations of mineral pulp and steel balls are not needed, so as to eliminate potential safety hazard; complex-structure sealing pieces are utilized to ensure normal working and pulp leaking of the tower mill without any influence, and sealing effect is good.

Publication: [CN 104624306 A 20150520](#)



5

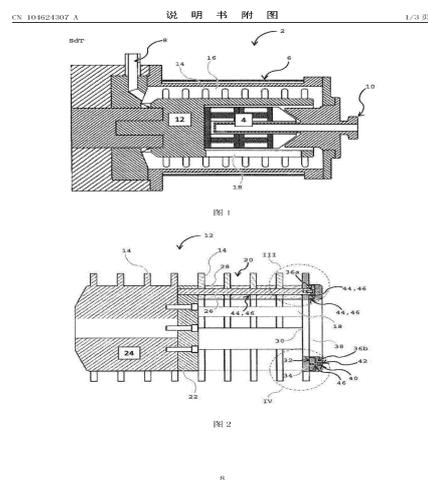
Applicant: SINOSTEEL ANHUI TIANYUAN TECHNOLOGY CO LTD
Inventor: CAO FEI; HAN CHENG; LI FENGCHUN; MA CHAO; MA MENGMEG; YAN XIAODONG
Prio:
Appl.No: CN201510016418
IPC: B02C 17/10

Wear protection assembly for an agitator mill

A wear protection assembly for an agitator mill, in particular a stirred ball mill (2) is provided. The wear protection assembly comprises an agitator (12) provided with a module body (20), is intended to allow an effective protection against wear of the entire modular agitator (12). According to the invention, the module body (20) formed by a grinding disc (30) is arranged on the end side of at least one end portion of the agitator (12), and the module body (20) are axially clamped by a clamping device (32), wherein the clamping means (32) is provided with a protective body (38) serving as a cover and the module body (20), the clamping device (32) and the protective body (38) are equipped with sealing means (44).

Publication: [CN 104624307 A 20150520](#)

Applicant: NETZSCH FEINMAHLTECHNIK
Inventor: MOESCHL HOLGER; PAUSCH HORSTE; SAWERWALD ANDREAS; WEILAND LARS-PETER
Prio: DE 20131108 102013112301
Appl.No: CN201410602222
IPC: B02C 17/20

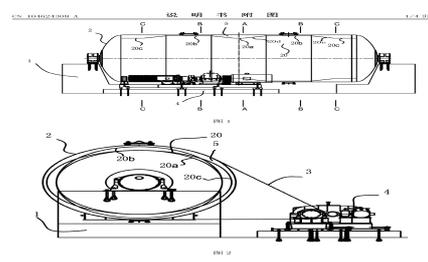


Ball mill with non-cylindrical inner cavity wall

The invention discloses a ball mill with a non-cylindrical inner cavity wall. The ball mill comprises a frame, a cylinder body, a transmission belt and a driving device, wherein the inner cavity wall of the cylinder body is in a sectional irregular shape; the inner cavity wall of the cylinder body comprises a circular-section inner cavity wall arranged in the middle of the cylinder body, first elliptical-section inner cavity walls symmetrically arranged at the two sides of the circular-section inner cavity wall and second elliptical-section inner cavity walls symmetrically arranged at one sides of the first elliptical-section inner cavity walls; the long shafts of the section ellipses of the first elliptical-section inner cavity walls and the second elliptical-section inner cavity walls are perpendicular to each other; a first irregular inner cavity wall and a second irregular inner cavity wall are orderly arranged between the circular-section inner cavity wall, the first elliptical-section inner cavity walls and the second elliptical-section inner cavity walls to form transitional linkages respectively; and the inner cavity wall of the cylinder body is a cylinder inner wall of the cylinder body or an inner wall of an irregular rubber lining installed on the cylinder inner wall of the cylinder body. The ball mill disclosed by the invention has advantages of high ball mill efficiency, short ball mill cycle and low energy consumption.

Publication: [CN 104624308 A 20150520](#)

Applicant: MAO XIN
Inventor: CHEN XIAOSONG; MAO XIN
Prio:
Appl.No: CN201510022261



IPC: B02C 17/22

Cutting and grinding device

The invention discloses a cutting and grinding device. The cutting and grinding device comprises a tool rest, a lifting rod, a cutting platform and a supporting frame used for supporting the cutting platform, wherein the tool rest is fixedly connected on the upper end surface of the lifting rod, the lifting rod passes through the cutting platform and is fixedly connected with a lifting device below the cutting platform, the cutting platform is also fixedly provided with a lifting rod guide pillar for providing a guiding function for the lifting rod, the lower end of the cutting platform is fixed on the supporting frame, the tool rest is provided with a main blade and an auxiliary blade, a certain angle is formed by the cutting directions of the main blade and the auxiliary blade, the auxiliary blade is a liftable blade, and the lifting power of the auxiliary blade is provided by a blade lifting device. The cutting and grinding device disclosed by the invention has the beneficial effects that the tool rest of the cutting and grinding device is provided with different blades and the blades are distributed at different angles, so that materials can be cut and ground at different angles at a time, so that the grinding time is shortened, and the grinding efficiency is improved.

Publication: [CN 104624309 A 20150520](#)

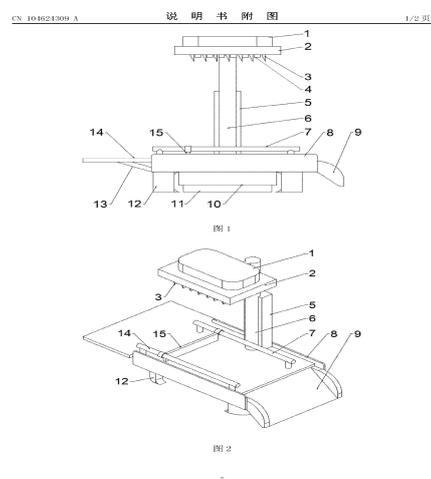
Applicant: TIANJIN GOLDEN WHEEL BICYCLE GROUP CO LTD

Inventor: YANG MAOXIU

Prio:

Appl.No: CN201410763181

IPC: B02C 18/02



Rotor structure of bark crusher

The invention provides a rotor structure of a bark crusher. The rotor structure comprises a main shaft and a rotor sleeving the main shaft, wherein the rotor consists of multiple sets of cutter heads which are connected in series, a cutter blade is installed on the outer side of each set of cutter head, the adjacent cutter heads are sequentially staggered by a certain angle, the cutter blades are arranged in a staggered manner in the axial length of the rotor, and the cutter blades are spirally distributed along the axial direction of the rotor. According to the rotor structure provided by the invention, the cutter blades of the cutter heads are arranged in a staggered manner in the axial length of the rotor, so that raw materials are in segmented contact when being hammered so as to reduce the impact load; and low-carbon steel blade bodies are adopted for the cutter blades, and abrasion-resistant alloy is installed on cutting parts by surfacing welding, so that the hardness is very high, and the cutter blades can be subjected to surfacing welding again after being worn, so that the use cost of a user is greatly saved.

Publication: [CN 104624310 A 20150520](#)

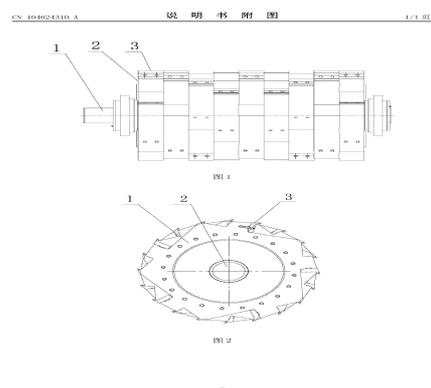
Applicant: JIANGSU DATANG MACHINERY CO LTD

Inventor: HONG WEIJIAN; TANG HAO

Prio:

Appl.No: CN201410745822

IPC: B02C 18/06



Vertical shaft shearing-type household garbage crusher

The invention discloses a vertical shaft shearing-type household garbage crusher which comprises a crushing device arranged in a crushing chamber, wherein the crushing device comprises a vertical rotating shaft and multiple layer crushing mechanisms arranged on the vertical rotating shaft; the vertical rotating shaft and the crushing chamber are arranged coaxially; each layer crushing mechanism comprises moving knives and stationary knives for shearing household garbage; the moving knives are fixedly mounted on an upper support and uniformly and radially distributed along the periphery; the upper support is mounted on the vertical rotating shaft; the stationary knives are mounted on a lower support and uniformly and radially distributed along the periphery of the vertical rotating shaft; the lower support is mounted in the crushing chamber; a feed opening is formed in the top of the crushing chamber; and a discharge opening is formed in the bottom of the crushing chamber. With the adoption of a vertical structure, multiple groups of moving knives and stationary knives are mounted on the vertical rotating shaft in a combination manner, and household garbage is crushed by the multiple layer crushing mechanisms, so that the structure is compact, and the fine crushing degree on the household garbage is high.

Publication: [CN 104624311 A 20150520](#)

Applicant: UNIV GUANGXI NORMAL

Inventor: LI JUN; LI ZUYU; LIANG CHUANGQUAN; LIU GUIYAN

Prio:

Appl.No: CN201510071911

IPC: B02C 18/10

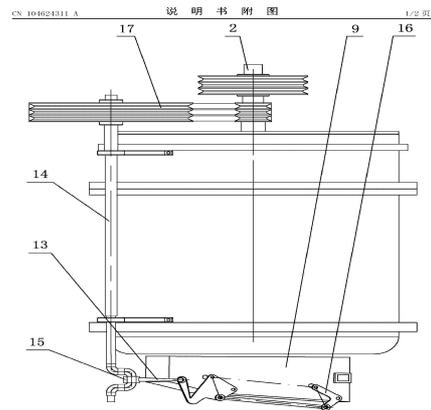


图 1

6

Meat grinder with double-layer cutter head structure

The invention discloses a meat grinder with a double-layer cutter head structure. The meat grinder comprises a meat grinding barrel assembly and a power device, wherein the meat grinding barrel assembly comprises a meat grinding barrel, a boost screw rod, a rotary cutter fixed on an outer end shaft of the boost screw rod, and a forming cutter head; the meat grinding barrel assembly also comprises a feeding cutter head; the feeding cutter head, the rotary cutter and the forming cutter head are sequentially arranged from interior to exterior by taking the outer end shaft of the boost screw rod as an axis; the rotary cutter comprises three blades which are symmetrically distributed; sawtooth-shaped knife edges are arranged on two sides of each blade. By using the meat grinder disclosed by the invention, when the meat is ground by using a double-layer cutter head, the condition that foods are stocked is avoided, and the food residue phenomenon is improved. Moreover, multiple foods which are difficult to mince, such as cowhells and broken bones, can be minced, the performance of the conventional meat grinder is improved, and the meat grinder is conveniently used by consumers.

Publication: [CN 104624312 A 20150520](#)

Applicant: HONGSHOUXIANG ELECTRIC APPLIANCE SHENZHEN CO LTD

Inventor: WANG ZHIWEI

Prio:

Appl.No: CN201310552157

IPC: B02C 18/14

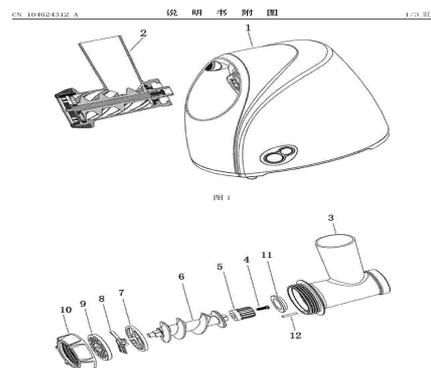


图 1

图 2

6

Strong shear crusher

The invention relates to a strong shear crusher, which comprises a crushing box and further comprises a sliding channel guide cylinder, a pushing rod, a hand wheel, a locking member and a baffle, wherein sliding channels are respectively arranged on the bottom plate and the top plate of the crushing box in a concave manner, the guide cylinder is arranged in the side wall of the crushing box in a penetrating manner, the locking member is arranged on one guide cylinder end positioned on the outer portion of the crushing box in a snapping manner, the pushing rod is arranged in the guide cylinder and the locking member in a penetrating manner, one pushing rod end extending into the crushing box is provided with the baffle connected with the sliding channel, and the other pushing rod end positioned outside the crushing box is provided with the hand wheel. According to the present invention, the hand wheel rotates to push the pushing rod to move inward so as to reduce the crushing gap, or the hand wheel rotates outward to drive the pushing rod to move outward so as to increase the crushing gap, such that the adjustment on the crushing gap is achieved.

Publication: [CN 104624313 A 20150520](#)

Applicant: WUXI XUEJIANG ENVIRONMENTAL ENGINEERING EQUIPMENT CO LTD

Inventor: ZENG XIONGYAN

Prio:

Appl.No: CN201310553810

IPC: B02C 18/14

CN 104624313 A 说明书附图 1/1 页

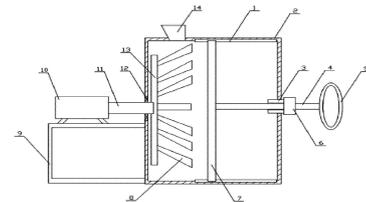


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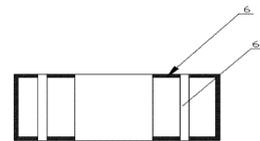


图 2

6

Crusher

The present invention relates to the technical field of crushers, particularly to a crusher, which comprises a base, a crushing box arranged on one side of the upper end of the base, a support base arranged on the other side of the upper end of the base, a motor, a rotation shaft, a first bearing, a second bearing, fixation members and cutting cutters, wherein the motor is arranged on the upper end of the support base, the first bearing and the second bearing are embedded in the side wall of the crushing box, the rotation shaft penetrates into the first bearing and the second bearing, extends to one end outside the crushing box, and is connected with the motor, the fixation member is sleeved on the rotation shaft, the cutting cutters are arranged in the snapping grooves arranged on both sides of the fixation members in a snapping manner, the motor drives the rotation shaft to rotate so as to drive the cutting cutter fixed on the fixation member to rotate, the cutting cutter cuts and crushes the material, the cutting cutter position layout is rational, and the cutting efficiency is high.

Publication: [CN 104624314 A 20150520](#)

Applicant: WUXI XUEJIANG ENVIRONMENTAL ENGINEERING EQUIPMENT CO LTD

Inventor: ZENG XIONGYAN

Prio:

Appl.No: CN201310553870

IPC: B02C 18/14

CN 104624314 A 说明书附图 1/1 页

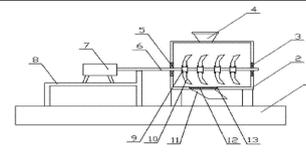


图 1

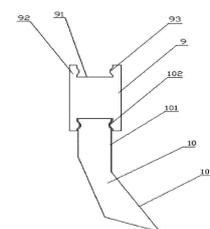


图 2

6

Novel garbage scattering machine

The invention discloses a novel garbage scattering machine which comprises a hollow shell, wherein a garbage inlet is formed in the center on the top of the shell; a first crushing device and a second crushing device which are arranged along the horizontal wind direction are sequentially arranged inside the shell and below the garbage inlet; an inclined guide plate is arranged at the bottom of the second crushing device; a garbage outlet is formed in the bottom of the side surface of the shell; the bottom end of the guide plate extends to the lower edge of the garbage outlet; the first crushing device comprises a first crushing shaft which is horizontally arranged; two ends of the first crushing shaft are rotationally arranged on two side walls of the shell; one end of the first crushing shaft is connected with a first crushing motor; multiple stab-shaped first crushing paddles are arranged on the first crushing shaft; the second crushing device comprises a second crushing shaft which is horizontally arranged; two ends of the second crushing shaft are rotationally arranged on two side walls of the shell; one end of the second crushing shaft is connected with a second crushing motor; and multiple stab-shaped second crushing paddles are arranged on the second crushing shaft.

Publication: [CN 104624315 A 20150520](#)

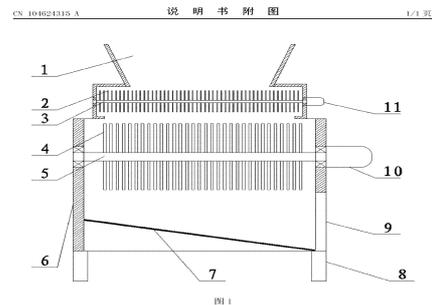
Applicant: XI AN SHANGSHANG ELECTROMECHANICAL CO LTD

Inventor: LI FENG; WANG HANYU

Prio:

Appl.No: CN201310567581

IPC: B02C 18/14



5

Plastic bag crusher

The invention discloses a plastic bag crusher. The plastic bag crusher comprises a shell, wherein the top of the shell is provided with a feed inlet; the side wall of the upper part in the shell is provided with a horizontal crushing shaft which is provided with a plurality of first crushing paddles; one end of the horizontal crushing shaft extends to the outer part of the shell and is connected to an output shaft of a horizontal speed reducer; the horizontal speed reducer is connected to a horizontal motor; a longitudinal crushing shaft is arranged below the horizontal crushing shaft in the shell, and is provided with a plurality of second crushing paddles; one end of the longitudinal crushing shaft extends to the outer part of the shell and is connected to the output shaft of a longitudinal speed reducer connected to the longitudinal motor; the inner wall of the shell positioned below the second crushing paddle is provided with a fan; the bottom in the shell is provided with a sundry outlet and a plastic bag outlet. The crusher not only can be used for completely crushing plastic bag garbage, but also can be used for individually exhausting the crushed plastic bags and the sundries in the garbage, is high in crushing strength and crushing efficiency.

Publication: [CN 104624316 A 20150520](#)

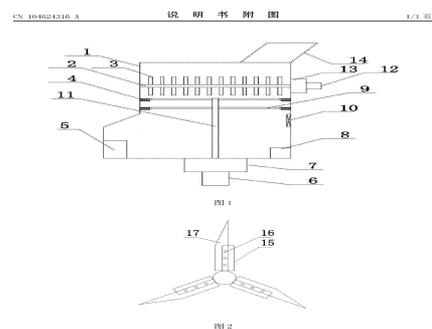
Applicant: XI AN ALL SAFE SCI & TECH CO

Inventor: LI WEIHONG

Prio:

Appl.No: CN201310574695

IPC: B02C 18/14



6

Simple paper shredder

The invention relates to the technical field of paper shredders and particularly relates to a simple paper shredder. The simple paper shredder comprises a casing, a base, a baffle plate, a rotating shaft and a knob, wherein the casing is fixed on the base; a driving blade and a driven blade, which occlude mutually, are arranged in the casing; a shaft hole for allowing the rotating shaft to be inserted in is formed in the casing; the baffle plate is fixedly connected to one side of the casing; and the knob is mounted at one end of the rotating shaft and located on one side of the baffle plate. The paper shredder provided by the invention is simple in structure, reasonable in design, particularly suitable for a family or an individual who needs to shred paper occasionally and convenient to mount and use, and occupies small space.

Publication: [CN 104624317 A 20150520](#)

Applicant: HUANG YONGHUAI

Inventor: HUANG YONGHUAI

Prio:

Appl.No: CN201410774162

IPC: B02C 18/14

CN 104624317 A 说明书附图 1/3页

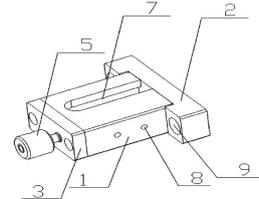


图1

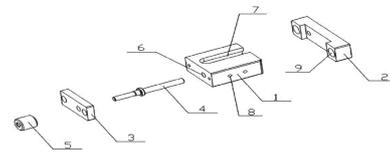


图2

6

Palm sheet cutting and crushing device

The invention relates to a palm sheet cutting and crushing device, which comprises a rack, a feeding mechanism, a decomposition mechanism and a discharge opening, wherein the feeding mechanism and the discharge opening are respectively arranged on an formed in the front part and the rear part of the rack; the decomposition mechanism is arranged in the middle of the rack; the feeding mechanism is composed of at least four feeding roll shafts, feeding rolls, gears, bearings, and a transmission mechanism; the feeding rolls sleeve the feeding roll shafts; the gears are arranged at two ends of each feeding roll shaft; the bearings are arranged on the outer sides of the gears; the transmission mechanism is connected with the feeding roll shafts; the decomposition mechanism is composed of a cutting mechanism and a crushing mechanism; and the cutting mechanism is communicated with the crushing mechanism. According to the palm sheet cutting and crushing device, the technical problems that a palm sheet fiber is relatively tightly entwisted, and is incompletely decomposed to cause incomplete decomposition are overcome; by virtue of coordination of the cutting mechanism and the crushing mechanism, the palm sheet fiber which relatively tightly entwisted can be easily cut into small palm fiber sections through the cutting mechanism; the palm fiber is completely decomposed through the crushing mechanism; and the palm sheet cutting and crushing device conforms to the production requirements.

Publication: [CN 104624318 A 20150520](#)

Applicant: TIANJIN SHANGDE WIRE UNWINDING MACHINERY CO LTD

Inventor: LIANG HAILUN

Prio:

Appl.No: CN201410819991

IPC: B02C 18/14

CN 104624318 A 说明书附图 1/3页

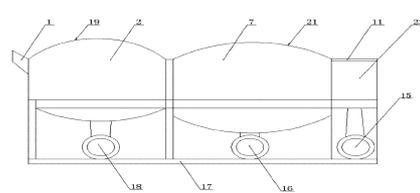


图1

6

Palm sheet breaking device

The invention relates to a palm sheet breaking device. The palm sheet breaking device is composed of a rack, a feeding mechanism, a breaking down mechanism and a discharge hole, wherein the feeding mechanism is arranged at the front part of the rack and the discharge hole is formed in the rear part of the rack; the breaking down mechanism is arranged in the middle of the rack, the feeding mechanism comprises at least four feeding rolling shafts, feeding rollers on the feeding rolling shafts in a sheathing manner, gears arranged at two ends of the feeding rolling shaft, a bearing arranged outside the gear, and a transmission mechanism connected with the feeding rolling shaft; and the breaking down mechanism is composed of a cutting mechanism and a breaking mechanism which are communicated with each other. The palm sheet breaking device overcomes the technical difficult problems that palm sheet fibers are entangled tightly and the break-down effect is not thorough; the cutting mechanism and the breaking mechanism are matched, the palm sheet fibers entangled tightly can be easily cut into fine palm fiber segments by the cutting mechanism, then the breaking mechanism is used for thoroughly breaking the palm sheet fibers; and the palm sheet breaking device meets the production demands.

Publication: [CN 104624319 A 20150520](#)

Applicant: TIANJIN SHANGDE WIRE UNWINDING MACHINERY CO LTD

Inventor: LIANG HAILUN

Prio:

Appl.No: CN201410820387

IPC: B02C 18/14

CN 104624319 A 说明书附图 1/1 页

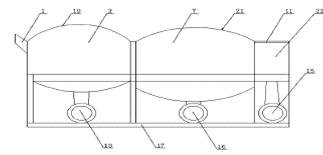


图 1

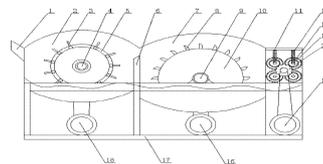


图 2

5

High-efficiency crushing machine

The invention discloses a high-efficiency crushing machine. A crushing device is arranged on a rack; a crushing feeding hole and a crushing discharge hole are respectively formed in the upper part and the lower part of the crushing device; a rolling screen which can rotate relative to the rack and is of a cylindrical structure, and a rolling screen driving device for driving the rolling screen to rotate are arranged on the rack; the crushing discharge hole is positioned in the inner side of the rolling screen; crushed garbage falls on the continuously rotating rolling screen through the garbage discharge hole; when the fineness of the crushed garbage meets provided requirements, the garbage can be screened off from the rolling screen, the garbage which does not meet the fineness requirements rotates along with the rolling screen, falls into the crushing feeding hole when rotating to a highest point, and is further crushed. Therefore, the uniform fineness of the garbage screened off from the rolling screen is effectively ensured, the process requirements can be met, and garbage which does not meet the fineness requirements can be automatically crushed for the second time or multiple times, so that the labor operation cost can be lowered, and the crushing efficiency can be improved.

Publication: [CN 104624320 A 20150520](#)

Applicant: ZHONGSHAN OMS IND CO LTD

Inventor: GU ZHONGSHENG; LIANG SHENGHAI; LONG XIAOBIN; QUAN JIATAI; RUAN WEIJUN; TAN WEIJIE; WANG JUNSHENG; WU JUN

Prio:

Appl.No: CN201410821268

CN 104624320 A 说明书附图 1/1 页

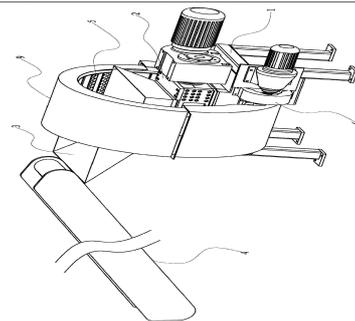


图 1

6

IPC: B02C 18/14

Movable hopper type crusher

The invention discloses a movable hopper type crusher which comprises a rack, a feeding hopper, a crushing bin, a discharge opening, a crushing assembly and a motor, wherein the rack refers to a rack capable of adjusting the inclination of the crushing bin; the rack capable of adjusting the inclination of the crushing bin consists of a base, a telescopic rod and two supporting rods; the movable hopper type crusher also comprises a discharging hopper, a swing arm, a conical table and a cylinder; the discharging hopper is arranged below the discharge opening and is suspended on the motor by virtue of the swing arm; the conical table is arranged on the base; the cylinder is arranged on the conical table; the discharging hopper is supported at the end of a piston rod of the cylinder; and the discharging hopper is pushed by the cylinder, so that the position of the discharging end in the discharging hopper is adjusted. With the adoption of a movable discharging hopper, the discharging hopper is pushed to move by virtue of the cylinder, and the position of the discharging end in the discharging hopper is adjusted, so that material receiving and feeding can be convenient.

Publication: **CN 104624321 A 20150520**

Applicant: FOSHAN HAIKE INTELLECTUAL PROPERTY SERVICES CO LTD

Inventor: CAI WEIYAN

Prio:

Appl.No: CN201410839001

IPC: B02C 18/14

CN 104624321 A 说明书附图 1/3页

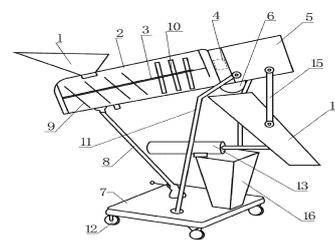


图 1

6

System for smashing plants to ferment fungus residues biologically and convert fungus residues into humus

The invention provides a system for smashing plants to ferment fungus residues biologically and convert fungus residues into humus. The system comprises a main body, a rotating blade, a screen, a fan, a pipe and a driving device; the main body comprises a main hollow cavity and a discharge cavity; the bottom of the main hollow cavity is communicated with one end of the discharge cavity; the rotating blade is arranged in the main hollow cavity and is driven by the driving device to rotate to smash materials in the main hollow cavity; the screen is arranged below the rotating blade; the air inlet of the fan is just opposite to the inlet of the pipe, and the fan is driven by the driving device to suck materials in the discharge cavity into the pipe from the inlet of the pipe. The system is capable of controlling the size of particles of the smashed materials in the process of smashing the materials.

Publication: **CN 104624322 A 20150520**

Applicant: GONGYI XINFEI MACHINERY PLANT; HENAN ZHIZHI BEILONG ENVIRONMENTAL PROTECTIVE EQUIPMENT SALES CO LTD

Inventor: DU MENGCHAO; HAN FUSHENG; HU HUALONG; HUANG SUYI; KONG XIANGJUAN; LI GUANGZONG; WANG JIE; YAO MINPU; ZHANG PENGFEI; ZHANG SHUMIN; ZHENG YIBIN

Prio:

Appl.No: CN201510064681

IPC: B02C 18/14

CN 104624322 A 说明书附图 1/3页

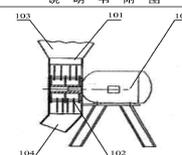


图 1

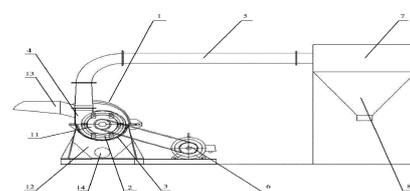


图 2

7

Bamboo and wood pulverizer

The invention discloses a bamboo and wood pulverizer. The bamboo and wood pulverizer comprises a lower pulverizer body, an upper pulverizer body, a fan, an inclined bottom plate, a toothed plate, a main shaft, a transmission belt pulley, a hammer support plate, bent cutters, hammers and a sieve; the upper pulverizer body is connected with the upper part of the lower pulverizer body by bolts; the feed end of the upper pulverizer body is provided with a feed hopper; the toothed plate is fixed on the bent part of the inner side wall of the upper pulverizer body by bolts; the inclined bottom plate which is inclined towards a discharge hole is arranged on the inner bottom of the lower pulverizer body; the sieve is arranged above the inclined bottom plate; the hammer support plate is arranged on the main shaft which penetrates through the interior of the lower pulverizer body; a plurality of groups of bent cutters and hammers are arranged on the hammer support plate; one end of the main shaft is provided with the transmission belt pulley, and the other end of the main shaft is connected with the fan in a transmission manner; a suction pipe of the fan is connected with the discharge hole on one side of the inclined bottom plate; and a discharge pipe of the fan is connected with a powder discharger. The bamboo and wood pulverizer disclosed by the invention is firm and durable, has strong pulverizing capability and can discharge smoothly.

Publication: [CN 104624323 A 20150520](#)

Applicant: ZHUCHENG CITY SHENGAO MACHINE CO LTD

Inventor: QU JINMING; WANG JUNRU; WANG ZELIU

Prio:

Appl.No: CN201510065035

IPC: B02C 18/14

CN 104624323 A 说明书附图 1/2 页

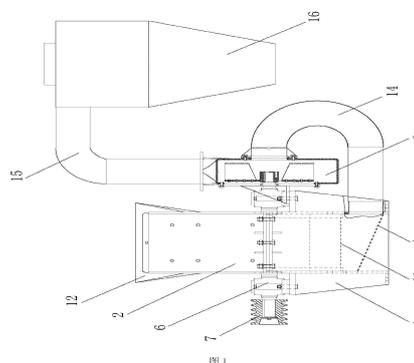


图 1

5

Overload prevention paper shredder

The invention discloses an overload prevention paper shredder which achieves the aims of low fault rate and long service life. The overload prevention paper shredder comprises a support (9), a motor (2), a first gear (3), a rack (7), a second gear (4), a movable shaft (5), a contact switch (8) and a fixed shaft (6), wherein the motor (2) is fixed on the support (9); the first gear (3) is driven by the motor (2); the rack (7) is meshed with the first gear (3) and is matched with the support (9) in a sliding mode; the second gear (4) is meshed with the rack (7); the movable shaft is coaxially fixed on the second gear (4) in a sleeving mode; the contact switch (8) is fixed on the support (9); the fixed shaft (6) is fixed on the support (9) via a fixing base (11) and the axis of the fixed shaft (6) is parallel to the axis of the movable shaft (5); the length direction of the rack (7) is perpendicular to the movable shaft (5); one side, opposite to the movable shaft (5), of the contact switch (8) is provided with a contact end (10); the shortest distance between the contact end (10) and the movable shaft (5) is less than the shortest distance between the fixed shaft (6) and the movable shaft (5).

Publication: [CN 104624324 A 20150520](#)

Applicant: DELI GROUP CO LTD

Inventor: CHEN JUNJIAN

Prio:

Appl.No: CN201410750942

CN 104624324 A 说明书附图 1/2 页

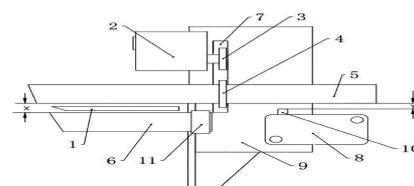


图 1

5

IPC: B02C 18/16

Anti-dust device of crusher

The invention discloses an anti-dust device of a crusher. The anti-dust device is connected between a feed opening and a dust collection passage of the crusher, wherein the dust collection passage is arranged at the feed opening of the crusher. The anti-dust device comprises at least one winding mechanism connected with the periphery of the feed opening of the crusher and a flexible pipeline connected with the winding mechanism, wherein a hook part is arranged at the other end of the flexible pipeline; and the hook part is connected with the lower end part of the dust collection passage. The anti-dust device (namely a dust guiding device) provided by the invention is arranged between the feed opening and the dust collection passage of the crusher, and dust or particles getting out of the crusher are led to the dust collection passage via the flexible pipeline, so that harm to people who operate the crusher is reduced, and health and favorable occupational environment are improved.

Publication: [CN 104624325 A 20150520](#)

Applicant: WUHU WANHUA PLASTIC PRODUCT CO LTD

Inventor: HUA HUISI

Prio:

Appl.No: CN201410765389

IPC: B02C 18/16

CN 104624325 A 说明书附图 1/3页

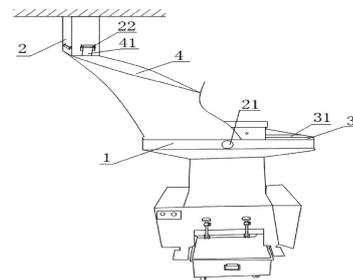


图 1

5

Metal shredding device

The invention discloses a metal shredding device. The metal shredding device comprises a box body, wherein the box body is internally provided with a knife roller which is equipped with a driving device, is also provided with a plurality of blades, and is coated with a protective membrane. The protective membrane comprises the following components in parts by weight: 8.5 parts of acrylic resin, 1.2 parts of benzyltriphenylphospho, 0.9 part of polydimethylsiloxane, 1.4 parts of dimethylethanolamine, 1.8 parts of glass-ceramic powder and 0.7 part of modified kieselguhr. The knife roll of the metal shredding device is coated with the protective membrane, so that the knife roll has excellent corrosion resistance and abrasion resistance, so that the metal shredding device can run for a long time.

Publication: [CN 104624326 A 20150520](#)

Applicant: CHANGSHU SHOUYU MACHINERY CO LTD

Inventor: XIE ZHANJUN

Prio:

Appl.No: CN201410833561

IPC: B02C 18/18

Rotor of movable knives of crushing machine

The invention discloses a rotor of movable knives of a crushing machine. The rotor is characterized in that four pin rolls are inserted on a plurality of rotor discs in a penetrating manner, a spacer bush sleeves the pin roll between every two rotor discs, two movable knives are inserted on two sides, which are positioned between the rotor discs, on the two opposite pin rolls, a movable knife is inserted in the middles, which are positioned between the two rotor discs, on another two pin rolls, cotter pins are respectively radially inserted on the four pin rolls, and the cotter pins used for fixing the spacer bushes with the pin rolls together. By means of the above arrangement, the rotor is used for a fishskin crushing machine. According to the rotor, the movable knives are reasonably arranged, a large quantity of fishskin fed into the crushing machine are completely crushed without being any leaked, and very uniformly crushed, with a remarkable effect, so that the product quality is greatly improved, and the user demand is met. The rotor plays main roles in improving the output per machine and reducing the consumption of kinetic energy.

Publication: [CN 104624327 A 20150520](#)

Applicant: ZHUCHENG CITY SHENGAO MACHINE CO LTD

Inventor: MENG LI; QU JINMING; ZHU HUAZHONG

Prio:

Appl.No: CN201510063435

IPC: B02C 18/18

CN 104624327 A 说明书附图 1/2页

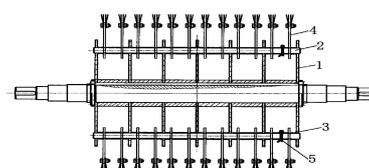


图 1

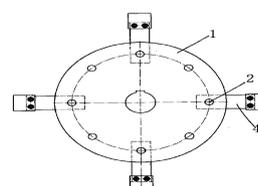


图 2

4

Moving cutter used for pulverizer

The invention discloses a moving cutter used for a pulverizer. The moving cutter is characterized in that the two sides of the lower end of a cutter seat are fixedly connected with straight blades and bent blades by bolts; the bent blades are arranged on the outer sides of the straight blades; and a mounting hole is formed in the middle of the upper part of the cutter seat. With the adoption of the arrangement above, the cutter can be changed to four cutter parts to be mounted on a rotor of the pulverizer, so that fish skin, fish intestines, and the like can be effectively pulverized to meet perfect using requirements; the processing quality is ensured reliably; and the strong guarantee is provided for an enterprise for timely pulverizing fish leftovers and putting fish leftovers in a refrigerated warehouse for fresh preservation.

Publication: [CN 104624328 A 20150520](#)

Applicant: ZHUCHENG CITY SHENGAO MACHINE CO LTD

Inventor: MENG LI; QU JINMING; ZHU HUAZHONG

Prio:

Appl.No: CN201510065056

IPC: B02C 18/18

CN 104624328 A 说明书附图 1/3页

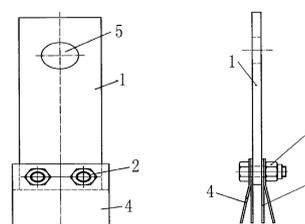


图 1

图 2

4

Side cutter holder for pulverizer

The invention discloses a side cutter holder for a pulverizer. The side cutter holder for the pulverizer is characterized in that L-shaped side cutter connection claws are uniformly distributed at the outer periphery of a shaft sleeve, on side of the inner wall of the shaft sleeve is provided with a key groove, and each L-shaped side cutter connection claw is provided with side cutter connection holes. Because the side cutter holder is arranged on one end of a main shaft of the pulverizer through the shaft sleeve, and side cutters are arranged on the L-shaped side cutter connection claws, the pulverizer has the extra function of cutting laterally, the common pulverizer can function as a multifunctional pulverizer, the application range of the pulverizer can be enlarged effectively, and the pulverizer can be used for pulverizing grain, straw, grass, paper, bamboo and the like. The side cutter holder can bear rated high-speed rotation, and the service life and pulverizing efficiency of the pulverizer can be increased effectively.

Publication: [CN 104624329 A 20150520](#)

Applicant: ZHUCHENG CITY SHENGAO MACHINE CO LTD

Inventor: MENG LI; QU JINMING; ZHU HUAZHONG

Prio:

Appl.No: CN201510065251

IPC: B02C 18/18

CN 104624329 A 说明书附图 1/3页

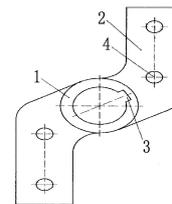


图 1

Curved knife on crusher rotor

The invention discloses a curved knife on a crusher rotor. The curved knife is characterized in that a tool bit is arranged on the upper part of an arc-shaped knife handle; a knife edge is formed on one side of the tool bit; a mounting hole is formed in a middle on the lower part of the arc-shaped knife handle; and the tool bit is subjected to quenching treatment. According to the arrangement, the operating principle of a short axe for a carpenter is adopted, and the width is properly reduced. The curved knife disclosed by the invention is arranged on the crusher rotor, so that pressure on the knife edge is high, the efficiency of cutting hard wood is extremely high, and the working efficiency of a crusher is improved. After the knife edge is damaged, the knife edge can be subjected to abrasive machining and is reutilized, and the maintenance cost is reduced.

Publication: [CN 104624330 A 20150520](#)

Applicant: ZHUCHENG CITY SHENGAO MACHINE CO LTD

Inventor: QU JINMING; WANG ZELIU; ZHU HUAZHONG

Prio:

Appl.No: CN201510065329

IPC: B02C 18/18

CN 104624330 A 说明书附图 1/3页

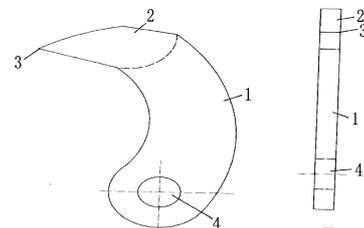


图 2

Automatic paper shredder

The invention provides an automatic paper shredder, belonging to the technical field of machinery and solving the problem that the existing automatic paper shredder is instable for paper feeding and easy in paper blocking. The automatic paper shredder comprises an enclosure and a paper shredding cutter arranged in the enclosure, wherein a gap is formed in the upper surface of the enclosure and connected with a paper placing disc inclining towards the interior of the enclosure, the outer end of the paper placing disc extends out of the enclosure and the inner end of the paper placing disc is positioned in the enclosure, a paper taking shaft is arranged in the enclosure above the inner end of the paper placing disc and provided with a paper taking wheel, a driving motor I which can drive the paper taking shaft to rotate is arranged in the enclosure, a paper separating block is arranged between the paper placing disc and the paper shredding cutter, the outer end of the paper separating block is close to the inner end of the paper placing disc, the upper surface of the paper separating block is covered by a rubber layer, an inclined surface I arranged in an inclined manner is on the upper surface of the rubber layer, and the lowest point of the inclined surface I is close to the inner end of the paper placing disc and higher than the inner end of the paper placing disc. The automatic paper shredder has the advantages that paper feeding is stable, paper is difficult to block, the number of fed paper is easily controlled, and the like.

Publication: [CN 104624331 A 20150520](#)

Applicant: SUNWOOD HOLDING GROUP CO LTD

Inventor: HE GUANGYU; LIN XIASEN

Prio:

Appl.No: CN201510074726

IPC: B02C 18/22

CN 104624331 A 说明书附图 1/19页

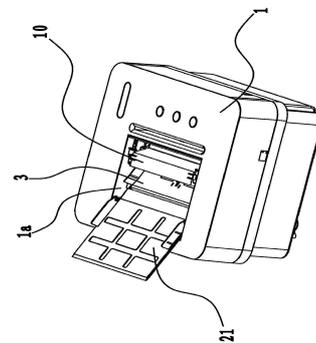


图1

12

Impact crushing device for ore crushing work

The invention discloses an impact crushing device for ore crushing work, relates to the field of mining machinery, in particular to an impact crushing device for ore crushing work. The impact crushing device comprises a machine room (1), a motor I (2), a discharging and conveying mechanism (3), a lifting cabin (4), a feeding and conveying mechanism (5), a firing device (6), an impact plate (7), a motor II (8), a driving wheel (9), a driven wheel (10), a feeding hopper (11), a conveyer belt (12), an inlet (13) and an output (14), wherein the motor I (2) is arranged on one side of the machine room (1); a feeding opening is formed in the upper end of the machine room (1); a discharge opening is formed in the lower end of the machine room; one end of the discharging and conveying mechanism (3) is arranged at the lower part of the discharge opening of the machine room (1); the lifting cabin (4) is arranged at the other end of the discharging and conveying mechanism (3); the outlet (14) is formed in the upper part of one side of the lifting cabin (4); an inlet (13) is formed in the lower part of one side of the lifting cabin (4); and the motor II (8) is arranged on the upper part of the other side of the lifting cabin (4).

Publication: [CN 104624332 A 20150520](#)

Applicant: LYU XIAOJUAN

Inventor: LYU XIAOJUAN

Prio:

Appl.No: CN201310568135

CN 104624332 A 说明书附图 1/12页

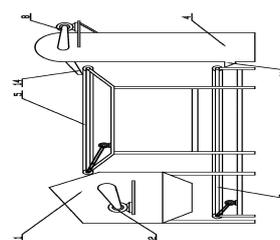


图1

6

IPC: B02C 19/00

Ore crushing equipment

The invention relates to the field of a mining industry and more particularly relates to ore crushing equipment. The ore crushing equipment comprises a ladder-shaped crushing base, and a ladder-shaped heavy-load crushing object which is in tooth match with the crushing base, wherein the heavy-load crushing object is in an integrally-formed structure; ores are poured into the crushing equipment according to production requirements which can be finished by setting the crushing base with different ladder numbers due to different manufacturing technique requirements; the ores are pressed and crushed by the heavy-load crushing object by the gravity effect and the horizontal tension force effect of the heavy-load crushing object, and the pressed and crushed ores enter the next ladder to repeat the movement and the steps are recirculated. The raw ores in the crushing equipment can be crushed into ore powder according to individual requirements under the matching effect of the heavy-load crushing object and the crushing base.

Publication: **CN 104624333 A 20150520**

Applicant: TIANJIN KEHUI ENTPR INCUBATOR CO LTD

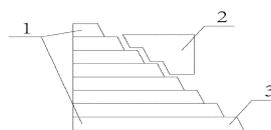
Inventor: XU HAO

Prio:

Appl.No: CN201310576340

IPC: B02C 19/00

CN 104624333 A 说明书附图 1/1页



Cast impact type gravel sand making machine

The invention discloses a cast impact type gravel sand making machine, belongs to the technical field of crushing machines, and provides a cast impact type gravel sand making machine. The sand making machine is high in crushing force; equipment is relatively good in abrasive resistance, and the prepared sand grains are uniform. According to the technical scheme of the cast impact type gravel sand making machine, a feeding hopper is arranged at the upper end of a machine body; a machine body bracket is arranged at the lower end of the machine body; casting impellers are arranged in the machine body, are located below the feeding hopper, and are driven through an electromagnetic speed regulation motor which is arranged in the machine body; an impact plate is arranged on the inner lateral wall of the machine body; a discharge opening is formed in the bottom end of the machine body, and is communicated with the middle of a wind cone on the machine body bracket; a draught fan is arranged at one end of the wine cone; the other end of the wind cone is communicated with a sand inlet of a sand forming barrel; a sand outlet is formed in the bottom of the sand forming barrel; and a dust removal opening is formed in the upper part of the sand forming barrel, and is communicated with a dust remover through an air hose. The cast impact type gravel sand making machine can be widely applied to the field of sand making.

Publication: **CN 104624334 A 20150520**

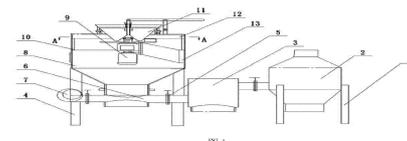
Applicant: TAIYUAN NORTH MACHINERY PLANT; UNIV NORTH CHINA

Inventor: FENG WANG; GAO QIANG; HUO HONG; LIANG BIN; LIANG YUANMING; LU HUIZHAN; WANG FUJIE; YAN HONGWEI; YAN SHUOJIN

Prio:

Appl.No: CN201410824553

CN 104624334 A 说明书附图 1/1页



IPC: B02C 19/00

Sesame crusher

The invention discloses a sesame crusher. The sesame crusher comprises a sesame crusher body, wherein the bottom of the crusher body is provided with a fixed rotary knob; the crusher body is provided with a crushing cavity; a handle movably connected with the crushing cavity is arranged; the top of the crushing cavity is provided with a charge hopper; the front part of the crushing cavity is also provided with a discharge head; the charge hopper and the crushing cavity can be separated; the discharge head is provided with a plurality of small discharge holes. Because the sesame crusher can drive an internal crushing device to crush sesame completely by the handle which is rotationally arranged on the body, the whole crusher is distinct in structure, is simple to operate, can rapidly crush sesame, and meanwhile guarantees the crushing quality, and the efficiency is high, and the crushing is complete.

Publication: [CN 104624335 A 20150520](#)

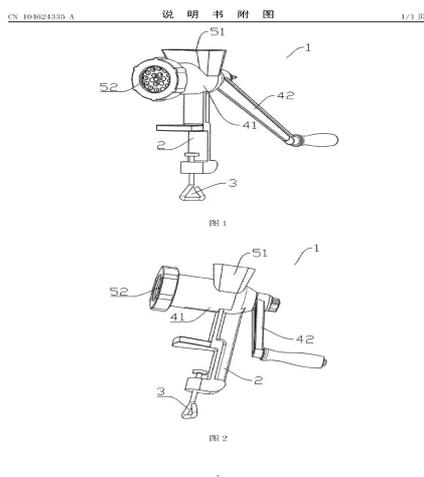
Applicant: XIONG QIUHONG

Inventor: XIONG QIUHONG

Prio:

Appl.No: CN201510056480

IPC: B02C 19/00



Simple preparation method for metal oxide semiconductor quantum dot

The invention discloses a simple preparation method for a metal oxide semiconductor quantum dot. The simple preparation method comprises the following step: reducing diameter of particles by mechanically crushing a metal oxide semiconductor to obtain the metal oxide semiconductor quantum dot which is 10-50 nanometers in diameter.

Publication: [CN 104624336 A 20150520](#)

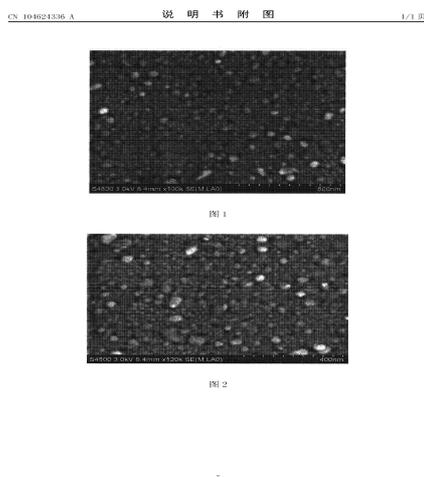
Applicant: JIANGSU QIHONG NEW MATERIAL
TECHNOLOGY CO LTD

Inventor: LIU SHUIPING; LIU WEIFENG; TAN LIANJIANG;
XIA QINGMING

Prio:

Appl.No: CN201510036334

IPC: B02C 19/06



Ultrasonic rescuing arm

The invention provides an ultrasonic rescuing arm. The ultrasonic rescuing arm is composed of a high strength drilling device, an ultrasonic generation device, a movement arm system and a process control system, the high strength drilling device is composed of a high speed motor and a high strength mining drilling bit, the ultrasonic generation device is composed of an ultrasonic generator and an ultrasonic probe, the movement arm system is composed of a hydraulic pump, a hydraulic pipe and a mechanical arm, the process control system is composed of a controller, a low voltage electrical appliance element and a solenoid valve, and the process control system is connected with the high strength drilling device, the ultrasonic generation device and the movement arm system through the low voltage electrical appliance element. The high strength drilling bit is used to drill field large broken stones cannot be carried by people, the ultrasonic generation device generates high power ultrasonic waves, and the broken stones can be easily crushed when the ultrasonic waves resonate with the broken stones, so the ultrasonic rescuing arm has the advantages of no secondary damages to trapped people and no secondary destruction to the field in the crushing process, convenient transportation, rapid crushing and efficient rescuing.

Publication: [CN 104624337 A 20150520](#)

Applicant: QINGDAO SANLI ZHONGDEMEI WATER EQUIPMENT CO LTD

Inventor: WANG XUECHENG; YAN LAISHENG; ZHANG MINGLIANG

Prio:

Appl.No: CN201310559709

IPC: B02C 19/18

CN 104624337 A 说明书附图 1/1 页

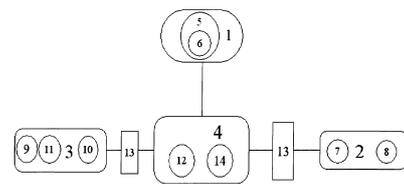


图 1

5

Heated and stimulated crusher

The invention provides a heated and stimulated crusher. The heated and stimulated crusher comprises an operation box body, wherein the inner part of the operation box body is provided with a heating cavity, a cooling cavity and a crushing cavity, wherein the lower parts of the heating cavity, the cooling cavity and the crushing cavity are provided slide base plates which are connected, and are pushed and sealed by an air cylinder; the heating cavity at the annular direction is provided with a heating pipe; ignition sprayers which are directed to the heating cavity part are uniformly distributed annularly on the heating pipe; the cooling cavity at the annular direction is provided with a cooling pipe; gas sprayers which are directed to the cooling cavity part are uniformly distributed annularly on the cooling pipe; the crushing cavity is internally provided with a crushing plate which is driven to slide back and forth by an air cylinder. The crusher is simple in structure and small in size; when in use, minerals are loose by cold and hot stimulation so as to be convenient to extrude; meanwhile, mineral fragments are difficult to remain due to a vertical cavity, and minerals can be collected completely. The crusher is applied to crushing and detecting of small minerals.

Publication: [CN 104624338 A 20150520](#)

Applicant: SUZHOU SHENGPULA NEW MATERIAL TECHNOLOGY CO LTD

Inventor: FEI JINHUA

Prio:

Appl.No: CN201510111636

CN 104624338 A 说明书附图 1/1 页

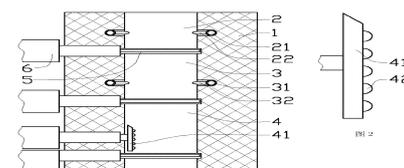


图 1

6

IPC: B02C 19/18

Low energy consumption method for printed circuit board

The invention relates to a field of methods for destroying solid wastes or converting solid wastes into harmless substances, and specifically relates to a low energy consumption method for printed circuit board. The method is characterized by comprising the following steps: step a, grinding; step b, crushing by a hammer for the first time; step c, crushing by a hammer for a second time; step d, sieving; step e, sorting. The provided method has the advantages of simple equipment, convenient operation, high recovery rate, and low energy consumption.

Publication: [CN 104624339 A 20150520](#)

Applicant: SHANGHAI JULANG PROTECTING ENVIRONMENT CO LTD

Inventor: XU BO

Prio:

Appl.No: CN201310550609

IPC: B02C 21/00

Ultrasonic wave crusher

The present invention relates to the technical field of crushers, particularly to an ultrasonic wave crusher, which comprises an ultrasonic wave generating barrel, a crushing barrel embedded in the ultrasonic wave generating barrel, a motor, ultrasonic wave generators, a stirring shaft, cutting cutters, fixation members, horizontal shafts and sleeve connection members, wherein the motor is arranged on the upper end of the crushing barrel, the stirring shaft is arranged on the top plate of the crushing barrel in a penetrating manner, the upper end of the stirring shaft is connected with the motor, the lower end of the stirring shaft extends into the crushing barrel, the horizontal shaft is vertically fixed on the stirring shaft through the sleeve connection member, the cutting cutter is symmetrically arranged on the horizontal shaft through the fixation member relative to the stirring shaft, the ultrasonic wave generator is arranged outside the ultrasonic wave generating barrel, the motor drives the cutting cutter to rotate so as to carry out primary crushing on the material in the crushing barrel, and the ultrasonic wave generator emits ultrasonic waves so as to crush the material into the nano-scale material.

Publication: [CN 104624340 A 20150520](#)

Applicant: WUXI XUEJIANG ENVIRONMENTAL ENGINEERING EQUIPMENT CO LTD

Inventor: ZENG XIONGYAN

Prio:

Appl.No: CN201310554454

IPC: B02C 21/00

CN 104624340 A 说明书附图 1/1 页

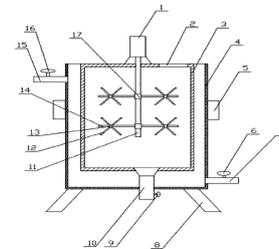


图 1

Quartz stone crusher

The invention belongs to the field of quartz stone crushing equipment, and particularly relates to a quartz stone crusher. The quartz stone crusher is characterized in that the inside of an enclosure of the crusher is separated into an upper layer, a middle layer and a lower layer by an upper baffle and a lower baffle; two crushing rollers are positioned in the upper layer; the upper baffle is provided with an upper layer material through hole; upper layer stirring and crushing blades are fixed on an upper layer stirring and crushing shaft which is fixed above the upper baffle and is connected with an upper layer stirring motor; the lower baffle is provided with a lower layer material through hole; lower layer stirring and crushing blades are fixed on a lower layer stirring and crushing shaft which is fixed above the lower baffle and is connected with a lower layer stirring motor; the bottom of the lower layer of the enclosure of the crusher is oblique. The quartz stone crusher is simple in structure; the quartz sand manufacturing process is simple and convenient; the crushing efficiency is high; the automation degree is high; the labor and resource costs are low.

Publication: [CN 104624341 A 20150520](#)

Applicant: TIANJIN KEHUI ENTPR INCUBATOR CO LTD

Inventor: XU HAO

Prio:

Appl.No: CN201310571684

IPC: B02C 21/00

CN 104624341 A 说明书附图 1/1 页

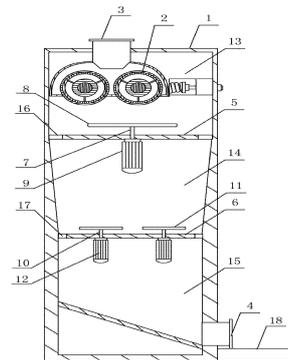


图 1

5

Returned material decomposing device

The invention discloses a returned material decomposing device which comprises a rack body, wherein a plurality of rollers are arranged on the rack body, a conveyor belt is arranged on the rollers and is connected with a vibrating screen, the vibrating screen is connected with a feed inlet of a crusher, a dedusting opening is formed on the crusher, and an ash bag is arranged at the dedusting opening. A shaft sleeve is arranged in a cavity, a shaft lever is arranged in the shaft sleeve, and a universal wheel is arranged at the end of the shaft lever. A crushing blade I is arranged on a vertical shaft while a crushing blade II is arranged on another vertical shaft; driven belt wheels are arranged at the bottom ends of the two vertical shafts. By arranging the vibrating screen and the crusher, the waste of waste materials is reduced, so that the production cost is lowered; dust is absorbed by virtue of the ash bag, so that personal injury is reduced.

Publication: [CN 104624342 A 20150520](#)

Applicant: HARBIN QUANXING TECHNOLOGY CO LTD

Inventor: LI JING

Prio:

Appl.No: CN201410810693

IPC: B02C 21/00

CN 104624342 A 说明书附图 1/1 页

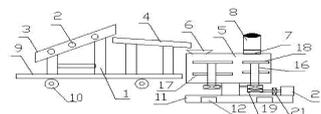


图 1

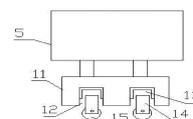


图 2

5

Organic fertilizer processing equipment

The invention discloses organic fertilizer processing equipment, which comprises a rack, a hopper, a coarse aggregate conveyor belt, a crushing device, a fine screening device, a concentrate conveyor belt, a conveyor, a filling machine and a control device, wherein the hopper and the fine screening device are respectively arranged on two sides of the rack; the fine screening device is driven through a motor; the crushing device is started through the motor, and is arranged on the rack between the hopper and the fine screening device; the coarse aggregate conveyor belt is arranged on the bottom of the hopper; a material is conveyed to the inlet of the fine screening device; and the concentrate conveyor belt is arranged at the bottom of the fine screening device. The organic fertilizer processing equipment is simple in structure, relatively low in construction cost and high in yield; automatic crushing, screening, and filling procedures of coarse aggregates of an organic fertilizer with the moisture content being 50%-60% can be achieved; the organic fertilizer can be continuously produced; manpower and material resources are saved; the problems of large dust, high noise, serious environmental pollution and the like in the organic fertilizer processing process in the prior art are solved; and healthy development of the organic fertilizer industry is actively promoted.

Publication: [CN 104624343 A 20150520](#)

Applicant: LI JIANWEN

Inventor: LI JIANWEN

Prio:

Appl.No: CN201510008539

IPC: B02C 21/00

CN 104624343 A 说明书附图 1/3页

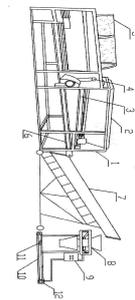


图 1

6

Crop straw bundle negative-pressure coarse grinding method and crop straw bundle negative-pressure coarse grinding equipment

The invention relates to a coarse straw bundle negative-pressure coarse grinding method. The coarse straw bundle negative-pressure coarse grinding method is characterized in that a straw bundle passes through an un-roping belt conveyor, an inclined scraper conveyor, a vertical type straw bundle coarse grinder, an air suction tube, a cyclone separator, an unloading air sealer, an air suction tube, a pulse bag dust collector, a dust-collecting air sealer, an air suction tube, a high-pressure draught fan and an air outlet tube; the vertical type straw bundle coarse grinder, the air suction tube, the cyclone separator, the unloading air sealer, the air suction tube, the pulse bag dust collector, the dust-collecting air sealer, the air suction tube, and the high-pressure draught fan are connected through the air suction tube, so that the straw bundle coarse grinding is continuously performed under a negative-pressure pneumatic transmission state. The vertical type straw bundle coarse grinder is characterized by being vertically arranged, wherein a gear roller bundle-off region, an electromagnetic iron removal region, a hammer sheet crushing region and a specific gravity stone removal region are arranged in a crusher tank body from top to top in sequence. According to the detection, the dust emission of the coarse straw bundle negative-pressure coarse grinding method meets the national environmental-friendly standards. The coarse straw bundle negative-pressure coarse grinding method realizes large-scale clean continuous coarse grinding of the straw bundle, can be applied to the fields of straw manmade plates, straw energy resources, straw feed and the like, and provides a novel and reliable process and complete equipment.

Publication: [CN 104624344 A 20150520](#)

Applicant: SHANGHAI COMPAK ENVIRONMENTAL PROT EQUIPMENT CO LTD

Inventor: PAN JIALIANG; WANG BUNING

Prio:

CN 104624344 A 说明书附图 1/3页

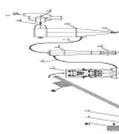


图 1

6

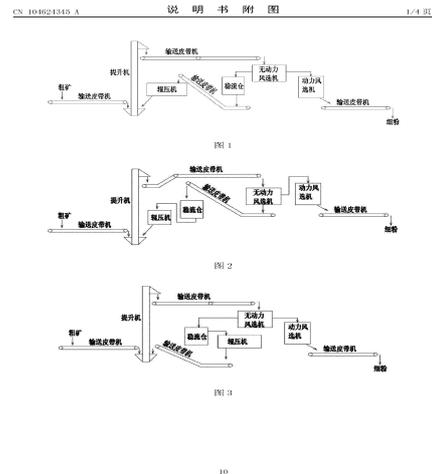
Appl.No: CN201510037691
IPC: B02C 21/00

Ore grinding system

The invention provides an ore grinding system which comprises a roller press, a current stabilizing bin, an air grading system and a power screening system. The ore grinding system is characterized by being longitudinally arranged. The ore grinding system provided by the invention can be used for saving the occupying area, saving the huge cost and the energy consumption by having no need of conveying a material by using a belt conveyer during material circulation and saving the water resources by having no need of using water during ore grinding and can be used for a place which is short of the water resources.

Publication: **CN 104624345 A 20150520**

Applicant: HU YANDONG; ZHANG JINCAI; ZHANG KE
Inventor: HU YANDONG; ZHANG JINCAI; ZHANG KE
Prio:
Appl.No: CN201510083032
IPC: B02C 21/00

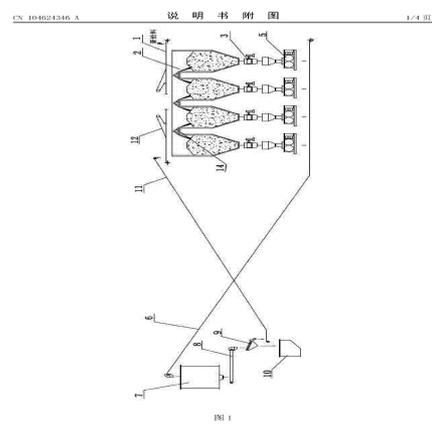


High-pressure roller grinding closed-circuit wet screening system

The invention relates to a high-pressure roller grinding closed-circuit wet screening system. The system comprises a high-pressure roller grinding crushing system, a high-pressure roller grinding product wet screening system and a wet screening oversize product returning system, and is characterized in that the high-pressure roller grinding crushing system consists of a belt leakage tramcar belt conveyor which conveys new feedstock, a high-pressure roller grinding storage bin, a silo bottom belt conveyor, a mixed material hopper, a high-pressure roller grinding machine and a high-pressure roller grinding product belt conveyor; the high-pressure roller grinding product wet screening system consists of a screening storage bin, a screening storage silo bottom belt conveyor, a wet vibration screen and an undersize pump pool; the wet screening oversize product returning system consists of a returning belt conveyor, a belt leakage tramcar belt conveyor for conveying oversize products and a wet screening oversize product storage bin. According to the high-pressure roller grinding closed-circuit wet screening system, the problems of material segregation during feeding of an existing belt conveyor with a screening system and large occupied space of the system, big space of the high-pressure roller grinding storage bin and adhesion between wet screening oversize returning products and new feedstock caused by the material segregation are radically solved.

Publication: **CN 104624346 A 20150520**

Applicant: NORTHERN ENG & TECH CORP MCC
Inventor: LI GUOZHOU; YANG HAILONG; YUE ZHONGKUI
Prio:
Appl.No: CN201510110352
IPC: B02C 21/00



Movable excavation crushing station

The invention relates to a movable excavation crushing station, and provides a movable excavation crushing station which is small in occupied space, capable of integrating the excavation and crushing, and high in applicability. According to the technical scheme, the movable excavation crushing station is characterized in that a discharging opening of a crusher is connected with an end opening of an adhesive tape conveyor, a feeding opening of the crusher is connected with a discharging opening of a plate-type feeding machine, a feeding machine supporting frame is fixedly provided with the plate-type feeding machine, the plate-type feeding machine is fixedly installed at an oblique angle of 20 to 25 degrees, the grounding end of the plate-type feeding machine is a receiving hopper, one end of a hydraulic piston rod is fixed on the tail part of the plate-type feeding machine by virtue of a pin shaft, the other end of the hydraulic piston rod is fixed on the side wall of the receiving hopper by virtue of a pin shaft, and an excavation mechanism is fixed on a crushing station framework. The movable excavation crushing station has advantages of high working efficiency and small occupied space.

Publication: [CN 104624347 A 20150520](#)

Applicant: XINXIANG DINGLI MINE EQUIPMENT CO LTD

Inventor: ZHANG YONG

Prio:

Appl.No: CN201510045907

IPC: B02C 21/02

CN 104624347 A 说明书附图 1/1 页

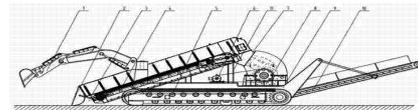


图 1

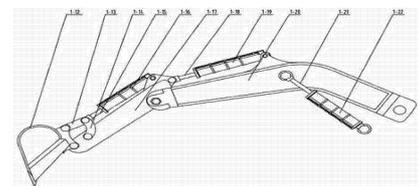


图 2

5

Movable type grinder

A movable type grinder includes a underframe; a plurality of idler wheels convenient to move are arranged under the underframe; the underframe is equipped with a stand column in an upward-extending mode; the stand column is equipped with an electric control cabinet and a grinding device; the upper part of the grinding device is equipped with a feeding mechanism; the feeding mechanism comprises a feeding hopper, a cover body and a feeding pipe; the feeding pipe is equipped with a discharge outlet communicated to an inlet of the grinding device; the interior of the feeding hopper is equipped with an accommodating space; the top of the accommodating space is equipped with a feeding inlet; the cover body is arranged on the feeding inlet in a covering mode; the bottom of the accommodating space is an inclined plane, and the lower end of the side face at the inclined side of the accommodating space is equipped with an outlet, and the outlet is communicated with a conveying pipe arranged vertically. The structure is simple, the movement is quick, the movable type grinder can be conveniently transported to a right place, and the use efficiency is improved; when feeding, air flows into a plurality of sieve pores at the same time, the disturbance frequency of the air is increased, and grinding of the movable type grinder is convenient.

Publication: [CN 104624348 A 20150520](#)

Applicant: CHENGDU SAITENG AUTOMATION
ENGINEERING CO LTD

Inventor: YANG CHUAN

Prio:

Appl.No: CN201310544983

CN 104624348 A 说明书附图 1/2 页

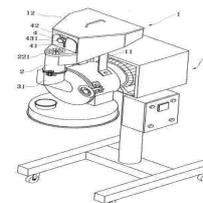


图 1

6

IPC: B02C 23/00

Air cooling system for crusher

The invention discloses an air cooling system for a crusher. The air cooling system comprises a main shaft, a rotor, an air cooling impellor I, an air cooling impellor II and a transmission belt wheel. The air cooling system is characterized in that the middle part of the main shaft is fixedly provided with the rotor; two ends of the main shaft are fixedly provided with the air cooling impellor I and the air cooling impellor II in a key connection mode; the outer side of the air cooling impellor II is provided with the transmission belt wheel connected with the main shaft. By the arrangement and an improved cooling mode, water cooling is changed into air cooling, so that the difficulty of a bearing base coasting and processing technology is reduced. The air cooling system is low in running cost, is obvious in temperature reduction, and can guarantee the normal continuous operation of the crusher.

Publication: **CN 104624349 A 20150520**

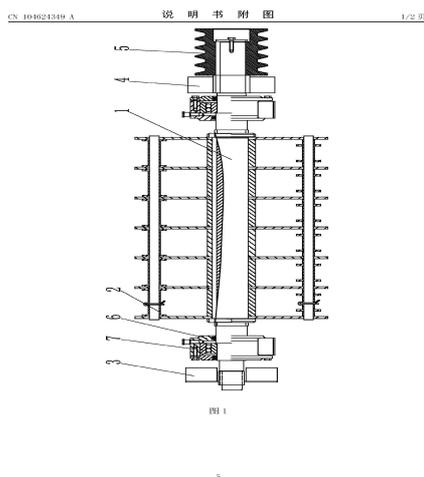
Applicant: ZHUCHENG CITY SHENGAO MACHINE CO LTD

Inventor: MENG LI; QU JINMING; ZHU HUAZHONG

Prio:

Appl.No: CN201510063169

IPC: B02C 23/00



Crusher installation base

The invention discloses a crusher installation base. The crusher installation base comprises a base, a horizontal installation plate, a horizontal movable installation plate and vertical installation plates, wherein the upper surface at one side of the base is provided with the horizontal installation plate and the horizontal movable installation plate which are in parallel; one end of the horizontal movable installation plate is clamped in a slide way of the base, and the other end of the horizontal movable installation plate is fixed above a long installation plate adjusting hole of the base via a bolt and a nut; one side, provided with the long installation plate adjusting hole, of the base is provided with a movable wheel via a pin shaft, and the upper surface at the other side of the base is provided with two parallel vertical installation plate, and the heights of the vertical installation plates are higher than the heights of the horizontal installation plate and the horizontal movable installation plate; the horizontal installation plate, the horizontal movable installation plate and the vertical installation plates are respectively provided with a plurality of long installation hole. When crushers with different models and sizes are installed, the crusher installation base can be applied to different models of crushes by adjusting the interval between the horizontal movable installation plate and the horizontal installation plate. The adjusting mode is simple and rapid, and the requirements for users are met well.

Publication: **CN 104624350 A 20150520**

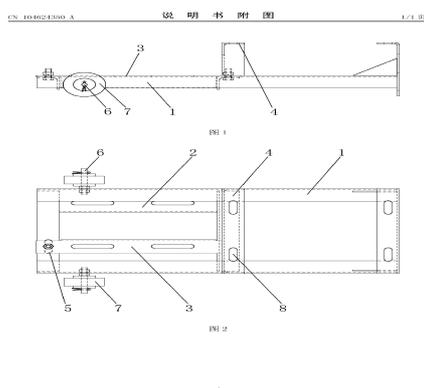
Applicant: ZHUCHENG CITY SHENGAO MACHINE CO LTD

Inventor: MENG LI; QU JINMING; WANG ZELIU

Prio:

Appl.No: CN201510063577

IPC: B02C 23/00



Novel toothed plate for pulverizer

The invention discloses a novel toothed plate for a pulverizer. The toothed plate comprises a steel plate, a plurality of threaded steel lugs and high-strength bolts. The novel toothed plate is characterized in that the steel plate is pressed to be of an arc-shaped structure, the threaded steel lugs are uniformly welded on the surface of the steel plate, and the four high-strength bolts are arranged in the upper left corner, lower left corner, upper right corner and lower right corner of the steel plate, respectively. Threaded steel is welded on the steel plate in a certain arrangement form, so that the toothed plate is not easy to break, and has good impact resistance, wear resistance and other mechanical performance. Materials falling on the toothed plate can break easily, and thus the safety is high. The novel toothed plate can be repaired in a welding way and is low in maintenance cost relatively.

Publication: [CN 104624351 A 20150520](#)

Applicant: ZHUCHENG CITY SHENGAO MACHINE CO LTD

Inventor: MENG LI; QU JINMING; ZHU HUAZHONG

Prio:

Appl.No: CN201510064353

IPC: B02C 23/00

CN 104624351 A 说明书附图 1/3 页

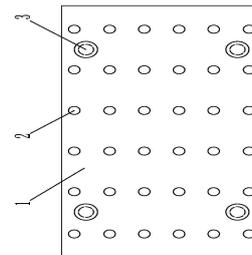


图 1

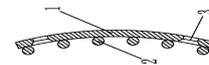


图 2

4

Inclined bottom plate used for pulverizer

The invention discloses an inclined bottom plate used for a pulverizer. The inclined bottom plate comprises a bottom plate part, bottom side plates and inclined side plates, wherein the bottom plate part is in an inverted triangle shape; each of the left side and the right side of the bottom plate part is connected with one triangular bottom side plate; the outer side of each bottom side plate is connected with one inclined side plate; the inclined side plates on the left side and the right side incline inwards; and the bottom plate part and the bottom side plates incline forwards or backwards. The inclined bottom plate is simple in structure, easy to manufacture and low in manufacturing cost; by matching the inclined bottom plate with a fan, the problems that a filling material, a suffocation vehicle, a burnt motor and a wet material cannot be pulverized are solved; the working efficiency is further improved; and a reliable guarantee is provided for a user for creating benefits.

Publication: [CN 104624352 A 20150520](#)

Applicant: ZHUCHENG CITY SHENGAO MACHINE CO LTD

Inventor: QU JINMING; WANG ZELIU; YANG ZHIYONG

Prio:

Appl.No: CN201510065253

IPC: B02C 23/00

CN 104624352 A 说明书附图 1/3 页

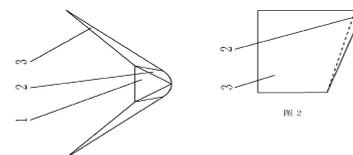


图 1

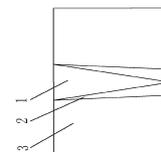


图 2

5

Grinder feeding device

The invention discloses a grinder feeding device which comprises an upper hood, fixing racks and a feeding hopper, and is characterized in that the fixing racks are welded on the left and right sides of the upper hood; a protruding feeding hole is formed in the right upper side of the upper hood; the feeding hole is connected with the feeding hopper by virtue of a bolt; an adjusting rack is welded on the upper side of the feeding hole; and an adjusting plate fixed by a bolt is arranged on the right side of the adjusting rack. The grinder feeding device disclosed by the invention has the beneficial effects that the material travel at the feeding hole is long, the operation is safe, and the feeding speed can be adjusted.

Publication: [CN 104624353 A 20150520](#)

Applicant: ZHUCHENG CITY SHENGAO MACHINE CO LTD

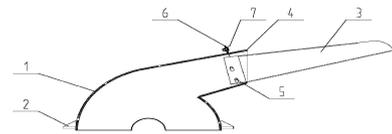
Inventor: QU JINMING; WANG JUNRU; YANG ZHIYONG

Prio:

Appl.No: CN201510064425

IPC: B02C 23/02

CN 104624353 A 说明书附图 1/1页



Air inlet adjusting device of pulverizer

The invention discloses an air inlet adjusting device of a pulverizer. The air inlet adjusting device comprises a pulverizer body side plate, an air inlet adjusting plate, an adjusting and fixing bolt, a flat washer, a spring washer and a nut, wherein a rectangular air inlet is formed in the pulverizer body side plate; adjusting and fixing bolt mounting holes are formed respectively in two sides above the air inlet; the air inlet adjusting plate is rectangular; a baffle vertical to and integrated with the air inlet adjusting plate is arranged on the upper end of the air inlet adjusting plate; vertical adjusting long holes are formed respectively in two sides of the same side of the air inlet adjusting plate; the adjusting and fixing bolt penetrates through the adjusting and fixing bolt mounting holes, the adjusting long holes, the flat washer and the spring washer and then is provided with the nut, in this way, the air inlet adjusting plate is arranged on the pulverizer body side plate. The air inlet adjusting device has the advantages that the air inlet is concentrated and easiness in blockage of the pulverizer is reduced; and with the united combined action of a discharge inclined base plate and a pulverizer fan, the blockage phenomenon of the pulverizer is avoided completely.

Publication: [CN 104624354 A 20150520](#)

Applicant: ZHUCHENG CITY SHENGAO MACHINE CO LTD

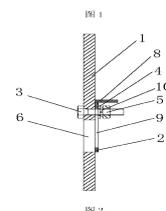
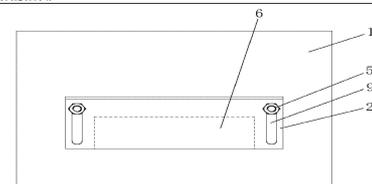
Inventor: QU JINMING; WANG ZELIU; ZHU HUAZHONG

Prio:

Appl.No: CN201510065337

IPC: B02C 23/20

CN 104624354 A 说明书附图 1/2页



Raw ore storage yard blanking control method

The invention provides a raw ore storage yard blanking control method. The raw ore storage yard blanking control method comprises the following steps: automatically calculating a final blanking ratio of each blanking opening according to an original blanking ratio, which is input by a production operator, of a raw ore storage yard blanking opening under the principle that the sum of the final blanking ratios of all the blanking openings is equal to 1; giving out a control signal of an ore feeding amount of a semi-autogenous mill according to a continuous control algorithm and automatically calculating a control signal of a material dragging belt frequency converter corresponding to each blanking opening, so as to automatically adjust the blanking amount of the raw ore storage yard blanking opening, ensure that the ratio of ore rough materials to ore fine materials of the semi-autogenous mill meets the production requirements, ensure an ore feeding amount tracking pre-set value of raw ores, and ensure that the error is in a production allowable range.

Publication: [CN 104624355 A 20150520](#)

Applicant: SHANXI TAIGANG STAINLESS STEEL
Inventor: CHEN RUOHENG; HU JUNWEN; LI ZHIHONG;
 LIU ZHIJIE

Prio:
Appl.No: CN201510010706
IPC: B02C 25/00

CN 104624355 A 说明书附图 1/2页

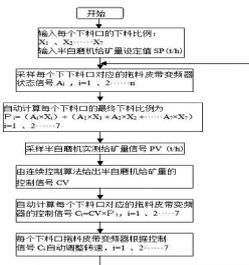


图 1

11

Method and vertical mill for grinding a product to be milled

The invention relates to a vertical mill for grinding a product to be milled and a method therefor, wherein the vertical mill has a grinding plate and one or more grinding rolls. A blade ring annular channel is provided for a transport gas flow rising around the grinding plate. An annular gap is provided between a downwards projecting middlings cone and the upper range of the grinding rollers through which gap even a fine content is recirculated back to the grinding plate. To overcome this disadvantage, a barrier gas flow is provided flowing from the inside towards the outside, by means of which the recirculation of ground particles of a defined size can be prevented.

Publication: [CN 104640634 A 20150520](#)

Applicant: LOESCHE GMBH
Inventor: MERSMANN MATTHIAS
Prio: EP 20130326 2013056418
Appl.No: CN201380048166
IPC: B02C 15/04

CN 104640634 A 说明书附图 1/3页

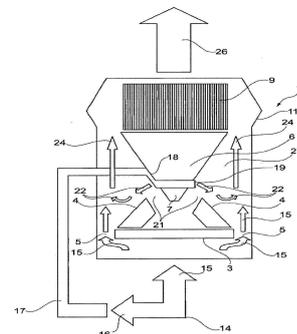


图 1

9

Crushing unit and municipal solid waste treatment device including same

A municipal solid waste treatment device, according to the present invention, comprises: a crushing unit which tears municipal solid waste and selectively pulverizes organic matter; a selection unit for classifying and selecting the municipal solid waste discharged from the crushing unit; a reaction unit for bio-drying the classified and selected municipal solid waste; a return unit which returns the bio-dried municipal solid waste to the crushing unit so as to increase a selectivity rate; and a recycling unit for recycling the remaining organic matter and combustibles, wherein the crushing unit is a rotary drum-type crusher for naturally and selectively pulverizing only the organic matter without using force, thereby enabling high-purity selection with minimum energy consumption, and the crushing unit adjusts a moisture content by using the organic matter dried in the reaction unit at the rear end part whereby a higher selection efficiency can be obtained, and the reaction unit at the rear end part is a bio-drying device for carrying out a drying process in a short time without using external drying energy.

Publication: [CN 104640635 A 20150520](#)

Applicant: LEEM GEON-MOOK

Inventor: LEEM GEON-MOOK

Prio: KR 20120716 20120077338, KR 20130716 2013006358

Appl.No: CN201380048019

IPC: B02C 18/28

CN 104640635 A 说明书附图 1/8页

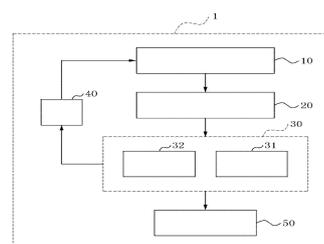


图 1

15

Combined-type buckwheat shelling machine

The invention discloses a combined-type buckwheat shelling machine, which mainly comprises a feed hopper, a milling shelling chamber, a kneading shelling chamber, an air duct 23, an impact shelling chamber and an air duct 29 which are arranged from top to bottom in sequence; a rotating disk and a fixed disk are correspondingly arranged in the milling shelling chamber; a discharge hole 16 is formed in the bottom part of the milling shelling chamber, and the top part of the milling shelling chamber is provided with a milling pan clearance adjustment valve; the kneading shelling chamber is connected below the discharge hole of the milling shelling chamber; two rubber rollers which are different in rotating speed and opposite in rotating direction are correspondingly arranged in the kneading shelling chamber; a discharge hole 19 is formed in the bottom part of the kneading shelling chamber, and the side face of the kneading shelling chamber is provided with a rubber roller clearance adjustment valve; the air duct 23 is connected with the kneading shelling chamber, and the air duct 23 is connected with a fan 24, a feeding hole and a hull dust outlet; the feeding hole of the air duct 23 is connected with the impact shelling chamber; a centrifugal impeller is arranged in the impact shelling chamber; a discharge hole 28 is formed in the bottom part of the impact shelling chamber; the air duct 29 is connected below the discharge hole of the impact shelling chamber; the air duct 29 is connected with a fan 30, a buckwheat rice outlet and the hull dust outlet. According to the combined-type buckwheat shelling machine disclosed by the invention, the buckwheat rice breakage rate of the buckwheat shelling process can be reduced, and the shelling work efficiency and the purity of buckwheat rice are increased.

Publication: [CN 104646086 A 20150527](#)

Applicant: UNIV TIANJIN

Inventor: GUO HUIMIN; LI JINCAI; REN GUIXING; ZHAO JIANCHENG; ZHAO XIHENG

Prio:

Appl.No: CN201410797188

CN 104646086 A 说明书附图 1/8页

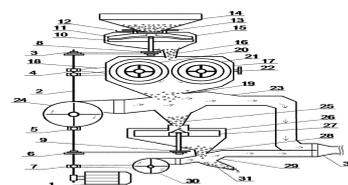


图 1

40

IPC: B02B 3/00

Flour processing technology

The invention relates to the field of food, in particular to a flour processing technology. The flour processing technology comprises the following steps of (1) material preparation; (2) clean wheat proportion; (3) wheat wetting; (4) grinding; (5) powder purification; (6) flour blending. According to the flour processing technology, the problem that some smaller particles in materials, which are processed by 9 reduction roller mills, 6 shelling mills and a purifier, are difficultly grinded sufficiently in a tail mill in the grinding process is solved. The flour processing technology has the advantages that the smaller particles are grinded more sufficiently by utilization of impact mills, so that the flour yield is improved, the integrity rate of wheat bran is improved at the same time, and the quality of flour and by-products are guaranteed.

Publication: [CN 104646087 A 20150527](#)

Applicant: SHANDONG JINYI RUNDE FLOUR INDUSTRY CO LTD

Inventor: WANG SONG

Prio:

Appl.No: CN201410793194

IPC: B02B 5/02

Jaw crusher rack

The invention relates to the field of mining equipment, and in particular relates to a jaw crusher rack. The jaw crusher rack comprises a main rack body, a fixed jaw frame and a wrist plate frame, wherein the main rack body comprises a rack base and two rack body side plates; the two rack body side plates are oppositely arranged on the rack base; and the fixed jaw frame and the wrist plate frame are arranged between the two rack body side plates. According to the jaw crusher rack, equipment vibration caused by occlusion of two jaws can be effectively reduced; and normal operation of the equipment is ensured.

Publication: [CN 104646088 A 20150527](#)

Applicant: ZHEJIANG ZHE KUANG HEAVY IND CO LTD

Inventor: CHEN BINGMIN; CHEN LIANFANG; CHEN LIHUA; LI GUOQIANG; ZHAO MENGJUN

Prio:

Appl.No: CN201510085563

IPC: B02C 1/02

CN 104646088 A 说明书附图 1/4页

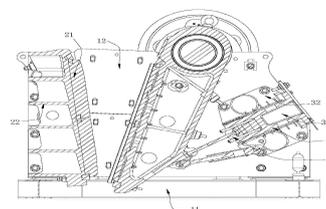


图 1

Discharging hole adjusting mechanism of jaw crusher

The invention relates to the field of mining equipment and particularly relates to a discharging hole adjusting mechanism of a jaw crusher. The discharging hole adjusting mechanism of the jaw crusher comprises a toggle plate seat and an adjusting wedge block which are arranged on a toggle plate frame, a movable jaw toggle plate seat arranged at the rear end of a movable jaw group, and a toggle plate, wherein the two ends of the toggle plate abut against the toggle plate seat and the movable jaw toggle plate seat respectively; the axial thickness of the adjusting wedge block is changed gradually and the adjusting wedge block can axially move by an external force; the movement direction of the adjusting wedge block is vertical to the supporting direction of the toggle plate; and when the adjusting wedge block moves axially, the toggle plate seat is driven by the adjusting wedge block to move along the supporting direction of the toggle plate. The discharging hole adjusting mechanism of the jaw crusher has a simple structure, and is convenient to mount and adjust.

Publication: [CN 104646089 A 20150527](#)

Applicant: ZHEJIANG ZHE KUANG HEAVY IND CO LTD

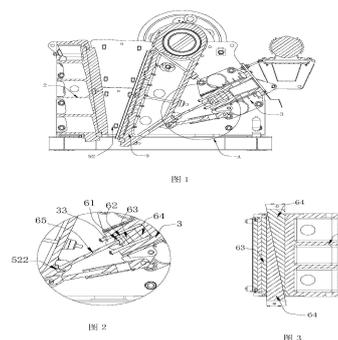
Inventor: CHEN BINGMIN; CHEN LIANFANG; CHEN LIHUA; LI GUOQIANG; ZHAO MENGJUN

Prio:

Appl.No: CN201510085430

IPC: B02C 1/04

CN 104646089 A 说明书附图 1/1 页



5

Jaw type crusher

The invention relates to the field of mine equipment and particularly relates to a jaw type crusher. The jaw type crusher comprises a frame, as well as a driving unit, a moving jaw group, a discharge hole regulating mechanism and a moving jaw tensioning cushioning mechanism which are arranged on the frame, wherein the frame comprises a frame main body, as well as a fixed jaw frame arranged at the front end in the frame main body and a toggle plate frame arranged at the back end in the frame main body; the moving jaw group is mounted on the frame main body between the fixed jaw frame and the toggle plate frame, the driving unit is in transmission and connection with the moving jaw group, the discharge hole regulating mechanism and the moving jaw tensioning cushioning mechanism are mounted on the toggle plate frame, the front end part of the discharge hole regulating mechanism pushes against the moving jaw group, and the front end part of the moving jaw tensioning cushioning mechanism is connected with the moving jaw group; and the fixed jaw frame of the jaw type crusher is firm in connection and has a shock absorption effect.

Publication: [CN 104646090 A 20150527](#)

Applicant: ZHEJIANG ZHE KUANG HEAVY IND CO LTD

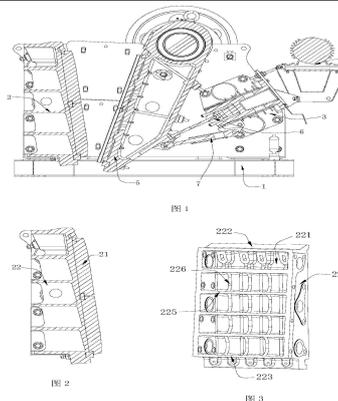
Inventor: CHEN BINGMIN; CHEN LIANFANG; CHEN LIHUA; LI GUOQIANG; ZHAO MENGJUN

Prio:

Appl.No: CN201510085450

IPC: B02C 1/04

CN 104646090 A 说明书附图 1/2 页



6

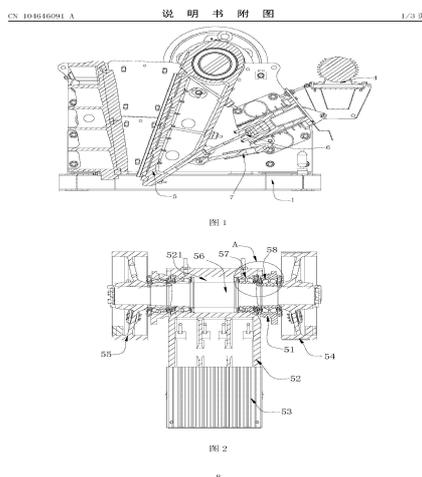
Jaw type stone crusher

The invention relates to the field of mine equipment and particularly relates to a jaw type stone crusher. The jaw type stone crusher comprises a frame, as well as a driving unit, a moving jaw group, a discharging hole regulating mechanism and a moving jaw tensioning cushioning mechanism which are arranged on the frame, wherein the driving unit is in transmission and connection with the moving jaw group, the discharging hole regulating mechanism pushes against the moving jaw group, and the moving jaw tensioning cushioning mechanism is connected with the moving jaw group; and the moving jaw group of the jaw type stone crusher is convenient to disassemble and assemble.

Publication: [CN 104646091 A 20150527](#)

Applicant: ZHEJIANG ZHE KUANG HEAVY IND CO LTD
Inventor: CHEN BINGMIN; CHEN LIANFANG; CHEN LIHUA; LI GUOQIANG; ZHAO MENGJUN

Prio:
Appl.No: CN201510085545
IPC: B02C 1/04



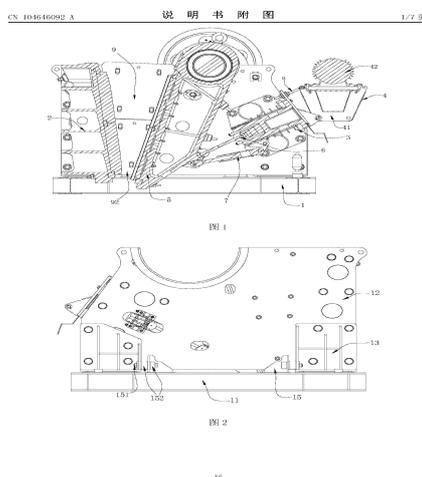
Compound pendulum jaw type crusher

The invention relates to the field of mine equipment and particularly relates to a compound pendulum jaw type crusher. The compound pendulum jaw type crusher comprises a frame, as well as a driving unit, a moving jaw group, a discharge hole regulating mechanism and a moving jaw tensioning cushioning mechanism which are arranged on the frame, wherein the frame comprises a frame main body, as well as a fixed jaw frame arranged at the front end in the frame main body and a toggle plate frame arranged at the back end in the frame main body, the moving jaw group is mounted on the frame main body between the fixed jaw frame and the toggle plate frame, and a crushing cavity is formed between the moving jaw group and the fixed jaw frame; the driving unit is in transmission and connection with the moving jaw group, the discharge hole regulating mechanism and the moving jaw tensioning cushioning mechanism are mounted on the toggle plate frame, the front end part of the discharge hole regulating mechanism pushes against the moving jaw group, and the front end part of the moving jaw tensioning cushioning mechanism is connected with the moving jaw group; and the compound pendulum jaw type crusher has the advantages of convenience in disassembly and assembly, stable structure, good shock absorption effect and long service life.

Publication: [CN 104646092 A 20150527](#)

Applicant: ZHEJIANG ZHE KUANG HEAVY IND CO LTD
Inventor: CHEN BINGMIN; CHEN LIANFANG; CHEN LIHUA; LI GUOQIANG; ZHAO MENGJUN

Prio:
Appl.No: CN201510085648
IPC: B02C 1/04



Compound pendulum jaw type crusher

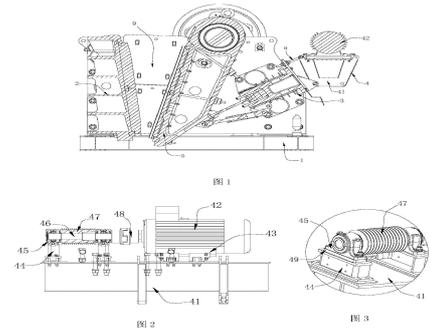
The invention relates to the field of mine equipment and particularly relates to a compound pendulum jaw type crusher. The compound pendulum jaw type crusher comprises a frame, as well as a driving unit and a moving jaw group which are arranged on the frame; the frame comprises a frame main body, as well as a fixed jaw frame arranged at the front end in the frame main body and a toggle plate frame arranged at the back end in the frame main body; the driving unit is in transmission and connection with the moving jaw group, the moving jaw group is mounted on the frame main body between the fixed jaw frame and the toggle plate frame, and a crushing cavity is formed between the moving jaw group and the fixed jaw frame; and the compound pendulum jaw type crusher has the advantages of convenience in disassembly and assembly, and stable pendulum of the moving jaw group.

Publication: [CN 104646093 A 20150527](#)

Applicant: ZHEJIANG ZHE KUANG HEAVY IND CO LTD
Inventor: CHEN BINGMIN; CHEN LIANFANG; CHEN LIHUA; LI GUOQIANG; ZHAO MENGJUN

Prio:
Appl.No: CN201510085664
IPC: B02C 1/04

CN 104646093 A 说明书附图 1/3页



9

Jaw crusher

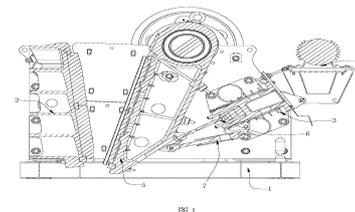
The invention relates to the field of mining equipment, and particularly relates to a jaw crusher. The jaw crusher comprises a rack, a driving unit, a moving jaw set, a discharge outlet adjusting mechanism and a moving jaw tensioning-buffer mechanism, wherein the driving unit, the moving jaw set, the discharge outlet adjusting mechanism and the moving jaw tensioning-buffer mechanism are arranged on the rack; the rack comprises a rack main body, a fixed jaw frame and a toggle plate frame, wherein the fixed jaw frame is arranged at the front end of the inside of the rack main body, and the toggle plate frame is arranged at the rear end of the inside of the rack main body; and the moving jaw set is arranged on the rack main body between the fixed jaw frame and the toggle plate frame, the driving unit is in transmission connection with the moving jaw set, the discharge outlet adjusting mechanism and the moving jaw tensioning-buffer mechanism are arranged on the toggle plate frame, the front end part of the discharge outlet adjusting mechanism props against the moving jaw set, and the front end part of the moving jaw tensioning-buffer mechanism is connected with the moving jaw set. The moving jaw set of the jaw crusher is installed and removed conveniently; and the moving jaw tensioning-buffer mechanism is novel in structure and good in tensioning and buffering effects.

Publication: [CN 104646094 A 20150527](#)

Applicant: ZHEJIANG ZHE KUANG HEAVY IND CO LTD
Inventor: CHEN BINGMIN; CHEN LIANFANG; CHEN LIHUA; LI GUOQIANG; ZHAO MENGJUN

Prio:
Appl.No: CN201510085672
IPC: B02C 1/04

CN 104646094 A 说明书附图 1/3页



9

Rolling wheel jaw type crusher

The invention relates to a rolling wheel jaw type crusher. The rolling wheel jaw type crusher comprises a rack, an eccentric wheel, a toggle plate, a pull rod spring, a fixed jaw plate and a movable jaw plate, wherein the fixed jaw plate is fixedly mounted on the rack; the upper end of the movable jaw plate sleeves an eccentric shaft connected with a motor; the toggle plate and the pull rod spring are used for supporting and are connected with the middle part and the lower end of the movable jaw plate respectively; the other ends of the toggle plate and the pull rod spring are connected onto the rack; rotary rollers which are vertically arrayed at equal distances are arranged on the movable jaw plate along the surface of the movable jaw plate; each rotary roller can rotate around a corresponding rotary shaft; each rotary shaft is electrically connected with a driving motor mounted at the top end of the movable jaw plate; and the bottom end of each rotary roller is rotationally mounted on a base, and each base is fixed at the bottom end of the movable jaw plate. The crusher can be used for automatically adjusting ore grains so that the crusher can easily extrude ores; and meanwhile, the blocking possibility can be effectively reduced.

Publication: [CN 104646095 A 20150527](#)

Applicant: SUZHOU SHENGPULA NEW MATERIAL TECHNOLOGY CO LTD

Inventor: FEI JINHUA

Prio:

Appl.No: CN201510112665

IPC: B02C 1/08

CN 104646095 A 说明书附图 1/1 31

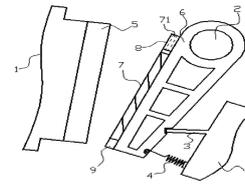


图 1

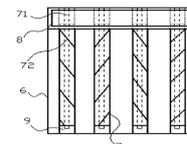


图 2

6

Movable jaw group on jaw crusher

The invention relates to the field of mining equipment and in particular relates to a movable jaw group on a jaw crusher. A movable jaw body on the movable jaw group is erected on a supporting bearing block by virtue of a movable jaw shaft assembly, specifically, an eccentric shaft on the movable jaw shaft assembly is positioned by an inner self-aligning roller bearing to penetrate through the movable jaw body and is positioned and erected on the supporting bearing block by virtue of an outer self-aligning roller bearing; a withdrawal sleeve is arranged between the outer self-aligning roller bearing and the eccentric shaft; the outer self-aligning roller bearing and the eccentric shaft are supported and connected by virtue of the withdrawal sleeve, and a wheel-side sealing ring is fixedly connected; and during installation, the withdrawal sleeve can be hydraulically pressed by a tool, and during detachment, the withdrawal sleeve can be rapidly withdrawn by virtue of an oil-injection method, so that rapid detachment among the outer self-aligning roller bearing, the wheel-side sealing ring and the eccentric shaft can be realized, namely rapid detachment of the movable jaw group is realized, and daily maintenance of the movable jaw group is promoted.

Publication: [CN 104646096 A 20150527](#)

Applicant: ZHEJIANG ZHE KUANG HEAVY IND CO LTD

Inventor: CHEN BINGMIN; CHEN LIANFANG; CHEN LIHUA; LI GUOQIANG; ZHAO MENGJUN

Prio:

Appl.No: CN201510085314

CN 104646096 A 说明书附图 1/2 31

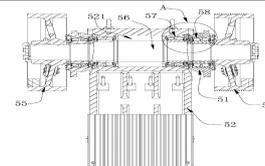


图 1

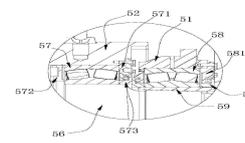


图 2

6

IPC: B02C 1/10

Mobile jaw set of jaw crusher

The invention relates to the field of mining equipment, and in particular relates to a mobile jaw set of a jaw crusher. The mobile jaw set of the jaw crusher comprises a mobile jaw body, a mobile jaw lining plate, a mobile jaw shaft assembly and a support bearing block, wherein the mobile jaw lining plate is arranged on the mobile jaw body; the mobile jaw shaft assembly is arranged in the mobile jaw body in a penetrating manner; and the support bearing block is used for positioning the mobile jaw shaft assembly. The mobile jaw set is convenient to dismantle and assemble and has a damping effect.

Publication: **CN 104646097 A 20150527**

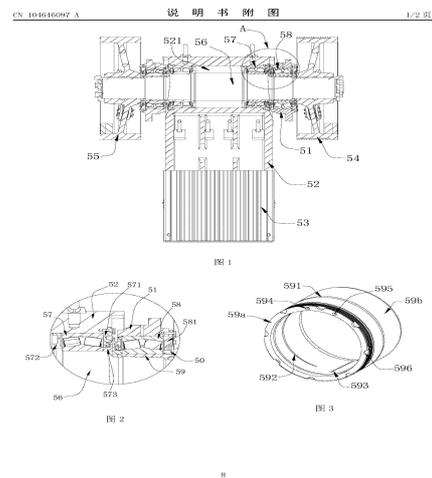
Applicant: ZHEJIANG ZHE KUANG HEAVY IND CO LTD

Inventor: CHEN BINGMIN; CHEN LIANFANG; CHEN LIHUA; LI GUOQIANG; ZHAO MENGJUN

Prio:

Appl.No: CN201510085518

IPC: B02C 1/10



Jaw fixing rack for jaw crusher

The invention relates to the field of mining equipment and in particular relates to a jaw fixing rack for a jaw crusher. The jaw fixing rack for the jaw crusher comprises a jaw fixing body, and a jaw fixing lining plate fixed on the jaw fixing body, wherein the jaw fixing lining plate is fixedly connected to the jaw fixing body by virtue of a jaw fixing connecting structure; the jaw fixing connecting structure comprises a jaw fixing lining plate wedge block, a jaw fixing bolt, a jaw fixing nut, a spring seat, a flat washer and a disc spring; the jaw fixing bolt penetrates through the jaw fixing body; the outer end of the jaw fixing bolt is fixedly connected with the jaw fixing lining plate wedge block; the jaw fixing lining plate wedge block and the jaw fixing lining plate are pressed against each other by virtue of an inclined plane; the spring seat, the flat washer and the jaw fixing nut are sequentially arranged at the inner end of the jaw fixing bolt from interior to exterior; the disc spring is arranged in the spring seat; and the outer end of the disc spring is pressed against the flat washer. The jaw fixing rack for the jaw crusher has a damping effect.

Publication: **CN 104646098 A 20150527**

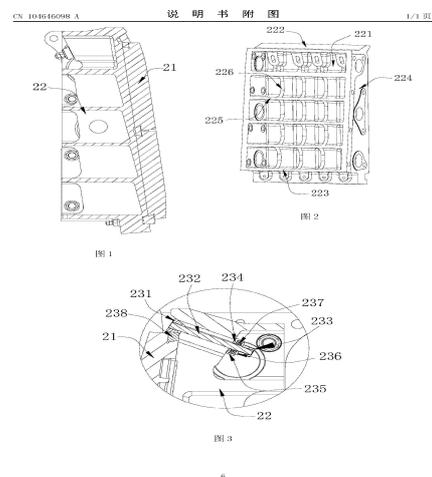
Applicant: ZHEJIANG ZHE KUANG HEAVY IND CO LTD

Inventor: CHEN BINGMIN; CHEN LIANFANG; CHEN LIHUA; LI GUOQIANG; ZHAO MENGJUN

Prio:

Appl.No: CN201510085635

IPC: B02C 1/10



Beater

The invention relates to a beater. The beater comprises a frame, a hopper, a feeding guide plate arranged in the hopper in a detachable or turnover manner, a beating roller, a beating roller power input belt pulley and a discharging opening. The feeding guide plate is arranged in the hopper in a detachable or eversible manner, so the feeding guide plate can be taken out or overturned after beating, and the hopper and the beating roller below the feeding guide plate can be conveniently cleaned, thereby a problem that above relevant positions of present types of beater cannot be cleaned is solved.

Publication: [CN 104646099 A 20150527](#)

Applicant: DAZHOU RUIFENG AGRICULTURAL MACHINERY CO LTD

Inventor: GAO WEIGUANG

Prio:

Appl.No: CN201310591485

IPC: B02C 4/00

CN 104646099 A 说明书附图 1/2 页

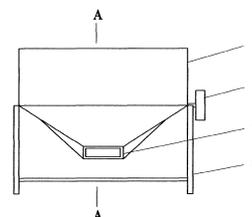


图 1

Method and device for crushing, screening and prestoring red coke in closed hot N2 heat preservation condition

The invention discloses a method and a device for crushing, screening and prestoring red coke in a closed hot N2 heat preservation condition, namely a method and a device developed for high-temperature pyrolysis of the red coke by directly employing pulverized coal. The method comprises the following steps: unloading a high-temperature pyrolysis product, namely the red coke of the pulverized coal at 950-1050 DEG C in 0.1MPa in the hot N2 heat preservation condition into a red coke hopper from a red coke tank; uniformly conveying to a crusher for crushing through a feeding machine; regulating, screening and then conveying to an afterheat recovery temperature-control red coke product cabin for prestoring; conveying into a fluidized bed and a mobile bed red coke boiler for combusting and/or a fluidized bed or a fixed bed red coke gasifier for gasifying through a red coke material cup at 350-850 DEG C; and removing dust through a dust remover, and introducing tail gas into a hot N2 heat preservation circulating system. The method and the device disclosed by the invention can meet the requirements of the red coke combustion boiler and/or the red coke gasifier on particle size in the method for the high-temperature pyrolysis of the red coke by directly employing the pulverized coal; the sensible heat loss of the red coke is reduced; the explosion caused by over-high dust concentration is effectively prevented; the dust pollution is solved from the source; and the environment benefits are obviously significant.

Publication: [CN 104646100 A 20150527](#)

Applicant: DACHENG ENGINEERING CO LTD OF TAIYUAN UNIVERSITY OF TECHNOLOGY; SHANXI IND EQUIPMENT INSTALLATION CO LTD

Inventor: GENG PENGPENG; LIANG YAN; MA WANHENG; SHEN JUN; YANG LI; ZHANG YUN; ZHOU JINHUA

Prio:

Appl.No: CN201510017980

IPC: B02C 4/02

CN 104646100 A 说明书附图 1/3 页

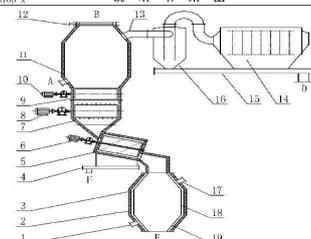


图 1

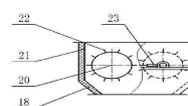


图 2

Tablet grinding machine

The invention discloses a tablet grinding machine. The tablet grinding machine comprises a feeding device, a box device which is arranged around the feeding device, a crushing wheel which is arranged inside the box device, a support device which is arranged under the box device, a base which is arranged under the support device, a baffle plate device which is arranged below the box device, a rotating device which is arranged below the baffle plate device, a material receiving device which is arranged around the rotating device, and a clearing device which is arranged at the right side of the box device, wherein the baffle plate device comprises a first supporting rod, a second supporting rod, a rotating rod, a baffle plate, an oblique plate, a horizontal plate and a supporting plate, the rotating device comprises a supporting column, a motor, a rotating shaft and a turntable, the material receiving device comprises a material receiving ring and a material receiving box, the material receiving ring comprises a feeding end on the upper end, a distributing end which is arranged below the feeding end and a separation plate which is arranged inside the distributing end. The tablet grinding machine is good in a crushing effect and is capable of automatically realizing the uniform distribution and accurate quantification.

Publication: [CN 104646101 A 20150527](#)

Applicant: CHENGDU GUANYU TECHNOLOGY CO LTD

Inventor: DU QUNFANG

Prio:

Appl.No: CN201510065210

IPC: B02C 4/02

CN 104646101 A 说明书附图 1/3页

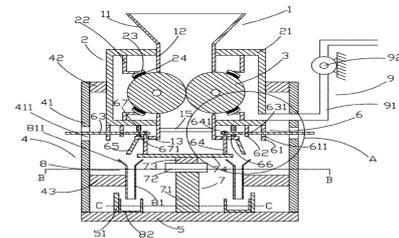


图 1

9

Adjustable automatic stone mill soybean milk machine

The invention discloses an adjustable automatic stone mill soybean milk machine, and relates to the technical field of food machine manufacture. The adjustable automatic stone mill soybean milk machine comprises a movable millstone arranged in an outlet hopper, and a base arranged under the outlet hopper, wherein the base is provided with a motor; an output shaft of the motor is connected with a rotating shaft of the movable millstone; a fixed millstone is connected onto the movable millstone in a pressing way and is connected with a feed hopper by a feeding pipe arranged on the fixed millstone; a stand column is fixed at one side of the base; the fixed millstone is connected with a bracket; the bracket is connected with a stand column by a connecting rack; the connecting rack is provided with a lifting hand wheel used for adjusting the height of the connecting rack, and a locking hand wheel used for fastening the connecting rack. The adjustable automatic stone mill soybean milk machine can be used for solving the problems that in the prior art, bean dregs in a soybean milk machine is difficult to clean, and bean curd is poor in mouth feel.

Publication: [CN 104646102 A 20150527](#)

Applicant: HUANG ZUNJING

Inventor: HUANG ZUNJING

Prio: CN 20131217 201310691908

Appl.No: CN201410059532

IPC: B02C 7/08

CN 104646102 A 说明书附图 1/2页

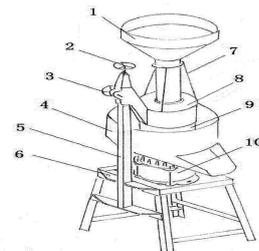


图 1

9

Novel pulverizer capable of automatically controlling

The invention discloses a novel pulverizer capable of automatically controlling. The novel pulverizer is characterized by comprising a feed inlet (1), an interconnected passageway (2), a housing case (3), a rotor (4), a brushing dividing roller (5), a torsion detector (6), a control computer (7), an air compressor (8), a hair dryer (9) and a discharge port (10), wherein the feed inlet (1) is formed in the top end of the housing case (3), the lower end of the housing case (3) is provided with the discharge port (10), and the rotor (4) and the brushing dividing roller (5) are arranged in the housing shell (3); the rotor (4) is positioned on the upper part of the working surface of the brushing dividing roller (5), the hair dryer (9) is connected with the air compressor (8), and the torsion detector (6) is arranged on a der revolving shaft of the brushing dividing roller (5); meanwhile the torsion detector (6) is with connected with the control computer (7), and the control computer (7) is connected with the air compressor (8). The novel pulverizer is mainly applicable to grinding product materials in the industries such as mine, metallurgy, chemical industry, building materials and steel and can be used for processing various flammable and combustible mineral materials such as coal, coke, mineral waste residue, ferric oxide yellow, a compound fertilizer, magnesite, chromium oxide green, clay, kaolin and porcelain clay.

Publication: [CN 104646103 A 20150527](#)

Applicant: XI AN YIMU SOFTWARE TECHNOLOGY

Inventor: CHENG HUA

Prio:

Appl.No: CN201310600649

IPC: B02C 13/02

CN 104646103 A 说明书附图 1/1 页

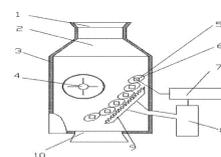


图 1

5

Material crushing device with balls and use method thereof

The invention discloses a material crushing device with balls. The material crushing device comprises an external fixed cylinder (8), an internal rotatable cylinder (7) and a crushing executing shaft component (9), wherein the external fixed cylinder (8) is provided with two end walls (81) which are respectively located at the left and right ends and a connecting wall (810) which is located between the two end walls (81), each of the two end walls (81) is provided with an annular support (84) which is provided with a ball groove, each ball groove is rotatably provided with a ball (87) through a ball cover plate (88), each ball cover plate (88) is provided with a through hole of which the diameter is smaller than that of the ball, each ball (87) is positioned thorough the corresponding through hole, a charging port (82) with an opening facing upwards and a powder discharge port (83) with an opening facing downwards are formed in the connecting wall (810), the charging port (82) and the powder discharge port (83) both extend along the longitudinal direction of the cylinders, and a left connecting wall (86) and a right connecting wall (85) are respectively arranged between the charge port (82) and the powder discharge port (83) in the peripheral direction on the connecting wall (810).

Publication: [CN 104646104 A 20150527](#)

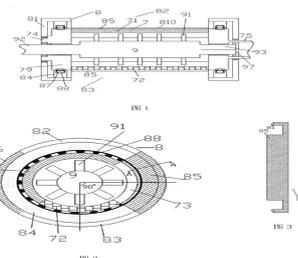
Applicant: WANG TAO

Inventor: WANG TAO

Prio:

Appl.No: CN201510074331

CN 104646104 A 说明书附图 1/1 页



6

IPC: B02C 13/02

Novel straw crusher

The invention provides a novel straw crusher, which comprises a bracket, a shell, a crushing device and a heat supply device. The shell comprises a feed hopper equipped upper shell and a discharge port equipped lower shell. The crushing device comprises: a main shaft, four pin shafts, cutterheads, hammer slices and a screen mesh. The main shaft is a hollow shaft, the shaft wall of the main shaft is provided with a plurality of through holes, both ends of the main shaft pass through the shell and are respectively connected to the bracket through bearings, 3-4 cutterheads are fixed installed on the main shaft in the shell at an equal distance, each cutterhead is provided with four holes, the four pin shafts respectively pass through the corresponding holes on the cutterheads and are fixedly connected to the cutterheads, 3-4 hammer slices are equidistantly mounted on each pin shaft between the cutterheads, the screen mesh is disposed below the main shaft and faces the discharge port. The heat supply device consists of an air heater and a conveyer pipe, and the conveyer pipe goes deep into the cavity of the main shaft. The novel straw crusher provided by the invention has the characteristics of simple structure and convenient making, heat supply into the shell through the hollow shaft with a porous shaft wall, easy crushing and enhanced efficiency.

Publication: [CN 104646105 A 20150527](#)

Applicant: TIANJIN YONGMENG MACHINERY MFG CO LTD

Inventor: WANG MENG; WANG SHIXIU; WANG YONG

Prio:

Appl.No: CN201310597523

IPC: B02C 13/04

CN 104646105 A 说明书附图 1/1 页

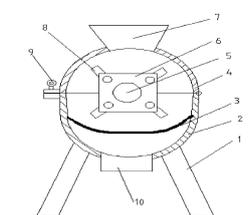


图 1



图 2

5

Self-priming grinder

The invention relates to the field of agricultural machinery and in particular relates to a self-priming grinder. The self-priming grinder comprises a first motor and a body, wherein a motor spindle is connected to the first motor; the body is separated into two cavities, namely a grinding chamber and a negative pressure chamber, by virtue of a separator; an opening is reserved in the separator; a suction pipe is connected to the grinding chamber; a feeding pipe is connected to the negative pressure chamber; a fan blade disc and a crushing device are respectively arranged on the motor spindle in a sleeving manner; the fan blade disc is positioned in the negative pressure chamber; fan blades are arranged on the fan blade disc; the crushing device is arranged in the grinding chamber; a screen is arranged at the periphery of the crushing device in a sleeving manner; and the motor and the body are arranged on the base. The self-priming grinder disclosed by the invention is simple in structure, easy to manufacture, high in production efficiency, small in size, easy and convenient to operate and low in power consumption.

Publication: [CN 104646106 A 20150527](#)

Applicant: JIANG CAIDI

Inventor: JIANG CAIDI

Prio:

Appl.No: CN201410711158

CN 104646106 A 552 001 -15 001 001 1/1 页

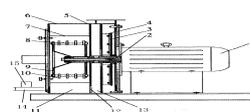


图 1

5

IPC: B02C 13/13

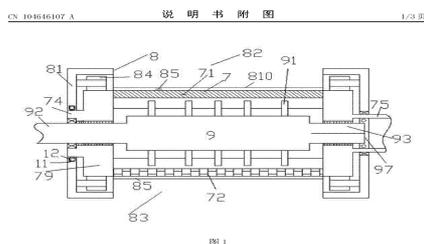
Material crushing device with balls and rollers and use method thereof

The invention discloses a material crushing device with balls and rollers. The device comprises an external fixed cylinder (8), an internal rotatable cylinder (7) and a crushing executing shaft component (9), wherein the external fixed cylinder (8) is provided with two end walls (81) which are respectively located at the left and right ends and a connecting wall (810) which is located between the two end walls (81), each of the two end walls (81) is provided with multiple supporting rollers (84) which are distributed along a peripheral direction, a charging port (82) with an opening facing upwards and a powder discharge port (83) with an opening facing downwards are formed in the connecting wall (810), the charging port (82) and the powder discharge port (83) both extend along the longitudinal direction of the cylinders, and a left connecting wall (86) and a right connecting wall (85) are respectively arranged between the charge port (82) and a powder discharge port (83) in the peripheral direction on the connecting wall (810).

Publication: **CN 104646107 A 20150527**

Applicant: JIAXING QIANGDA CNC EQUIPMENT CO LTD
Inventor: THE INVENTOR HAS WAIVED THE RIGHT TO BE MENTIONED

Prio:
Appl.No: CN201510074582
IPC: B02C 13/13



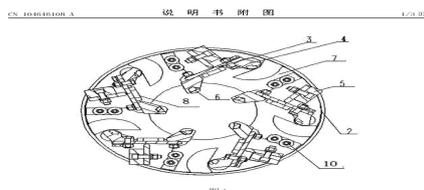
Rotor body of vertical shaft crusher

The invention discloses a rotor body of a vertical shaft crusher. The rotor body comprises a rotor top disc (1) and a rotor bottom disc (2), as well as material-throwing heads (4), counterattack plates (5), material distribution plates (6) and flow guide plates (7), wherein five groups of T-shaped material-throwing standing plates (3) are arranged between the rotor top disc (1) and the rotor bottom disc (2); the material-throwing heads (4) and the counterattack plates (5) are respectively connected to the sides of the material-throwing standing plates (3), far away from the centre of the circle; the material distribution plates (6) are connected with the ends of the material-throwing standing plates (3), near to the centre of the circle; the flow guide plates (7) are laminated to the rotor top disc (1) or the rotor bottom disc (2); and the flow guide plates (7) are clamped in the region formed by two material-throwing standing plates (3), cylindrical material-throwing heads (4) and material distribution plates (6). The flow guide plate with a novel structure is applied to the rotor body and the bolt pressing structure of a kidney slot is cancelled by the flow guide plate; the rotor body is fixed by an inclined block and a limited block so that the strength of the flow guide plate is greatly increased, the rotor body can be prevented from breakage, and the service life is not affected.

Publication: **CN 104646108 A 20150527**

Applicant: CINTEC HEAVY EQUIPMENT CO LTD
Inventor: LIU CAIZHENG; LIU JINSONG; MA ZHENGTAO;
TANG YONGHONG; WU ZHANXIAN; ZHI KAIXIN; ZHU DONGMIN

Prio:
Appl.No: CN201410825246



IPC: B02C 13/26

Novel pin shaft for crusher

The invention discloses a novel pin shaft for a crusher. The pin shaft is characterized in that a hammer carrier plate fixing position is arranged at the head part of a shaft body; hammer sheet arrangement positions and spacer bush arrangement positions are alternatively distributed in the middle of the shaft body; a lock thread is arranged at the front end position of the tail part of the shaft body; and a cotter position is arranged at the center position of the tail end of the tail part of the shaft body. Through the arrangement, the locking thread is machined on the tail part, so that the structure is relatively optimal; a locking nut is assembled on the locking thread; and a rotor can be fixed and locked. A cotter is also arranged on the pin shaft, so that the rotor is fixed and locked relatively safely, and the safety production is facilitated.

Publication: **CN 104646109 A 20150527**

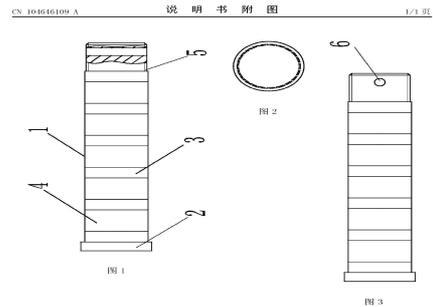
Applicant: ZHUCHENG SHENG AO MACHINERY CO LTD

Inventor: MENG LI; QU JINMING; ZHU HUAZHONG

Prio:

Appl.No: CN201510064749

IPC: B02C 13/26



Novel disc roller crusher

A novel disc roller crusher is characterized in that the crusher includes a support (1), a lower portion load cylinder (2), a pedestal (3), a speed reducer (4), a shell (5), a power disc (6), a middle pillar (7), a conical roller (8), an upper portion load cylinder (9), a distributing device (10) and a main motor (11); and the pedestal (3) is placed at the upper end of the support (1), the speed reducer (4) is fixed to the pedestal (3), the right end of the speed reducer (4) is connected with the main motor (11) placed on the support (1), the upper portion of the speed reducer (4) is connected with the power disc (6), the lower portion load cylinder (2) traverses from the center of the support (1) and is positioned below the support (1), the middle pillar (7) is positioned above the power disc (6) and is connected with the conical roller (8) at a certain angle, the upper portion load cylinder (9) is placed vertically and is connected with the conical roller (8), and the distributing device (10) is positioned at the top of an entire structure. The novel disc roller crusher is mainly used in industrials of ore dressing, chemical engineering, refractory materials, abrasives and building materials to finely crush all high and medium hardness materials.

Publication: **CN 104646110 A 20150527**

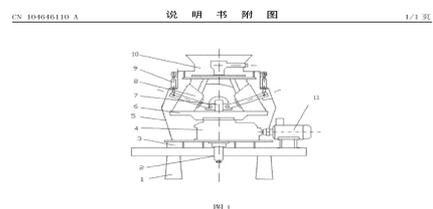
Applicant: XI AN YIMU SOFTWARE TECHNOLOGY

Inventor: ZHAO TENG

Prio:

Appl.No: CN201310596191

IPC: B02C 15/14



Water quenching carbonized dreg grinding method

The invention discloses a water quenching carbonized dreg grinding method, which belongs to the technical field of powder processing, and aims at solving the problems that the water quenching carbonized dreg treated by a ball grinder grinding process for the carbonized dreg which is slowly cooled in air has large steel ball loss and low grinding efficiency, and the ground granularity does not meet the requirements. The water quenching carbonized dreg grinding method comprises the following steps: adding the water quenching carbonized dreg into a ball grinder stock bin; grinding by a grinding body to prepare carbonized dreg powder, wherein the grinding body is composed of steel balls with large and small grain diameters, the weight of the large-grain-diameter steel balls accounts for 60%-75% of the weight of the grinding body, the diameters of the large and small steel balls are $\phi 30\text{mm}$ - $\phi 80\text{mm}$, and the difference value of the diameters of the two steel balls is not less than 20mm. According to the method, a process of firstly crushing and then grinding is not needed, and the production process is simple and easy to control; the granularity of the obtained carbonized dreg powder is uniform and stable, and the granularity requirements of grinding of the water quenching carbonized dreg by a low-temperature selection chlorination process are met; and the loss rate of the steel balls is reduced, the unit power consumption of the ball grinder is reduced and the production cost is saved.

Publication: [CN 104646111 A 20150527](#)

Applicant: PANZHIHUA IRON & STEEL RES

Inventor: HUANG JIAXU; LI LIANG; ZHANG JIDONG

Prio:

Appl.No: CN201510098168

IPC: B02C 17/10

Fine grinding ball mill

The invention discloses a fine grinding ball mill, including a cylinder (1) and a lining board (2). The fine grinding ball mill is characterized in that the axial section of the cylinder (1) is a trapezoid, the inner wall of cylinder (1) is connected with the lining board (2) by bolts, the lining plate (2) is uniformly provided with a plurality of hemispherical bumps, and the hemispherical grooves are arranged among the hemispherical bumps. Through the trapezoidal axial section of the cylinder, the lining board fixed on the cylinder and the inner wall of the cylinder is not parallel to the axis of the cylinder, so the bulk materials within the cylinder are not easy to roll to the outlet end in rotation and full milling can be achieved. At the same time, the lining board with the bumps and the grooves can well and evenly grind the materials, and the production efficiency of the ball mill can be improved effectively.

Publication: [CN 104646112 A 20150527](#)

Applicant: ANHUI TONGLING DAMING MALLEABLE IRON CO LTD

Inventor: ZHANG CHENGXI; ZHANG GUOQING

Prio:

Appl.No: CN201310575842

IPC: B02C 17/18

CN 104646112 A 说明书附图 1/1 页

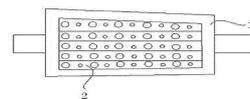


图 1

Bowl mill charging end cap pad

The invention relates to a bowl mill charging end cap pad, which comprises a hollow conical body, and a material of the hollow conical body is rubber. The bowl mill charging end cap pad comprises the following beneficial effect that a structure is simple, the wearing of an end cap and a hollow shaft can be avoided, and the bowl mill usage period can be prolonged.

Publication: [CN 104646113 A 20150527](#)

Applicant: JIANGSU SHILEI MACHINERY CO LTD

Inventor: HUANG GUIZHONG

Prio:

Appl.No: CN201310577881

IPC: B02C 17/18

CN 104646113 A 说明书附图 1/1 页



图 1

Elevator bucket liner plate

The invention relates to an elevator bucket liner plate, which comprises a liner plate and a lifting strip, and is characterized in that the liner plate and the lifting strip are in an integrated structure, the lifting strip is positioned at two sides of the liner plate, and a rubber layer is coated on the surface of the liner plate and the lifting strip. The elevator bucket liner plate has the beneficial effects that wear resistance is good, usage period is prolonged, dismounting time is shortened, and maintenance workload is reduced.

Publication: [CN 104646114 A 20150527](#)

Applicant: JIANGSU SHILEI MACHINERY CO LTD

Inventor: HUANG GUIZHONG

Prio:

Appl.No: CN201310577981

IPC: B02C 17/18

CN 104646114 A 说明书附图 1/1 页

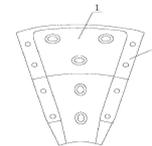


图 1

Combined self-fixed bolt-free liner plate

The invention relates to a combined self-fixed bolt-free liner plate, including liner plates, fixed riveting plates and combined riveting plates. Four pieces of fixed riveting plates are arranged in interval of 90 degrees to divide the cylinder along the circumferential into four regions; a plurality of liner plates are arranged between two adjacent fixed riveting plates; and combined riveting plates insert among the liner plates. The invention has the beneficial effects of good safety and reliability, elimination of labor-consuming and environmentally unfriendly common problems such as powder leakage and bolt tightening, and improved operating rate of the equipment.

Publication: [CN 104646115 A 20150527](#)



图 1

Applicant: JIANGSU SHILEI MACHINERY CO LTD
Inventor: HUANG GUIZHONG
Prio:
Appl.No: CN201310576579
IPC: B02C 17/22

Liner plate

The invention relates to a liner plate, which comprises a plate body. The outer wall of the plate body is a circular arc mounting surface, one side of the plate body is provided with a convex block, the outer wall of the convex block is the extension of the radial wall of the mounting surface, the other side of the plate body is provided with a groove adapted to the convex block, and two adjacent plate bodies are connected through the cooperation of the convex block and the concave groove. The invention has the beneficial effects of simple installation, good sealing effect and long service life of the liner plate.

Publication: **CN 104646116 A 20150527**

Applicant: JIANGSU SHILEI MACHINERY CO LTD
Inventor: HUANG GUIZHONG
Prio:
Appl.No: CN201310576619
IPC: B02C 17/22

CN 104646116 A 说明书附图 1/1 页

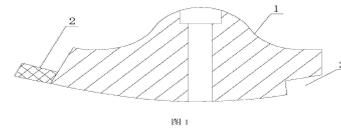


图 1

4

Lining plate for ball mill

The invention relates to a lining plate for a ball mill. The lining plate comprises a lining plate fixing surface and a lining plate working surface, wherein the surface of the lining plate working surface is provided with a pattern layer. The invention has the following beneficial effects: structure is simple; the sliding friction of materials is reduced; grinding time is increased; and the grinding efficiency is improved.

Publication: **CN 104646117 A 20150527**

Applicant: JIANGSU SHILEI MACHINERY CO LTD
Inventor: HUANG GUIZHONG
Prio:
Appl.No: CN201310577270
IPC: B02C 17/22

CN 104646117 A 说明书附图 1/1 页

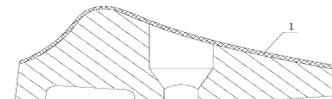


图 1

4

Composite liner plate

The invention relates to a composite liner plate, which comprises an installing surface and a plate body of a work surface, the working face is in a corrugated shape, the working face comprises a plurality of grooves positioned at central section and half grooves positioned at side surface of a groove, the half grooves are positioned at two sides of the plate body, and two opposite half grooves on the adjacent two plate bodies are capable of forming the groove. The composite liner plate has the beneficial effect that the projection of the work surface is not easy to being worn, and the usage life of the liner plate is long.

Publication: [CN 104646118 A 20150527](#)

Applicant: JIANGSU SHILEI MACHINERY CO LTD

Inventor: HUANG GUIZHONG

Prio:

Appl.No: CN201310577983

IPC: B02C 17/22

CN 104646118 A 说明书附图 1/1 页

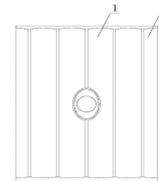


图 1

4

Discharge end liner plate

The invention relates to a discharge end liner plate, which comprises an installing surface and a body of a work surface, two beads are arranged on the work surface, reinforcing ribs are arranged at same side of the beads, beads and reinforcing ribs are uniformly distributed on the work surface, and a hand held lug used for lifting a liner plate is arranged at center of the work surface. The discharge end liner plate has the beneficial effect that a frame is arranged inside for supporting to ensure strength, and has the advantages of wear resistance, portable performance, replacement, and long usage life, worker installation and maintenance labor intensity can be reduced, a liner plate of an elevator bucket and the end cap are tightly applied, and installation gap is little, separation rib casting is not required on the inner wall of the end cap, ore discharge space is increased, elevator bucket height can be reduced by a little so as to increasing a grinding space of a bowl mill cylindrical shell, and grinding efficiency is increased.

Publication: [CN 104646119 A 20150527](#)

Applicant: JIANGSU SHILEI MACHINERY CO LTD

Inventor: HUANG GUIZHONG

Prio:

Appl.No: CN201310578089

IPC: B02C 17/22

CN 104646119 A 说明书附图 1/1 页

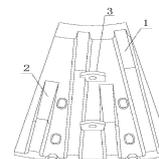


图 1

4

Bowl mill sealing liner plate

The invention relates to a bowl mill sealing liner plate, which comprises a plate body, serrated projections are arranged at one side of the plate body, grooves matched with the projections are arranged at opposite side of the plate body, and two adjacent plate bodies are connected through cooperation of the projection and the groove. The bowl mill sealing liner plate has the beneficial effects that installation is simple, sealing effect is good, and usage life of the liner plate is long.

Publication: [CN 104646120 A 20150527](#)

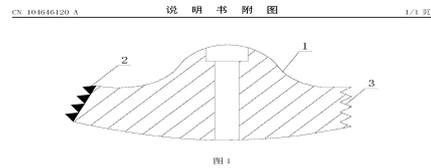
Applicant: JIANGSU SHILEI MACHINERY CO LTD

Inventor: HUANG GUIZHONG

Prio:

Appl.No: CN201310578749

IPC: B02C 17/22



Wear-resistant liner plate

The invention relates to a wear-resistant liner plate, which comprises a liner plate fixed plane and a liner plate work surface, a ceramic layer is arranged on the surface of the liner plate work surface. The wear-resistant liner plate has the beneficial effects that the hardness is high, wear resistance is high, service life is long, original casting high manganese steel thickness is reduced, deadweight of a whole bowl mill is reduced, and production cost is greatly reduced.

Publication: [CN 104646121 A 20150527](#)

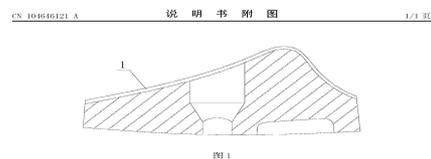
Applicant: JIANGSU SHILEI MACHINERY CO LTD

Inventor: HUANG GUIZHONG

Prio:

Appl.No: CN201310578773

IPC: B02C 17/22



Bowl mill grinding head liner plate

The invention relates to a bowl mill grinding head liner plate, which comprises an inner side liner plate and an outboard liner plate, the complete liner plate is formed by slicing the inner side liner plate and the outboard liner plate, and a protrusion and a groove which are cooperated are arranged at a splicing part of the inner side liner plate and the outboard liner plate. The bowl mill grinding head liner plate has the beneficial effect that the replacement of the grinding head liner plate is simple, and grinding machine operation ratio is increased.

Publication: [CN 104646122 A 20150527](#)

Applicant: JIANGSU SHILEI MACHINERY CO LTD
Inventor: HUANG GUIZHONG
Prio:
Appl.No: CN201310578817
IPC: B02C 17/22

Waveform groove liner plate

The invention relates to a waveform groove liner plate, which comprises a plate body, wherein the inclination angle α of the surface of the plate body is 14-15 DEG. THE waveform groove liner plate has the beneficial effect that the appropriate surface inclination angle is capable of increasing the lifting capability and grading capability of the liner plate.

Publication: **CN 104646123 A 20150527**

Applicant: JIANGSU SHILEI MACHINERY CO LTD
Inventor: HUANG GUIZHONG
Prio:
Appl.No: CN201310578838
IPC: B02C 17/22

CN 104646123 A 说明书附图 1/1 页

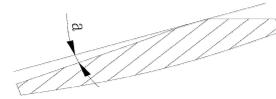


图 1

4

Ball mill lining

The invention relates to a ball mill lining including lining plates arranged on an inner side of a cylinder body. The lining plates are made from rubber. Manganese steel pressing bars are arranged between adjacent lining plates and are fixed onto the cylinder body. The ball mill lining is simple in structure, is less in noise and is high in smashing efficiency.

Publication: **CN 104646124 A 20150527**

Applicant: JIANGSU SHILEI MACHINERY CO LTD
Inventor: HUANG GUIZHONG
Prio:
Appl.No: CN201310582365
IPC: B02C 17/22

CN 104646124 A 说明书附图 1/1 页

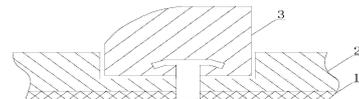


图 1

5

Bolt-free lining plate

The invention relates to a bolt-free lining plate comprising a plate body, of which thicknesses of two ends are equal. The bolt-free lining plate is advantaged in that by means of the equal thicknesses of the two ends of the lining plate, grinding dead angles can be eliminated, thereby improving usage effect of the lining plate.

Publication: [CN 104646125 A 20150527](#)

Applicant: JIANGSU SHILEI MACHINERY CO LTD

Inventor: HUANG GUIZHONG

Prio:

Appl.No: CN201310583028

IPC: B02C 17/22

CN 104646125 A 说明书附图 1/1 页

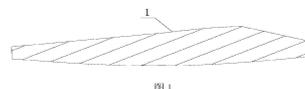


图 1

Lining plate used in overflow ball mill

The invention relates to a lining plate used in an overflow ball mill. The lining plate includes a plate body having wave crests and wave troughs, wherein a height difference between the wave crests and the wave troughs of the plate body is 50-60 mm. A back surface of the plate body is a circular-arc-shaped structure matched with a cylinder body. The lining plate is improved in lifting capability, can alleviate furrow abrasion on the lining plate by milling balls and is increased in thickness at positions being liable to worn, thereby prolonging the service life of the lining plate.

Publication: [CN 104646126 A 20150527](#)

Applicant: JIANGSU SHILEI MACHINERY CO LTD

Inventor: HUANG GUIZHONG

Prio:

Appl.No: CN201310583091

IPC: B02C 17/22

CN 104646126 A 说明书附图 1/1 页

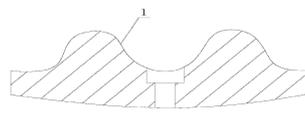


图 1

Lining plate lifting bar

The invention discloses a lining plate lifting bar which includes a body (1) and a bolt (2) therein. A hollow chamber is formed in the body (1) and is used for accommodating the bolt (2). A cross section of the hollow chamber is T-shaped, wherein lengths of two ends of the cross section of the hollow chamber is larger than that of the cross section of the bolt (2). Because that the body is made from rubber, the body allows a certain elastic deformation, so that the body can be clamp-engaged onto the bolt (2). When the body needs to be detached, the body can be stripped from the bolt (2).

Publication: [CN 104646127 A 20150527](#)



图 1

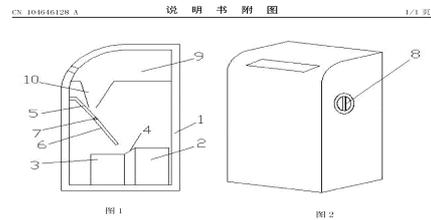
Applicant: TONGLING DACHENG ROLL CO LTD
Inventor: ZHANG CHENGXI; ZHANG ZHAO
Prio:
Appl.No: CN201310583536
IPC: B02C 17/22

Classification and recycling shredder

The invention provides a classification and recycling shredder which comprises a housing and a collecting frame and a shredder bin which are arranged inside the housing. The bottom of the shredder bin is provided with a scraps outlet hole. The collecting frame contains a paper scraps collecting frame at the front end and a CD collecting frame at the rear end. The CD collecting frame is higher than the paper scraps collecting frame. The paper scraps collecting frame is connected through a connecting plate with the upper end of the CD collecting frame. A fixed slide plate is arranged below the scraps outlet hole. One end of the fixed slide plate is fixedly connected with the housing, and the other end of the fixed slide plate is connected with a movable slide plate through a hinge. An outer end of the housing is provided with a rotating switch which is fixedly connected with the hinge. According to the invention, shredded rubbish can be effectively classified. The classification and recycling shredder has a simple structure, is simple to operate and is low-cost.

Publication: [CN 104646128 A 20150527](#)

Applicant: SHAANXI BOYUAN SCIENCE & TECHNOLOGY
DEV CO LTD
Inventor: YANG JUNLI
Prio:
Appl.No: CN201310570506
IPC: B02C 18/00



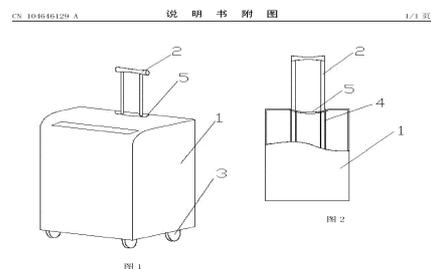
5

Shredder with pull rod

The invention provides a shredder with a pull rod. The shredder comprises a housing. The back part of the housing is provided with the pull rod. The bottom of the housing is equipped with a walking device. The shredder with the pull rod has a simple structure. With the arrangement of the walking device and the pull rod, the shredder is easy to move. Thus, the defect that a shredder needs to be moved by manpower is solved, and human physical strength is saved.

Publication: [CN 104646129 A 20150527](#)

Applicant: SHAANXI BOYUAN SCIENCE & TECHNOLOGY
DEV CO LTD
Inventor: YANG JUNLI
Prio:
Appl.No: CN201310570510
IPC: B02C 18/00



6

Shredder with electric hot plate

The invention belongs to the technical field of electron and electric products and provides a shredder with an electric hot plate. The shredder comprises a housing and a power supply arranged on the housing. An electric hot plate connected to the power supply is inserted in the housing. Front and rear parts of the housing are provided with rectangular grooves. The bottoms of the rectangular grooves are provided with quadrate jack sockets for power supply connection. The electric hot plate is provided with a plug matching the quadrate jack sockets. The shredder has a detachable heating function unit for warming hands and feet and improving an indoor temperature in winter. Preferably, the inserted structure, a parallel circuit and a series circuit are convenient for use and maintenance and have strong practicality.

Publication: [CN 104646130 A 20150527](#)

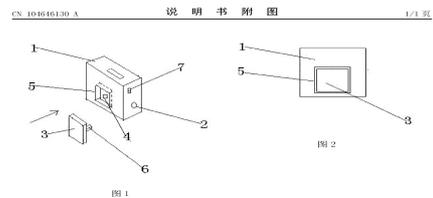
Applicant: XI AN QINGYULAN INFORMATION TECHNOLOGY CO LTD

Inventor: WANG ZHIFENG

Prio:

Appl.No: CN201310575416

IPC: B02C 18/00



5

Shredder with aromatherapy function

The invention belongs to the technical field of electron and electric products and provides a shredder with an aromatherapy function. The shredder comprises a housing, the housing is provided with a chamber and perfume is arranged in the chamber. A side of the chamber is provided with a grid door hinged to the side of the chamber, the right side of the grid door is provided with a magnetic block and the right side of the chamber is provided with an iron stripe matching the magnetic block. The shredder has an aromatherapy function and improves the indoor environment. In the preferable scheme, through use of the double door structure design and the magnet, the shredder can conveniently start and stop an aromatherapy function and has good practicality.

Publication: [CN 104646131 A 20150527](#)

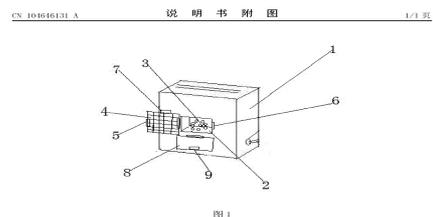
Applicant: XI AN QINGYULAN INFORMATION TECHNOLOGY CO LTD

Inventor: WANG ZHIFENG

Prio:

Appl.No: CN201310575428

IPC: B02C 18/00



5

Shredder with mosquito killing function

The invention provides a shredder with a mosquito killing function. The shredder comprising a housing and a power supply interface, the upper part of the side of the housing is provided with an aperture hole, the bottom of the aperture hole is provided with an annular power supply socket electrically connected to the power supply interface, a matched mosquito killing device fits to the aperture hole, the mosquito killing device is provided with a power supply plug, and the power supply plug is inserted into the annular power supply socket. The shredder has a detachable mosquito killing function unit. In the preferable scheme, through screw thread cooperation and a setscrew nut, use is convenient and practicality is good.

Publication: [CN 104646132 A 20150527](#)

Applicant: XI AN QINGYULAN INFORMATION TECHNOLOGY CO LTD

Inventor: WANG ZHIFENG

Prio:

Appl.No: CN201310575503

IPC: B02C 18/00

CN 104646132 A 说明书附图 1/1 页

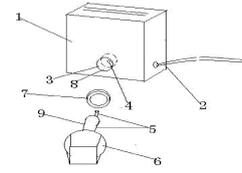


图 1

5

Shredder with humidification function

The invention belongs to the technical field of electron and electric products and provides a shredder with a humidification function. The shredder comprises a housing and a power supply interface arranged in the housing. The back surface of the housing is transversely provided with a glide strip. The glide strip is provided with a stripline electrode connected to a power supply. The glide strip is provided with a matched humidification machine with a chute. The chute is provided with an electrode matching the stripline electrode. The shredder can save an office area. In the preferable scheme, the chute is convenient for use and has good fixing performances.

Publication: [CN 104646133 A 20150527](#)

Applicant: XI AN QINGYULAN INFORMATION TECHNOLOGY CO LTD

Inventor: WANG ZHIFENG

Prio:

Appl.No: CN201310575510

IPC: B02C 18/00

CN 104646133 A 说明书附图 1/1 页

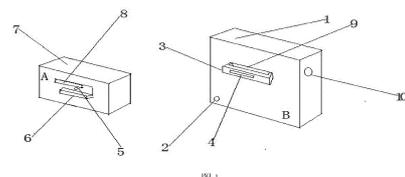


图 1

5

Shredder with radio function

The invention provides a shredder with a radio function. The shredder comprises a housing and a power supply interface, a transformer connected to the power supply interface is arranged in the housing, the upper part of the side of the housing is provided with an annular groove, the bottom of the annular groove is provided with a power supply socket electrically connected to a transformer output port, a matched radio with a power plug is inserted in the annular groove, and the power plug is inserted in the power supply socket. The shredder has a detachable radio unit. In the preferable scheme, through use of a handle and an earphone aperture, use is convenient and practicality is good.

Publication: [CN 104646136 A 20150527](#)

Applicant: XI AN QINGYULAN INFORMATION TECHNOLOGY CO LTD

Inventor: WANG ZHIFENG

Prio:

Appl.No: CN201310575653

IPC: B02C 18/00

CN 104646136 A 说明书附图 1/1 页

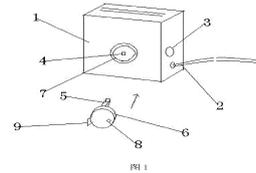


图 1

5

Shredder with paper dispersion function

The invention belongs to the technical field of computer consumables and provides a shredder with a paper dispersion function. The shredder comprises a casing, a paper shredding box, a power supply, a cabinet door and a paper inlet and is characterized in that the casing is provided with a paper separation device, the paper separation device is provided with a motor connected to a front delivery wheel, the motor drives the delivery wheel to rotate, the rear part of the paper separation device is connected to a paper separation device power supply, and the front end of the conveyor belt is opposite to the paper inlet. The front part of the paper separation device is provided with a height limiting rack, the outer layer of the height limiting rack is in a shape of a rectangular box, two sides of the height limiting rack are provided with height adjustment holes, a rectangular height limiting plate is arranged in the height limiting rack, and the sides of the rectangular height limiting plate are provided with circular raised parts blocked in the height adjustment holes so that height adjustment is realized. The shredder with a paper dispersion function solves the problem that the existing shredder cannot realize crushing of a batch of papers by one process. The shredder realizes paper batch feeding, avoids long-time waiting caused by paper manual feeding one by one, and greatly improves work efficiency.

Publication: [CN 104646137 A 20150527](#)

Applicant: XI AN KUNPENG INFORMATION TECHNOLOGY CO LTD

Inventor: JIAO SUMEI

Prio:

Appl.No: CN201310599868

IPC: B02C 18/00

CN 104646137 A 说明书附图 1/2 页

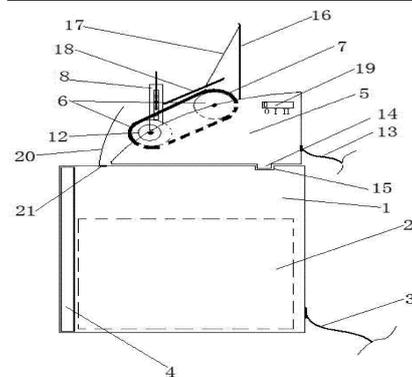


图 1

5

U-shaped paper folding and shredding machine

The invention discloses a U-shaped paper folding and shredding machine. The U-shaped paper folding and shredding machine comprises a rack, a paper folding frame, a paper shredding mechanism and a driving mechanism, wherein the paper folding frame, the paper shredding mechanism and the driving mechanism are arranged on the rack; the paper folding frame comprises a first paper guide wall and a second paper guide wall, the second paper guide wall is a concave arc surface, the cross section of the second paper guide wall is gradually closed from top to bottom to enable the lower end of the second paper guide wall to form a U shape, the first paper guide wall is a convex arc surface matched with the second paper guide wall, the first paper guide wall and the second paper guide wall are opposite by a certain distance, and a paper folding channel is formed between the first paper guide wall and the second paper guide wall, a U-shaped outlet of the paper folding channel is positioned under an arc inlet, and a paper shredding channel of the paper shredding mechanism is longitudinally arranged along the U-shaped outlet. When the U-shaped paper folding and shredding machine is used for shredding paper, paper enters the paper folding channel and is gradually folded into the U shape along the concave arc surface of the second paper guide wall, and thus, the length of the paper is reduced by more than half, the length of a paper shredding tool can be reduced by half, the material is saved, the cost is low and the manufactured paper shredding machine has small volume.

Publication: [CN 104646138 A 20150527](#)

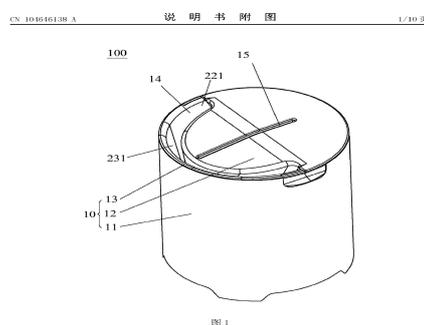
Applicant: DONGGUAN JINGRUI ELECTRIC APPLIANCE
HARDWARE CO LTD

Inventor: LU XUEZHONG

Prio:

Appl.No: CN201410855560

IPC: B02C 18/00



Claw type cutter, shredder comprising same and combination device

The invention relates to a claw type cutter. A cutter rest comprises a fixing part and a cutting supporting part, wherein one end of the cutting supporting part is connected with one end of the fixing part to form a triangular plane; a cutter body comprises a cutter holder, a first cutting part and a second cutting part; the first cutting part and the second cutting part are arranged on the cutter holder in parallel, and a cutting gap is left between the first cutting part and the second cutting part; and at least one cutting part is a cone and is provided with an inwards-concave arc-shaped front cutting surface. According to the claw type cutter, all power is applied to shredding of materials such as a plastic film, the claw type cutter is used for overcoming the disadvantages that the material cannot be fully cut due to expanded gap between a moving cutter and a fixed cutter or abrasion of a cutting angle in the prior art and the defects of high electrical consumption, frequency in cutter replacement, high blocking fault rate, high using cost and the like; and the claw type cutter is applied to various shredding equipment or forms the combination device together with other equipment, and the overall efficiency is improved remarkably.

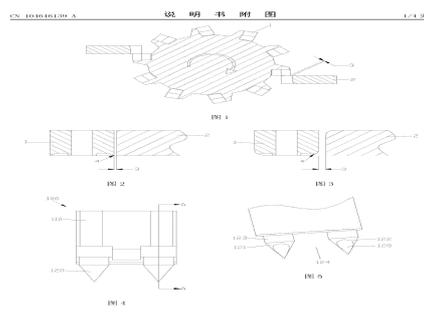
Publication: [CN 104646139 A 20150527](#)

Applicant: SHANGHAI SHENJIA SANWA CO LTD;
ZHANGJIAGANG AMSTAR SANWA MACHINERY
CO LTD

Inventor: LIN BINGQIANG; LIU PU; ZHANG JIAN

Prio:

Appl.No: CN201510030929



IPC: B02C 18/06

Fish skin pulverizer

The invention discloses a fish skin pulverizer which comprises a rack, an upper machine body, a lower machine body, a motor and a main shaft, wherein one side of the rack is higher than the other side of the rack; the lower machine body is arranged at the relatively high side of the rack; the motor is arranged at the relatively low side of the rack; the upper machine body is arranged above the lower machine body; a feeding hopper is arranged at a feeding opening of the upper machine body; the main shaft is arranged on the lower machine body in a penetrating manner; an air-cooling impeller is arranged at one end of the main shaft; a drive belt pulley is arranged at the other end of the main shaft; the drive belt pulley is in transmission connection with a motor wheel on the motor on the side through a driving belt; a moving cutter is arranged on the main shaft in the lower machine body, and is in cross arrangement; a circular arc tooth plate is arranged on the inner side wall of the upper machine body; a semicircular sieve sheet covers above a discharge opening in the lower machine body; and a discharge hopper is arranged at the outlet below the lower machine body. The crushing efficiency is high; the utilization rate of seafood product waste such as fish skin is improved; waste of raw materials is avoided; and the environmental pollution is alleviated.

Publication: **CN 104646140 A 20150527**

Applicant: ZHUCHENG SHENG AO MACHINERY CO LTD

Inventor: QU JINMING; WANG JUNRU; WANG ZELIU

Prio:

Appl.No: CN201510063892

IPC: B02C 18/06

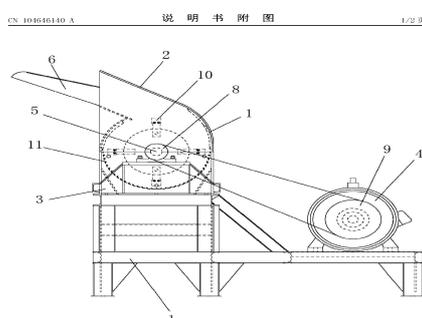


图 1

6

Clinker crushing mixer

The invention relates to a clinker crushing mixer. The clinker crushing mixer is characterized by comprising a belt conveyor for conveying a clinker, wherein a seal cover for covering a conveyor belt is arranged above the conveyor; a feeding opening and a discharge opening are respectively formed in two ends of the seal cover; the feeding opening is connected with upstream feeding equipment; the discharge opening is connected with downstream feeding equipment; and a crushing assembly is also arranged above the conveyor in the seal cover. According to the clinker crushing mixer provided by the invention, the clinker horizontally moves in the seal cover; the movement speed of materials can be effectively controlled; the material can be fully knocked by a blade, and are fully crushed and mixed; and the sizes of particles cut from the materials can be accurately controlled. The clinker crushing mixer is especially suitable for mixing fried wheat powder, a mold starter and bean pulp in the brewing process; the fried wheat powder and the mold starter are stained on the surface of the bean pulp surface when the fried wheat powder, the mold starter and the bean pulp are fully mixed; the moisture on the bean pulp surface is absorbed; growth of infectious microbes is inhibited; and starter-making through ventilation is facilitated.

Publication: **CN 104646141 A 20150527**

Applicant: NINGBO CHANGRONG BREWING EQUIPMENT CO LTD

Inventor: ZHOU WEIYONG

Prio:

Appl.No: CN201510083250

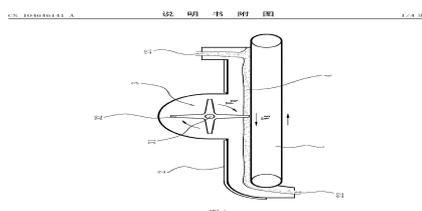


图 1

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IPC: B02C 18/06

Novel leaf crusher

The present invention provides a novel leaf crusher, which comprises a bracket, an upper housing, a lower housing, and a crushing device, wherein the lower housing and the bracket are fixedly connected, the bottom portion of the lower housing is provided with a leaking hole, one side of the upper housing and the corresponding side of the lower housing are hinged, the upper portion of the upper housing is provided with a material inlet hopper, the crushing device comprises a first crushing device and a second crushing device, the first crushing device and the second crushing device respectively comprise a motor, a rotation shaft and a cutter disk, the motor is positioned on the outer end of the housing, the output end of the motor is connected with one end of the rotation shaft, the other end of the rotation shaft penetrates out of the housing, extends into the inner cavity of the upper housing and the lower housing, and is connected with the cutter disk, the first crushing device and the second crushing device are respectively arranged on the lower housing and the upper housing, and the rotation directions of the first crushing device and the second crushing device are opposite. According to the present invention, the structure is simple, and the rotation directions of the two sets of the crushing devices are opposite so as to provide the cutting effect on the two directions of the leaves in the housing, such that the crushing effect is good, and the crushing efficiency is improved.

Publication: **CN 104646142 A 20150527**

Applicant: ECOMADE TIANJIN GREEN MATERIAL CO LTD

Inventor: LI XINTAO

Prio:

Appl.No: CN201310590884

IPC: B02C 18/10

CN 104646142 A 说明书附图 1/3 页

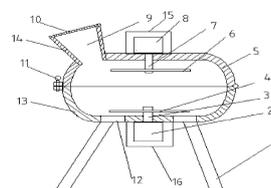


图 1

Leave crushing machine

The invention discloses a leave crushing machine including a material guide barrel and a rack arranged on the bottom of the material guide barrel. The material guide barrel includes a lower material guide barrel and an upper material guide barrel which is installed on the top of the lower material guide barrel. A sealing cover is arranged on the top of the upper material guide barrel. By means of arrangement of the sealing cover on the top of the upper material guide barrel, when the leave crushing machine is not used, the top of the upper material guide barrel can be covered by the sealing cover, thereby ensuring a safety use performance of the leave crushing machine.

Publication: **CN 104646143 A 20150527**

Applicant: POSITEC POWER TOOLS SUZHOU CO

Inventor: GAO ZHENDONG

Prio:

Appl.No: CN201310585905

IPC: B02C 18/12

CN 104646143 A 说明书附图 1/3 页

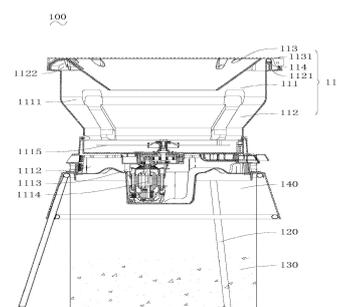


图 1

Crusher

The invention discloses a crusher which comprises a crushing box. A feeding hole is formed in the side surface of the crushing box; a discharge hole is formed in the side, corresponding to the feeding hole, of the crushing box; an exhaust hole is formed in the top of the crushing box; a feed board is rotatably arranged at the feeding hole, and a discharge board is rotatably arranged at the discharge hole; the feed board is provided with a feed cylinder at the end far away from the feeding hole; the discharge board is provided with a discharge cylinder at the end far away from the discharge hole; the crushing box is internally and sequentially provided with a chopping roller and a grinding roller in a rotating way along the direction from the feeding hole to the discharge hole; the crushing box is externally provided with a dual-axis motor used for driving the chopping roller and the grinding roller to rotate. The crusher is provided with an exhaust pipe and an exhaust fan, so that pungent odor can be discharged outside in real time in the whole crushing process; the rotary feed board and the rotary discharge board are arranged, so that feeding and discharging are smoothly carried out; the chopping roller and the grinding roller are arranged at the same time, so that the crushing effect is better.

Publication: [CN 104646144 A 20150527](#)

Applicant: XI AN ZHONGKEMAITE ELECTRONIC TECHNOLOGY EQUIPMENT

Inventor: MA SHUBO

Prio:

Appl.No: CN201310611441

IPC: B02C 18/14

CN 104646144 A 说明书附图 1/2 页

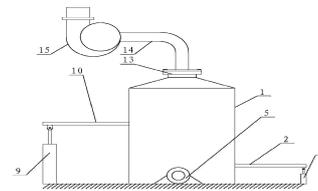


图 1

6

Storehouse body inclination adjustable type crusher

The invention discloses a storehouse body inclination adjustable type crusher. The storehouse body inclination adjustable type crusher comprises a rack, a feeding hopper, a crushing storehouse, a discharging hole, a crushing assembly and a motor, wherein the crushing storehouse is formed in the rack, the feeding hopper is arranged at the top of the lower end of the crushing storehouse, the discharging hole is formed in the bottom of the higher end of the crushing storehouse, the crushing assembly is arranged in the crushing storehouse and driven by the motor, a crushing storehouse inclination adjustable type rack is adopted and consists of a base, a telescopic rod and two supporting rods, the two supporting rods are arranged on two sides of one end of the crushing storehouse, one end of each supporting rod is articulated with the side wall of the crushing storehouse, the other end of each supporting rod is fixed on the base, one end of the telescopic rod is articulated with the bottom of the other end of the crushing storehouse, and the other end of the telescopic rod is arranged on the base. Due to the adoption of the structure form, the inclination and rotational speed of the crushing storehouse can be adjusted according to different materials and requirements, thereby greatly expanding the application range; and the equipment has the advantages of simple structure, long service life, convenience in operation and maintenance, and good crushing performance.

Publication: [CN 104646145 A 20150527](#)

Applicant: FOSHAN HAIKE INTELLECTUAL PROPERTY SERVICE CO LTD

Inventor: CAI WEIYAN

Prio:

Appl.No: CN201410807237

CN 104646145 A 说明书附图 1/1 页

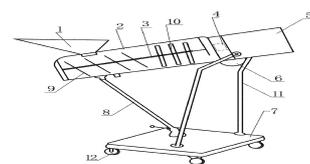


图 1

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IPC: B02C 18/14

Alligator cutter and shredding machine with same

The invention provides an alligator cutter, which comprises a cutter base and a cutting part, wherein the front blade surface of the cutting part is in an arc form; a plurality of cutting edges are arranged on the front blade surface. According to the alligator cutter provided by the invention, the exchange frequency is reduced (the cutter is exchanged once every 3 months); the use cost is correspondingly reduced; all power is applied to shredding of materials (such as plastic films); the defects that a clearance between a movable knife and a fixed knife is expanded or a cutting angle is abraded, so that the materials cannot be completely cut to cause a plurality of defects, such as high power consumption, frequent cutter exchange, high material blocking failure rate and high use cost, are overcome; the alligator cutter is applied to kinds of shredding equipment or other equipment to form combination devices, so that the overall benefits are significantly improved.

Publication: [CN 104646146 A 20150527](#)

Applicant: SHANGHAI SHENJIA SANWA CO LTD;
ZHANGJIAGANG AMSTAR SANWA MACHINERY
CO LTD

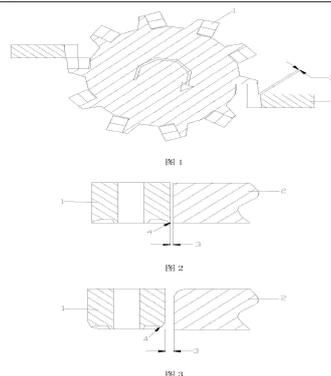
Inventor: LIN BINGQIANG; LIU PU; ZHANG JIAN

Prio:

Appl.No: CN201510030541

IPC: B02C 18/14

CN 104646146 A 说明书附图 1/3页



11

Cutting tool for recycling goods and materials

The invention provides a cutting tool for recycling goods and materials. The cutting tool comprises a turntable and cutters fixed on the turntable, wherein each cutter is provided with a bending part, and the cutter is divided into a turntable cutter and a bending cutter by the bending part; the bending parts of every two adjacent cutters are respectively arranged in the opposite direction. The cutting tool provided by the invention has the advantages and beneficial effects that the bending part is added on the basis of the original cutter to divide the cutter into the turntable cutter and the bending cutter, and the two parts of cutters are matched when in work, so that the effective working range of the cutting tool is greatly increased, the cutting efficiency is effectively improved, and the number of cutting tools is reduced; and the cutting tool has the advantages of reasonable structure, high cutting efficiency, simplicity and durability.

Publication: [CN 104646147 A 20150527](#)

Applicant: TIANJIN ZHIHAI ZHONGTIAN RENEWABLE
MATERIAL RECYCLING CO LTD

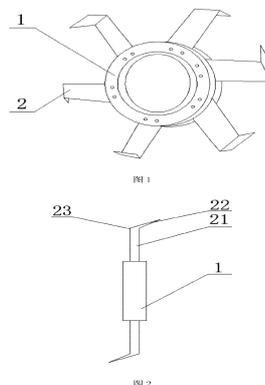
Inventor: LI JINQUAN

Prio:

Appl.No: CN201310608922

IPC: B02C 18/18

CN 104646147 A 说明书附图 1/1页



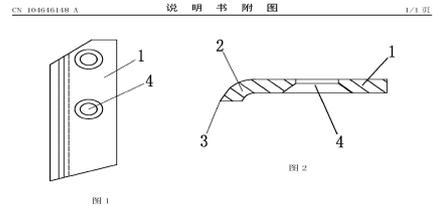
5

Blade for pulverizer

The invention discloses a blade for a pulverizer. The blade comprises a knife handle, a tool bit and a cutting edge, and is characterized in that the knife handle, the tool bit and the cutting edge are of an integral structure; two mounting holes are formed in the knife handle; the tool bit is arranged at one side of the knife handle; and the cutting edge is arranged at one side of the tool bit. Through the arrangement, the blade is unique in appearance; a bent and sloped knife body can form a sharp lateral cutting edge, and can also be used as a fan for blowing, so that the suction of a feeding hole is relatively large, the feeding speed of material is improved, and the crushing efficiency is relatively high; and the blade is durable in use, very sharp and reliable in safety performance.

Publication: [CN 104646148 A 20150527](#)

Applicant: ZHUCHENG SHENG AO MACHINERY CO LTD
Inventor: QU JINMING; WANG JUNRU; YANG ZHIYONG
Prio:
Appl.No: CN201510064789
IPC: B02C 18/18

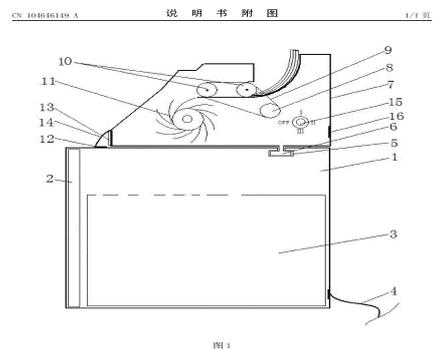


Paper shredder with paper slitter

The invention belongs to the technical field of electronic products and specifically provides a paper shredder with a paper slitter. The paper shredder comprises a housing, a cabinet door, a paper-shredding box, a shredder power supply and a paper inlet. The paper shredder is characterized in that a paper slitter is arranged on the housing; a motor is installed inside the paper shredder; the motor drives paper feed wheels through a belt; a paper receiving wheel is installed at the back of the paper feed wheels; a paper outlet is arranged at the back of the paper receiving wheel; and a paper slitter power supply is connected at the back of the paper slitter. The problem that a huge wad of paper cannot be automatically smashed by an existing paper shredder and manual scattering is required is solved. According to the invention, a huge wad of paper can be automatically smashed without the need of manually putting pieces of paper into the paper shredder one by one. Thus, the objective of full automation in offices is achieved.

Publication: [CN 104646149 A 20150527](#)

Applicant: XI AN KUNPENG INFORMATION TECHNOLOGY CO LTD
Inventor: JIAO SUMEI
Prio:
Appl.No: CN201310598624
IPC: B02C 18/22



Meat grinder

The invention provides a meat grinder which comprises a meat grinder shell, wherein a ribbed plate is arranged in the meat grinder shell; a motor is fixedly arranged at the bottom of the meat grinder shell; a belt pulley A is fixedly arranged on a power output shaft of the motor; the belt pulley A is connected with a belt pulley B which is fixedly arranged on a power input shaft of a gearbox by virtue of a belt; the gearbox is fixedly arranged on the ribbed plate by virtue of a bolt; a power output shaft of the gearbox is connected with a meat grinding roller assembly which passes through a mounting hole in the meat grinder shell and is fixed to the side wall of the meat grinder; a meat grinding roller is of a variable-pitch structure, and is provided with inner threads at the two ends; one end of the meat grinding roller is connected with the power output shaft of the gearbox by virtue of the thread; a meat inlet is formed at the upper part of a long-pitch segment of the meat grinding roller. The long-pitch segment of the meat grinding roller is formed at the lower end of the meat inlet, and is used for feeding more meat into a short-pitch segment of the meat grinding roller for grinding after meat is put into the machine, so that more meat can be stirred after once rotation of the meat grinding roller.

Publication: [CN 104646150 A 20150527](#)

Applicant: TIANJIN YINGDAHUA FOOD MACHINERY MFG
CO LTD

Inventor: WANG ZHIHUA

Prio:

Appl.No: CN201310578440

IPC: B02C 18/30

CN 104646150 A 说明书附图 1/2 页

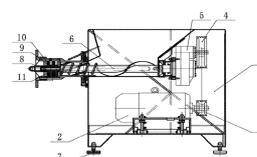


图 1

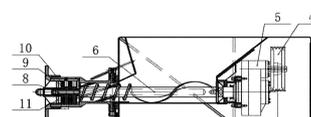


图 2

5

Vertical shaft type impact crusher

The invention discloses various sand making molds which are suitable for the ore crushing and machine-made sand industry of the mine field, and particularly relates to a vertical shaft type impact crusher. The crusher comprises a main rack, wherein a feeding barrel, a material separating rack, a crushing cavity, a rotor, a motor and a discharge tank are arranged on the main rack in sequence; a feeding inner barrel is arranged inside the feeding barrel; a crushing cavity cover plate is arranged between the feeding barrel and the crushing cavity; the motor is positioned on the center inside the discharge tank; an output shaft of the motor and the rotor are coaxially arranged and are connected; the rotor is positioned in the crushing cavity, and a wearable sleeve liner plate is arranged on the rotor; a damping spring is arranged on the rack between the crushing cavity and the discharge tank; an air dust collecting device is arranged on the side wall of the feeding barrel. The crusher is driven by the single motor, so that the energy consumption is reduced; the motor and a vertical shaft are coaxially arranged, so that the vertical shaft is uniformly stressed during working, and the service lives of the vertical shaft and associated parts are prolonged; besides, the air dust collecting device is arranged on the side wall of the feeding barrel, so that dust pollution is eliminated. The vertical shaft type impact crusher is environmentally friendly.

Publication: [CN 104646151 A 20150527](#)

Applicant: ZHANG XIAOYI

Inventor: ZHANG XIAOYI

Prio:

Appl.No: CN201510044168

CN 104646151 A 说明书附图 1/2 页

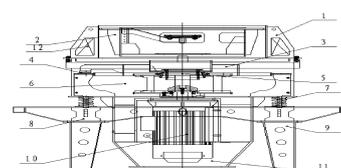


图 1

6

IPC: B02C 19/00

Vertical coating material grinding machine

The invention discloses a vertical coating material grinding machine. The vertical coating material grinding machine comprises a barrel, a rotating shaft, a connecting rod, compression rollers and a roller shaft, wherein the barrel is in an inverted conical shape, a coating material outlet is formed in the bottom of the barrel, the coating material outlet is matched with an outlet cover plate, the rotating shaft stretches into the barrel and is coaxial with the barrel, the roller shaft is obliquely arranged and is parallel to the inner wall of the barrel, one end of the connecting rod is connected with the rotating shaft, the other end of the connecting rod is connected to the middle part of the roller shaft, two sides of the connecting rod on the roller shaft are respectively sleeved with one compression roller, and each compression roller attaches to the inner wall of the barrel. By adopting the vertical coating material grinding machine, while the stirring of the coating material is realized, the grinding of the coating material can be realized, the coating material is more exquisite, and the casting quality is improved.

Publication: [CN 104646152 A 20150527](#)

Applicant: HUANG CHUNFENG; XIA PINGGUI

Inventor: HUANG CHUNFENG

Prio:

Appl.No: CN201510045588

IPC: B02C 19/00

CN 104646152 A 说明书附图 1/3页

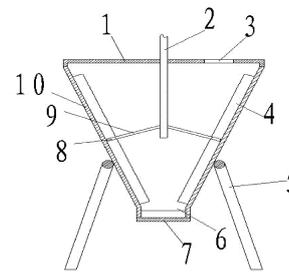


图 1

6

Glass breaking device

The invention relates to a glass breaking device which comprises a glass bearing unit, a glass breaking unit and a control unit, wherein the glass bearing unit is used for bearing the glass; the glass breaking unit is arranged above the glass and is used for breaking the glass; and the control unit is used for controlling the glass breaking unit to move to the direction close to or far away from the glass. The glass breaking device disclosed by the invention has the beneficial effects that automatic control of glass breaking is realized, the manual labor is saved, and the working efficiency is improved.

Publication: [CN 104646153 A 20150527](#)

Applicant: BOE TECHNOLOGY GROUP CO LTD; HEFEI XINSHENG OPTOELECTRONIC TECHNOLOGY CO LTD

Inventor: HONG YANPING; HUANG ZHUBING; RUAN DEFA; WANG WENHAO; YU PENG; ZHANG CHAO

Prio:

Appl.No: CN201510093538

IPC: B02C 19/00

CN 104646153 A 说明书附图 1/3页

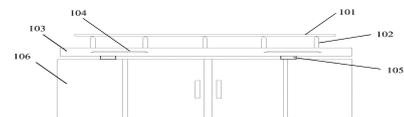


图 1

7

Sesame mill

The invention relates to a sesame mill which comprises a main body and a motor, a milling assembly and a material feeding barrel which are arranged on the main body. The sesame mill is characterized by further comprising a connection piece of which two ends are detachably connected with the main body and the material feeding barrel respectively, wherein the milling assembly comprises outer ceramic teeth and inner ceramic teeth; the outer ceramic teeth are fixed at the bottom of the material feeding barrel; the inner ceramic teeth are arranged in the connection piece rotationally; a milling clearance which is gradually reduced from top to bottom is formed between the outer ceramic teeth and the inner ceramic teeth; the motor drives the inner ceramic teeth to rotate. The connection piece is detachably connected with the main body and the material feeding barrel, so that the sesame mill is very convenient to assemble and detach; after sesames are milled, the connection piece, the main body and the material feeding barrel are all detached, and the outer ceramic teeth and the inner ceramic teeth are separated too; therefore, the sesame mill is very convenient to clean.

Publication: [CN 104646154 A 20150527](#)

Applicant: WANG SONGBIAO

Inventor: WANG SONGBIAO

Prio:

Appl.No: CN201310632374

IPC: B02C 19/22

CN 104646154 A 说明书附图 1/2 页

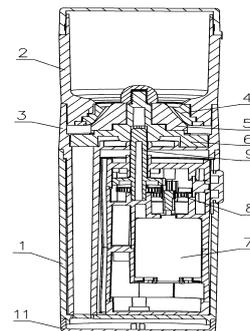


图 1

5

Multifunctional pulverizer system

The invention relates a pulverizer and especially relates to a multifunctional pulverizer system suitable for medicine, chemical engineering and food industries. The multifunctional pulverizer system comprises a machine body, a motor is installed on the machine body, and a static disc and a dynamic disc connected to the motor are arranged in the machine body. The multifunctional pulverizer system is characterized in that the static disc and the dynamic disc are respectively provided with ring gears, a spiral feeding device is connected to the upper part of the machine body, a cyclone separator is connected to the lower part of the machine body and a vibrating screen is arranged below the cyclone separator. The multifunctional pulverizer system has a reasonable design, a compact structure, high efficiency, low energy consumption, and product fineness and granularity adjustability, and provides great convenience for crushing of materials in pharmacy, chemical engineering and food industries.

Publication: [CN 104646155 A 20150527](#)

Applicant: XU GUANGMIN

Inventor: XU GUANGMIN

Prio:

Appl.No: CN201310575566

IPC: B02C 21/00

CN 104646155 A 说明书附图 1/1 页

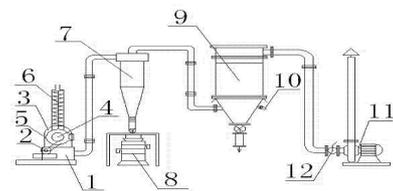


图 1

5

Ultrafine titanium concentrate grinding process flow

The invention discloses an ultrafine ilmenite concentrate grinding process flow, equipment is mainly composed of a cylindrical silo, a conveyer, a crusher, a mixer, a vertical mill machine, a powder selecting machine and a dust collector. The process flow is characterized in that crude ore in the cylindrical silo is conveyed to a crusher through a band conveyer for fragmenting the ore, then introducing in a mixer, simultaneously adding 0.5-0.8% of mixing grinding aid for stirring and mixing; then sending the mixing material in the vertical mill machine for grinding for a corresponding time, then sending the powder material to the powder selecting machine, screening the powder, if the power material is not qualified, sending to the vertical mill machine, and continuously repeating; screening the qualified powder material and sending into a packaging machine for packaging, and finally outputting the ultrafine ore powder products with size of 8-12 μ m.

Publication: [CN 104646156 A 20150527](#)

Applicant: KUNMING DEDAO TECHNOLOGY CO LTD

Inventor: DAYONG ZENG

Prio:

Appl.No: CN201310579310

IPC: B02C 21/00

CN 104646156 A 说明书附图 1/3 页

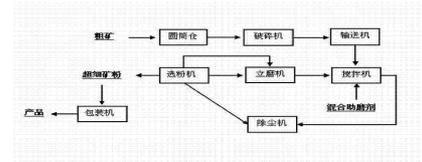


图 1

5

Crushing and drying-type household garbage processor

The invention provides a crushing and drying-type household garbage processor. The processor comprises a box; a hot air blower, a stirring stick and a baffle are arranged inside the box sequentially from top to bottom; multiple crushing blades are arranged on the stirring stick; the bottom of stirring stick penetrates the baffle and is then connected with a motor; a crushed material outlet is arranged on the box at the right end of the baffle; the crushed material outlet is connected with a crushed material box; the crushed material box is internally provided with a filter screen; and the crushed material box is connected with a sewer pipe. With the crushing and drying-type household garbage processor, solids are separated from liquids, so that centralized processing in a rubbish transfer station is facilitated, and liquid directly flow into the sewer pipe. The crushing and drying-type household garbage processor is firm in structure, convenient and rapid to use and free of pollution.

Publication: [CN 104646157 A 20150527](#)

Applicant: GUANGDONG SHUNDE YINGPAI ELECTRICAL APPLIANCE TECHNOLOGY CO LTD

Inventor: LI CHIRONG

Prio:

Appl.No: CN201410813365

IPC: B02C 21/00

CN 104646157 A 说明书附图 1/3 页

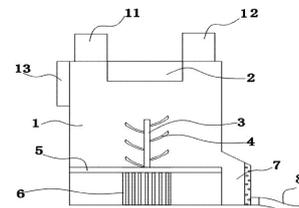


图 1

5

Vehicle-mounted mobile crusher

The invention relates to a vehicle-mounted mobile crusher. The vehicle-mounted mobile crusher comprises a heavy-duty lorry (1), wherein a crusher (2) is arranged on the compartment of the heavy-duty lorry (1); the upper part of the crusher (2) is provided with a feeding hole (21); the side of the crusher (2) is provided with a discharge hole (22); a feeding conveyor (3) communicated with the feeding hole (21) is arranged on the heavy-duty lorry (1); and the tail of the compartment of the heavy-duty lorry (1) is provided with a discharge conveyor (3) communicated with the discharge hole (22). According to the vehicle-mounted mobile crusher, a crane does not need to be additionally leased, thus the cost is saved, the occupied area is small, the automation degree is high, the reaction is quick and the vehicle-mounted mobile crusher can operate at any time in any place.

Publication: [CN 104646158 A 20150527](#)

Applicant: ZHONGSHAN OMS IND CO LTD
Inventor: GU ZHONGSHENG; LIANG SHENGHAI; LONG XIAOBIN; QUAN JIATAI; RUAN WEIJUN; TAN WEIJIE; WANG JUNSHENG; WU JUN

Prio:
Appl.No: CN201410821712
IPC: B02C 21/02

CN 104646158 A 说明书附图 1/4页

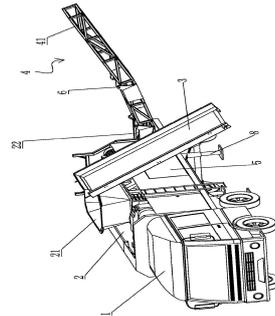


图 1

6

Pulverizer driven by gasoline engine

The invention discloses a pulverizer driven by a gasoline engine. The pulverizer comprises a rack, a pulverizer body and the gasoline engine, wherein the rack comprises a base, a pulverizer body mounting seat, a gasoline engine mounting transverse beam, movable wheels and a handle, wherein the movable wheels are arranged at the bottom parts of supporting legs of the base by shaft pins; the pulverizer body mounting seat is mounted on the upper surface of one side of the base, and the gasoline engine mounting transverse beam is arranged on the base of the other side; the handle is mounted on one side of the rack; the pulverizer body mounting seat is higher than the gasoline engine mounting transverse beam; a plurality of mounting long holes are formed in the pulverizer body mounting seat and the gasoline engine mounting transverse beam respectively; the pulverizer body and the gasoline engine are mounted on the pulverizer body mounting seat and the gasoline engine mounting transverse beam by the mounting long holes respectively; and an automatic clutch wheel of the pulverizer body is rotationally connected with a transmission belt wheel of the pulverizer body. The pulverizer is suitable for being used in regions where electric power cannot cover; and the pulverizer has a simple structure and can be conveniently transported in regions with complicated terrains.

Publication: [CN 104646159 A 20150527](#)

Applicant: ZHUCHENG SHENG AO MACHINERY CO LTD
Inventor: MENG LI; QU JINMING; WANG ZELIU

Prio:
Appl.No: CN201510063865
IPC: B02C 21/02

CN 104646159 A 说明书附图 1/2页

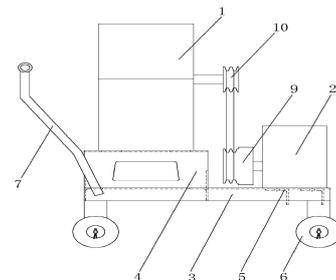


图 1

4

Cement mill lining plate

The invention relates to a cement mill lining plate, which comprises a plate body, the plate body is fixed on a cylindrical shell through a retaining nut, a protection sleeve is fixed at outboard of the retaining nut, and the retaining nut is higher than top of the retaining nut. The cement mill lining plate has the beneficial effect that the protection sleeve is capable of enhancing the wear resistant intensity of the retaining nut, motion locus of the steel ball can be simultaneously changed, washing on a liner plate is reduced, and usage life of the liner plate is prolonged.

Publication: [CN 104646160 A 20150527](#)

Applicant: JIANGSU SHILEI MACHINERY CO LTD

Inventor: HUANG GUIZHONG

Prio:

Appl.No: CN201310578492

IPC: B02C 23/00

CN 104646160 A 说明书附图 1/1 页

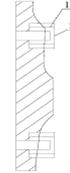


图 1

4

Dispersing device of powder grinding equipment

The invention relates to a dispersing device of powder grinding equipment. The dispersing device comprises a second motor, wherein the second motor is connected with a rotating shaft, and a dispersing blade is arranged on the rotating shaft; powder ground by the grinding device can be dispersed and thrown onto a filter screen when falling off a slope, the powder cannot be caked together when falling off the slope, so that the powder block caused by caking can be avoided; when a lifting device is lifted, a first lifting plate can block an inlet of a material storage bin, the power can be accumulated at the position of the inlet, the dispersing device can be used for dispersing the powder and preventing the powder from accumulation and coagulation.

Publication: [CN 104646161 A 20150527](#)

Applicant: GAO SHUITU

Inventor: GAO SHUITU

Prio:

Appl.No: CN201410804373

IPC: B02C 23/00

CN 104646161 A 说明书附图 1/2 页

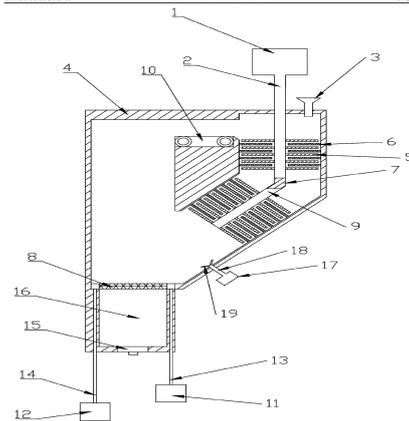


图 1

6

Laying-off inclined tube of ball mill

The invention discloses a laying-off inclined tube of a ball mill. The laying-off inclined tube includes an inclined tube (1). A plurality rows of steel bars (2) are welded to a surface of the inclined tube. Because that materials are stricken and jumped at the steel bars (2) on the inclined tube (1), some materials can be accumulated at the steel bars (2), so that the material being laid-off recently not acts on the surface of a material tube but strikes the steel bars (2) or the accumulated materials, thereby reducing abrasion on the surface of the inclined tube (1) and greatly prolonging the service life of the inclined tube (1).

Publication: [CN 104646162 A 20150527](#)

Applicant: TONGLING DACHENG ROLL CO LTD

Inventor: ZHANG CHENGXI; ZHANG ZHAO

Prio:

Appl.No: CN201310583591

IPC: B02C 23/02

CN 104646162 A 说明书附图 1/1页

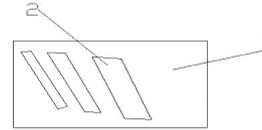


图 1

Feeding apparatus of powder grinding equipment

The invention discloses a feeding apparatus of powder grinding equipment. The feeding apparatus comprises a feeding hole, wherein the outer wall of the feeding hole is annularly provided with an annular water feeding apparatus; an inductor is arranged above the annular water feeding apparatus which is connected with a water pipe; the water pipe is connected with a quantitative water inlet valve which is connected with a water valve through the water pipe; powder materials entering material entrances are induced by the inductor when being required to be wetted and ground, proper quantity of water is added into the quantitative water inlet valve through induction of the inductor, and the powder materials can be wetted at material entrances, so that the powder materials does not need to be wetted by in advance by adding the water and manpower and material resources are saved; the powder materials and water are uniformly mixed by adding the water via the annular water feeding apparatus, thereby increasing the wet powder grinding efficiency.

Publication: [CN 104646163 A 20150527](#)

Applicant: GAO SHUITU

Inventor: GAO SHUITU

Prio:

Appl.No: CN201410805656

IPC: B02C 23/02

CN 104646163 A 说明书附图 1/3页

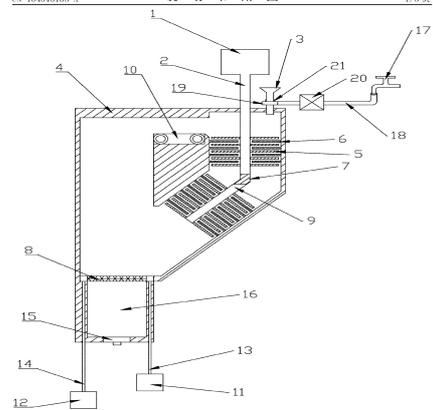


图 1

Grid plate

The invention relates to a grid plate, which comprises a plate body, a working face of the plate body is in a corrugated shape, and a ceramic layer is arranged on the working face of the plate body. The grid plate has the beneficial effects that the structure is simple, wear resistance and anti-blocking performance are good, and the grid plate also has crushing effect.

Publication: [CN 104646164 A 20150527](#)

Applicant: JIANGSU SHILEI MACHINERY CO LTD

Inventor: HUANG GUIZHONG

Prio:

Appl.No: CN201310577951

IPC: B02C 23/08

CN 104646164 A 说明书附图 1/1页



图 1

4

Crusher

The invention discloses a crusher. The crusher comprises a driving mechanism and further comprises a sieve barrel, wherein a plurality of sieve holes are formed in the side wall of the sieve barrel; the driving mechanism comprises a plurality of supporting rails fixedly connected with the outer side wall of the sieve barrel, a transmission mechanism, a motor and supporting wheels; the output end of the motor is connected with the transmission mechanism; the transmission mechanism is connected with the plurality of supporting wheels; the motor drives the supporting wheels to rotate; and the supporting rails drive the sieve barrel to rotate by the friction force between the supporting wheels and the supporting rails. The sieve holes are formed in the sieve barrel and the feeding speed is controlled; materials with uniform meshes can be sieved and the requirements of controlling materials respectively are met; the requirements of users can be met and continuous feeding and discharging can be realized; and the continuous production work is realized, the treatment amount is great, the working efficiency is high and the production efficiency is improved.

Publication: [CN 104646165 A 20150527](#)

Applicant: HU YONGSHENG

Inventor: HU YONGSHENG

Prio:

Appl.No: CN201510083764

IPC: B02C 23/10

CN 104646165 A 说明书附图 1/2页

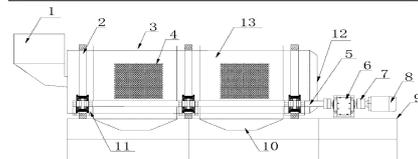


图 1

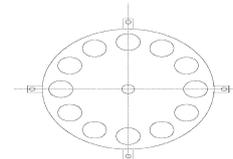


图 2

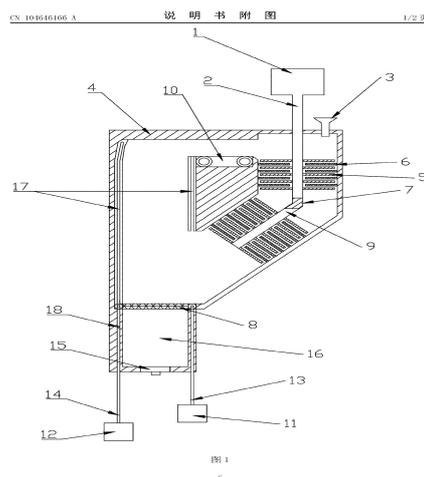
6

Lifting track of powder grinding equipment

The invention relates to powder grinding equipment. The equipment comprises a shell, a transmission device, a lifting device and a grinding device; the lifting device comprises a first air cylinder, a second air cylinder, a first lifting plate, a second lifting plate and a strainer, wherein the interior of the shell descends to form a platform; the strainer is placed on the platform; the first air cylinder is connected with the first lifting plate; the second air cylinder is connected with the second lifting plate; the first lifting plate and the second lifting plate are connected with the side wall of the strainer; the first lifting plate is shorter than the second lifting plate; and the transmission device is arranged between the lifting device and the grinding device. The first lifting plate and the second lifting plate are provided with tracks, the second lifting plate is provided with a rotating device, and the lifting device is provided with the tracks to prevent the strainer from separation in a lifting process, so that the grinding efficiency is prevented from being delayed and the strainer is relatively steady in the lifting process.

Publication: [CN 104646166 A 20150527](#)

Applicant: GAO SHUITU
Inventor: GAO SHUITU
Prio:
Appl.No: CN201410804374
IPC: B02C 23/12

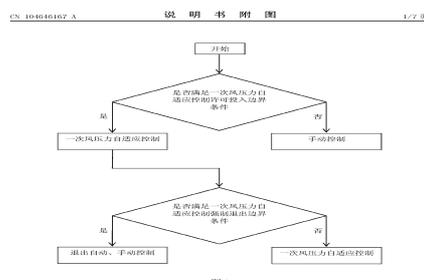


Primary air pressure self-adaptive control method

The invention discloses a primary air pressure self-adaptive control method. The method comprises a coal mill outlet overtemperature protection circuit, a coal mill primary air volume low protection circuit, a coal mill sealing air and milling bowl lower part differential pressure low protection circuit and an energy-saving operation main circuit. When any one of the situations that the coal mill outlet temperature exceeds a set value, the coal mill primary air volume is lower than a set value, and the coal mill sealing air and milling bowl lower part differential pressure is lower than a set value occurs, and protection circuit action requirements are met, or a plurality of situations occur simultaneously, and the greatest potential safety hazard working conditions meet the protection circuit action requirements, the protection circuits take actions, the outlet pressure of a primary fan is gradually increased, and the safe operation of a coal pulverizing system of a coal mill is always ensured; under the condition that the protection circuits do not take actions, the energy-saving operation main circuit takes action, the outlet pressure of the primary fan is gradually decreased, and the opening of a cold and hot air door of the coal mill is increased, so that the throttling loss is reduced, the power consumption of the primary fan is reduced, and the economical efficiency of the unit is enhanced.

Publication: [CN 104646167 A 20150527](#)

Applicant: UNIV ZHEJIANG
Inventor: CEN KEFA; LUO JIANMING; MA ZENGYI; NI MINGJIANG; SHEN YUELIANG; TANG YIJUN; WANG YUELAN; YAN JIANHUA; YAN ZHUMING; YOU HAIHUI
Prio:
Appl.No: CN201510028385
IPC: B02C 25/00



An improved two roller sugarcane crushing mill

The present invention provides an improved two roll sugarcane crushing mill with a semi closed frame comprising plurality of improved two roll mill modules in tandem. Each improved two roll mill modules comprises a bottom roll and top roll, bottom roll being rotatably mounted in a pair of main frames at the two ends and the top roll is rotatably mounted in a pair of top beams. One end of each of the said top beams being pivotally attached near the upper end of the main frame towards feed side for swinging the said top beams along with the top roll. A hydraulic loading means is provided which is pivotally attached between end of top beam and base of main frame. The semi closed frame fitted at the bottom end to the base of the Head Stock is designed to bear the forces of heavy and fluctuating loads.

Publication: [CN 104661756 A 20150527](#)

Applicant: NIKAM BHAUSAHEB; NIKAM SACHIN
Inventor: NIKAM BHAUSAHEB; NIKAM SACHIN
Prio: IN 20130812 2013000489, IN 20120821 MU 24222012
Appl.No: CN201380043820
IPC: B02C 4/02

CN 104661756 A 说明书附图 1/3页

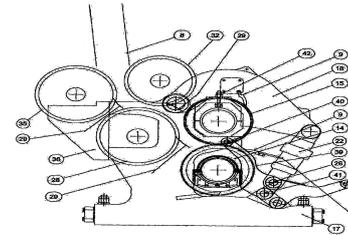


图1

10

Device for processing food waste part

Publication: [CN 101298061 B 20150506](#)

Applicant: JOHNSON ELECTRIC SA
Inventor: I SAED; PAN GUANGYE; PAN JICHENG
Prio:
Appl.No: CN200710102345
IPC: B02C 18/06

CN 101298061 B 说明书附图 1/3页

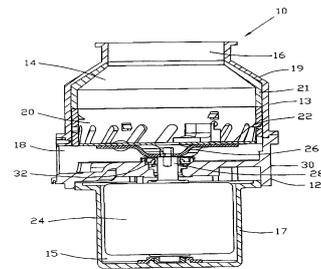


图1

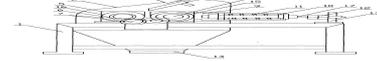
6

Rolling machine for grinding materials

Publication: [CN 101829615 B 20150527](#)

Applicant: WUXI XINKE SURFACE ENGINEERING MATERIALS CO LTD
Inventor: WANG YUQI; XUE JIAN; XUE YONGZONG

CN 101829615 B 说明书附图 1/3页



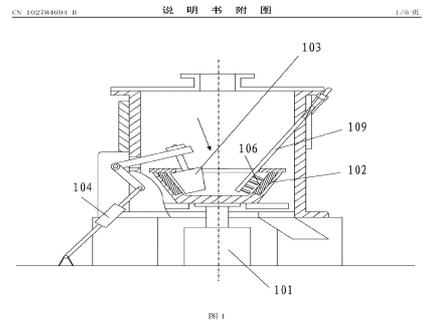
7

Prio:
Appl.No: CN201010137237
IPC: B02C 4/02

Vertical mill

Publication: **CN 102784694 B 20150520**

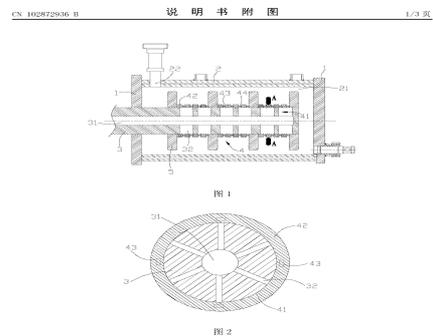
Applicant: HAO ZHIGANG
Inventor: HAO ZHIGANG
Prio:
Appl.No: CN201210291591
IPC: B02C 15/04



Nanoscale dynamic separation-type grinder

Publication: **CN 102872936 B 20150513**

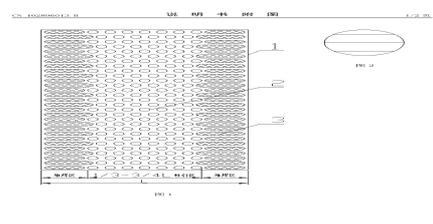
Applicant: PUHLER GUANGZHOU MACHINERY AND EQUIPMENT CO LTD
Inventor: LEI LIMENG
Prio:
Appl.No: CN201210364487
IPC: B02C 7/06



Roller mill and self-synchronizing wearing roller of high-pressure roller mill

Publication: **CN 102896013 B 20150527**

Applicant: CHENGDU LEEJUN IND CO LTD
Inventor: HE YAMIN; WEI YONG; XU ZHIPING
Prio:
Appl.No: CN201210363083



IPC: B02C 4/30

Cabinet type rice milling and powder grinding combination machine

Publication: **CN 102935395 B 20150520**

Applicant: SICHUAN JINGYAN COUNTY FEIYA MACHINERY
MFG CO LTD

Inventor: SHUI CHENGXUAN

Prio:

Appl.No: CN201210308508

IPC: B02C 9/04

CN 102935395 B 说明书附图 1/4 页

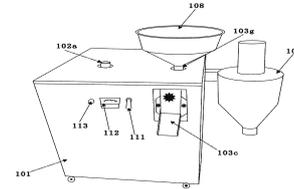


图 1

6

Method for performing dry classification enrichment on V2O5 from vanadium-containing mineral

Publication: **CN 102935404 B 20150520**

Applicant: CHANGSHA RES INST MINING & METALLURG
CO LTD

Inventor: CHEN WENYONG; FENG ZHIMIN; LI ZHAOJIA;
NING SHUNMING; SHE ZONGHUA; WAN
HONGQIANG; WANG WENJUAN; WU
JIANGHUA; XING XUEYONG; ZHAO QIANG

Prio:

Appl.No: CN201210493928

IPC: B02C 21/00

CN 102935404 B 说明书附图 1/1 页

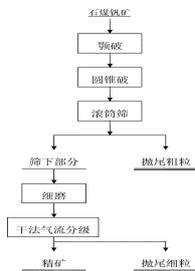


图 1

6

Pushing device of material crushing equipment

Publication: **CN 102950053 B 20150506**

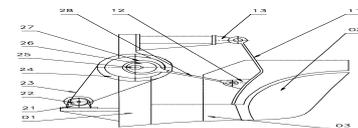
Applicant: CHENG LIPING; LU XIAOPING

Inventor: CHENG LIPING; LU XIAOPING

Prio:

Appl.No: CN201110249271

CN 102950053 B 说明书附图 1/1 页



IPC: B02C 18/22

Conic sand making machine comprising concave-convex arc-shaped sand making cavities and sand making method

Publication: **CN 103008046 B 20150506**

Applicant: ZHEJIANG SHUANGJIN MACHINERY GROUP

Inventor: HU ZUYAO

Prio:

Appl.No: CN201210529999

IPC: B02C 2/00

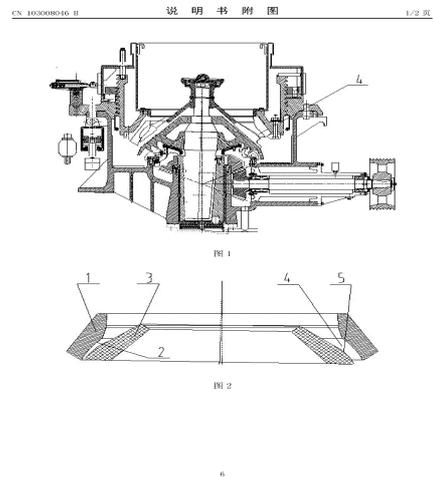


Plate hammer of impact crusher

Publication: **CN 103041893 B 20150520**

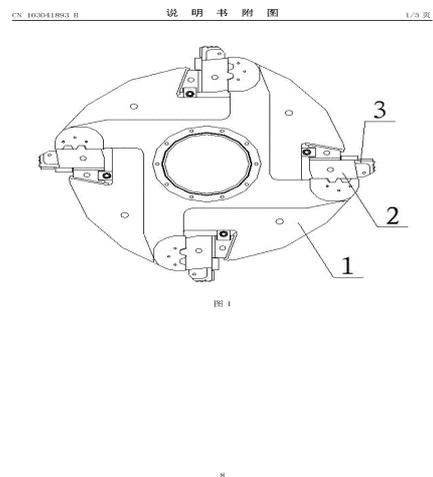
Applicant: CINTEC HEAVY EQUIPMENT CO LTD

Inventor: LIU JINSONG; MA ZHENGTAO; SHI WEN; TANG YONGHONG; YAN HESHUN; ZHOU YUANSONG; ZHU DONGMIN

Prio:

Appl.No: CN201310018849

IPC: B02C 13/28



Vacuum ball-milling degassing tank for rare gas analysis, and analysis method

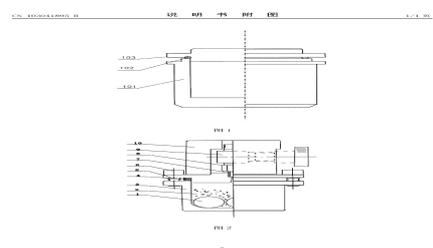
Publication: **CN 103041895 B 20150506**

Applicant: CHINA PETROLEUM & CHEMICAL; SINOPEC EXPLORATION & PRODUCTION RES INST

Inventor: LI GUANGYOU; TAO CHENG; WANG JIE; WANG PING; YANG HUAMIN

Prio:

Appl.No: CN201110310605



IPC: B02C 17/10

Arrangement method and structure of hydraulic control system of crawler-type mobile crusher

Publication: **CN 103056017 B 20150520**

Applicant: CINTEC HEAVY EQUIPMENT CO LTD
Inventor: GUI YU; LIU JINSONG; SHI WEN; YAN HESHUN;
YE JIAN; ZHU DONGMIN

Prio:
Appl.No: CN201310018882
IPC: B02C 25/00

CN 103056017 B 说明书附图 1/1页

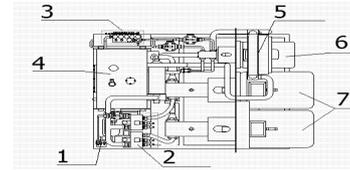


图 1

5

Coal mill multiparameter operation optimization energy-saving system

Publication: **CN 103084262 B 20150527**

Applicant: ELECTRIC POWER RES INST OF STATE GRID SHANDONG ELECTRIC POWER CO; SHANDONG LUNENG SOFTWARE TECHNOLOGY CO LTD
Inventor: DING SHUGENG; LIU SIBIN; WANG SHOUEN;
XING HONGWEI; ZHANG HUAWEI; ZHANG JIANHUI

Prio:
Appl.No: CN201310023620
IPC: B02C 25/00

CN 103084262 B 说明书附图 1/1页

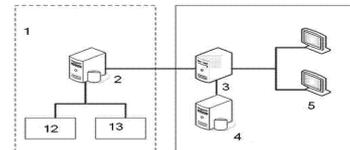


图 1

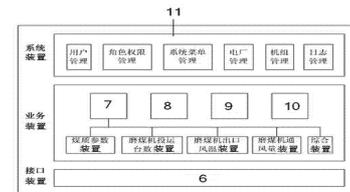


图 2

8

Environmentally-friendly old circuit board grinding machine

Publication: **CN 103100460 B 20150520**

Applicant: LIANG GANG
Inventor: LIANG GANG
Prio:
Appl.No: CN201110360336

CN 103100460 B 说明书附图 1/1页

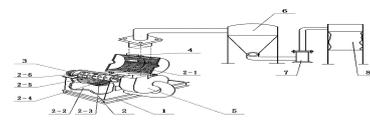


图 1

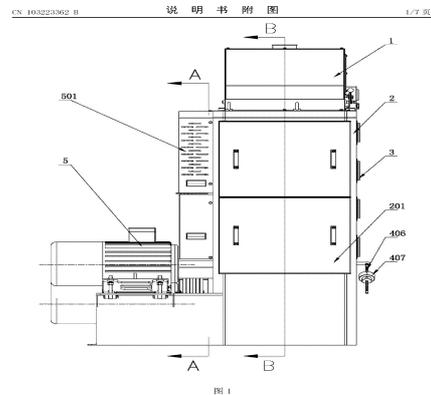
6

IPC: B02C 13/04

Waterfall type rice husking machine

Publication: [CN 103223362 B 20150506](#)

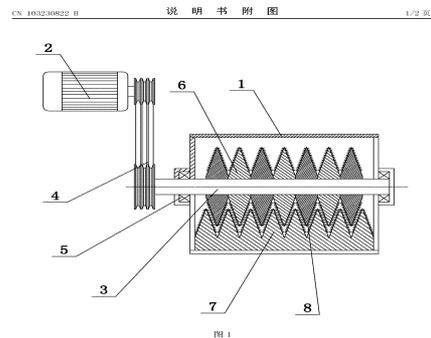
Applicant: MUYANG CO LTD
Inventor: HUANG GANG; WAN XIWU
Prio:
Appl.No: CN201310099079
IPC: B02B 3/04



Disc-type multi-tooth grinding machine

Publication: [CN 103230822 B 20150520](#)

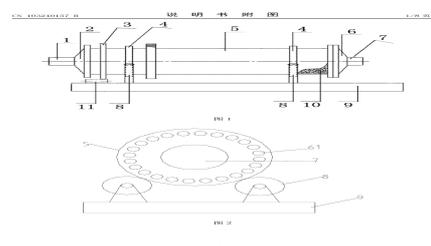
Applicant: UNIV HENAN POLYTECHNIC
Inventor: LI PING; OUYANG WEIQIANG; QIAN ZHIDONG;
SU LI; WU CHANGMING; YUAN QINGLONG
Prio:
Appl.No: CN201310181371
IPC: B02C 18/18



Garbage classifying, recycling and treating system and garbage classifying and recycling method

Publication: [CN 103240157 B 20150520](#)

Applicant: CHANGCHUN AORUI INVEST MAN CO LTD
Inventor: SONG CHAO
Prio:
Appl.No: CN201310145409



IPC: B02C 21/00

Method and system for crushing and recycling twisted ropes

Publication: **CN 103240158 B 20150520**

Applicant: DONGGUAN NINE DRAGONS PAPER IND CO LTD

Inventor: HU LIANG; LIN XINYANG; LIU MINGZHONG; LIU WENJUN; LIU ZHUOXING

Prio:

Appl.No: CN201310154786

IPC: B02C 21/00

CN 103240158 B 说明书附图 1/2页

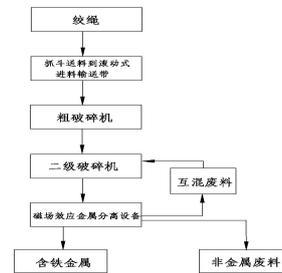


图 1

8

Mineral pulp classifying device

Publication: **CN 103240160 B 20150506**

Applicant: BEIJING GEN RES INST MINING; BGRIMM MECHANICAL AND ELECTRICAL TECHNOLOGY CO LTD

Inventor: CHEN DONG; FENG TIANRAN; HAN DENG FENG; LU SHIJIE; SHEN ZHENGCHANG

Prio:

Appl.No: CN201310134561

IPC: B02C 23/08

CN 103240160 B 说明书附图 1/1页

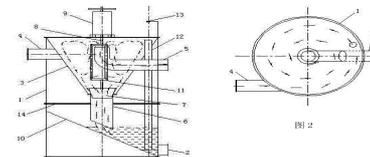


图 1

图 2

7

Transportable roller mill and transportable grinding installation

Publication: **CN 103260763 B 20150520**

Applicant: LOESCHE GMBH

Inventor: AUTHENRIETH MATTHIAS; BARCZUS CHRISTIAN; BETTENWORTH JOERG; HENDY NIGEL; KULAGIN WILHELM; WULFERT HOLGER

Prio: EP 20101122 2010007070

Appl.No: CN201080065916

CN 103260763 B 说明书附图 1/2页

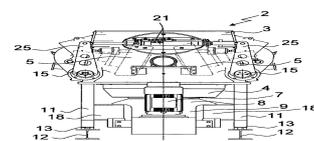


图 1

11

IPC: B02C 15/00

Automatic crushing system of super-hard material compound blocks

Publication: [CN 103316748 B 20150513](#)

Applicant: ZHONGNAN DIAMOND CO LTD
Inventor: CHE LIN; E DINGTAO; YAN GUOJUN; YAN LEI;
YANG QINGJIAN; ZHOU FEI

Prio:
Appl.No: CN201310227628
IPC: B02C 21/00

CN 103316748 B 说明书附图 1/2页

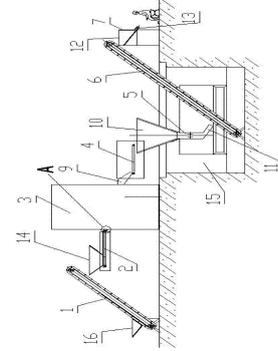


图 1

5

Screening device in super-fine grinding mill

Publication: [CN 103316754 B 20150527](#)

Applicant: SANMENXIA FANGYUAN IND CO LTD
Inventor: LIU CHANGJIANG; NIE QUNCHAO; ZHANG
FAN; ZHANG SANQIANG; ZHANG XIJUN

Prio:
Appl.No: CN201310271453
IPC: B02C 23/08

CN 103316754 B 说明书附图 1/3页

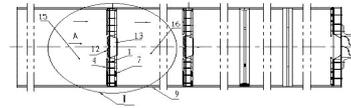


图 1

5

Method of processing nepheline syenite powder to produce an ultra-fine grain size product

Publication: [CN 103331194 B 20150520](#)

Applicant: UNIMIN CORP
Inventor: ACEVEDO ARTEMIO GONZALEZ; GONZALEZ
GERARDO HERNANDEZ; SANCHEZ MAURICIO
DURAN; SCHLESINGER LOUIS M

Prio: US 20070207 89990607
Appl.No: CN201310173138

CN 103331194 B 说明书附图 1/2页

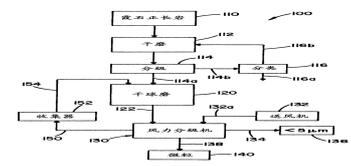


图 1

5

IPC: B02C 25/00

Homogenizer and storage cooler

Publication: **CN 103357478 B 20150513**

Applicant: SYSMEX CORP
Inventor: ASADA SHOICHIRO; JINDO KATSUHIKO;
OBINATA DAIJYU; OOI YOSHINORI; SHOHMI
KEIICHIRO

Prio: JP 20120329 2012076232, JP 20130227
2013037906

Appl.No: CN201310100507

IPC: B02C 19/18

CN 103357478 B 说明书附图 1/21页

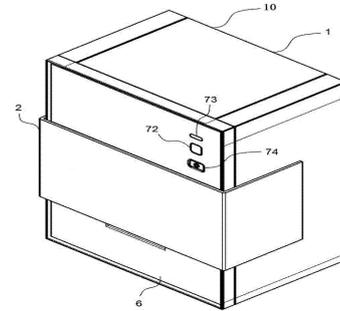


图 1

23

Method and system for crushing wood material into wood chips and drying wood chips

Publication: **CN 103357482 B 20150520**

Applicant: SHENZHEN JUUYUANTIANCHENG TECHNOLOGY
CO LTD

Inventor: HUANG YIN

Prio:

Appl.No: CN201310301924

IPC: B02C 21/00

CN 103357482 B 说明书附图 1/3页

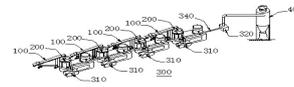


图 1



图 2

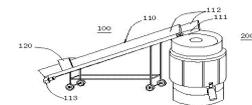


图 3

19

Wax plate conveying device

Publication: **CN 103357487 B 20150520**

Applicant: NINGBO INNOVATION2 MACHINERY
TECHNOLOGY CO LTD

Inventor: WANG HUAWEI; YU ZICHUN; ZHOU
FENGPING; ZHU NINGSHENG

Prio:

Appl.No: CN201310282756

CN 103357487 B 说明书附图 1/10页

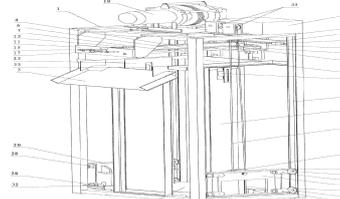


图 1

19

IPC: B02C 23/02

Centrifugal type partition-net-free material bead separator for media stirring mill

Publication: **CN 103357489 B 20150520**

Applicant: XIE XIAOFEI

Inventor: XIE XIAOFEI

Prio:

Appl.No: CN201210082058

IPC: B02C 23/12

CN 103357489 B 说明书附图 1/3页

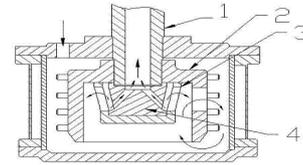


图 1

6

Grinding machine

Publication: **CN 103433103 B 20150513**

Applicant: NINGBO LONGFAR ELECTRIC APPLIANCES TECHNOLOGY CO LTD

Inventor: ZHOU XUEFENG

Prio:

Appl.No: CN201310346773

IPC: B02C 18/10

CN 103433103 B 说明书附图 1/2页

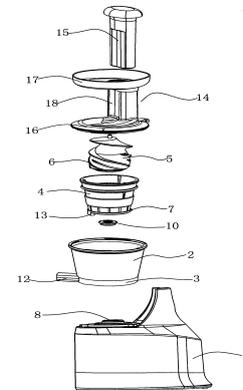


图 1

6

Mechanism for regulating distance between hammer wheel and grinding ring of wedge type vertical type ring mill

Publication: **CN 103447120 B 20150513**

Applicant: HUNAN ZHONGHONG HEAVY MACHINERY CO LTD

Inventor: SUN HONGZHONG; SUN ZISHUN

Prio:

CN 103447120 B 说明书附图 1/2页

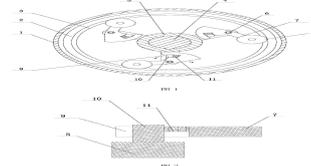


图 1

6

Appl.No: CN201310364555
IPC: B02C 15/08

Coating dispersion grinding mill

Publication: **CN 103464250 B 20150506**

Applicant: ANHUI MEINUO NEW MATERIAL
TECHNOLOGY CO LTD

Inventor: ZHANG JIN

Prio:

Appl.No: CN201310429650

IPC: B02C 17/10

CN 103464250 B 说明书附图 1/6页

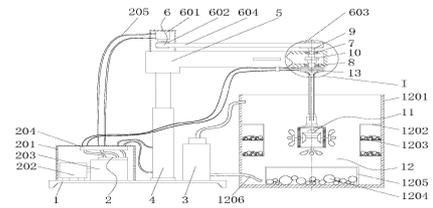


图 1

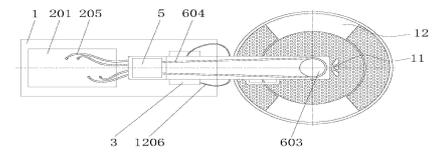


图 2

6

Self-propelled crushing station

Publication: **CN 103464267 B 20150520**

Applicant: CCTEG SHENYANG ENGINEERING CO LTD

Inventor: JIANG WEIDONG; LIU CHANG; MA PEIZHONG;
SONG BO; SUN XIAOQUANG; ZHANG
QINGMIN

Prio:

Appl.No: CN201310433956

IPC: B02C 21/02

CN 103464267 B 说明书附图 1/3页

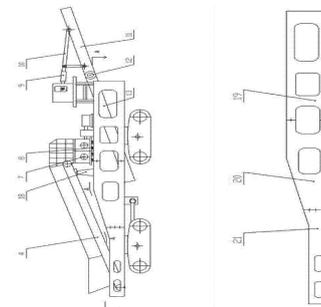


图 1

图 2

9

Cone-shaped crusher

Publication: **CN 103476501 B 20150527**

Applicant: HA YONG-GAN

Inventor: HA YONG-GAN

Prio: KR 20110414 20110034523, KR 20120313
20120025599, KR 20120416 2012002879

Appl.No: CN201280018428

CN 103476501 B 说明书附图 1/3页

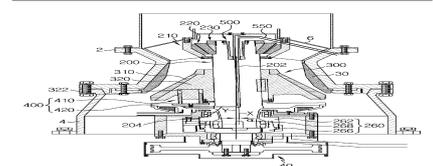


图 1

11

IPC: B02C 2/04

Device and method for regulating potassium feldspar powder size distribution

Publication: [CN 103495471 B 20150527](#)

Applicant: YINGDE AOSHENG NEW MATERIAL CO LTD
Inventor: DONG XIAOMING; LIU ZHIYONG; LU GUOYAN;
LU WENYI; LU YONGCHU; LUO GANMING; LYU
LIANHUAN; SU CHENG; YANG MINGXIANG; YE
DECHANG; ZHU WEIGUO

Prio:
Appl.No: CN201310460061
IPC: B02C 17/00

CN 103495471 B 说明书附图 1/8页

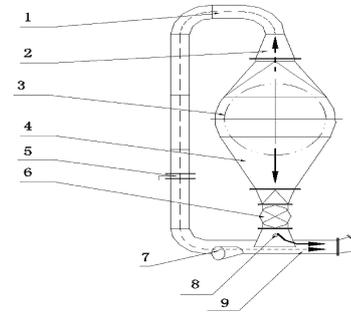


图 1

8

Pulse breaking mechanism, as well as seabed cobalt-rich crust breaking system and method

Publication: [CN 103551231 B 20150527](#)

Applicant: UNIV CENTRAL SOUTH
Inventor: HU QIONG; LIU SHAOJUN; ZHENG HAO

Prio:
Appl.No: CN201310580954
IPC: B02C 19/00

CN 103551231 B 说明书附图 1/3页

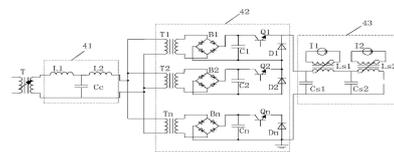


图 1

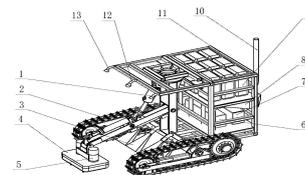


图 2

14

Municipal domestic garbage squeezing smashing and winnowing system

Publication: [CN 103551234 B 20150520](#)

Applicant: GUANGZHOU INST ENERGY CONV CAS
Inventor: CHEN YONG; LU TAO; WANG MIN; WANG
YAZHUO; YUAN HAORAN; ZHANG WEIJIAN

Prio:
Appl.No: CN201310526350

CN 103551234 B 说明书附图 1/3页

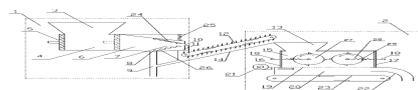


图 1



图 2

14

IPC: B02C 21/00

System for improving efficiency of wet process sanding, and operating method of same

Publication: **CN 103586111 B 20150506**

Applicant: BAOSTEEL MAGNETIC INDUSTRY JIANGSU CO LTD

Inventor: JING WEI; LIU CHEN; LIU GUOPING; TANG QINGLI; XU HUIYU; ZHU JIAYUN

Prio: CN20131055265
Appl.No: B02C 17/10
IPC:

CN 103586111 B 说明书附图 1/1页

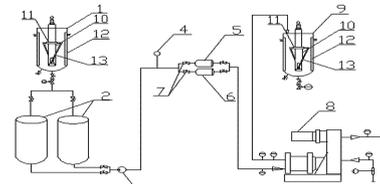


图 1

5

Embedded-type all-grain-size dry magnetic separation technology for closed recycle of iron-containing minerals in steel slag

Publication: **CN 103586118 B 20150527**

Applicant: UNIV HENAN POLYTECHNIC

Inventor: MA JIAO; SHI CHANGLIANG; WANG FEIYUE; WANG HEKUI; XIE YUJUAN; YANG KAI; ZHANG BINGHAO; ZHANG YISHUN

Prio: CN20131055986
Appl.No: B02C 21/00
IPC:

CN 103586118 B 说明书附图 1/3页

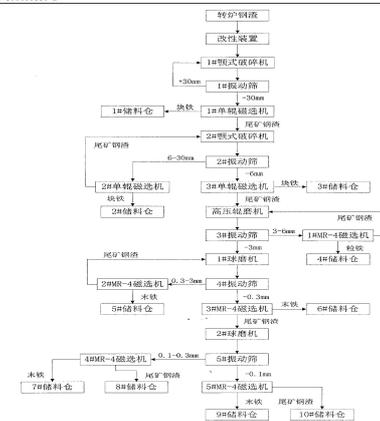


图 1

6

Movable pebble coal sealing collector

Publication: **CN 103586120 B 20150513**

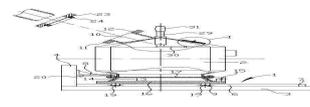
Applicant: YIN GUOQING

Inventor: YIN GUOQING

Prio: CN 20130822 201310369103

Appl.No: CN201310615321

CN 103586120 B 说明书附图 1/1页



7

IPC: B02C 23/00

Agitator ball mill having wear prevention

Publication: [CN 103596693 B 20150506](#)

Applicant: GUSTAV EIRICH GMBH & CO KG
Inventor: AHKE KLAUS; SEILER ANDREAS
Prio: DE 20110614 102011051041, EP 20120604 2012060523
Appl.No: CN201280029317
IPC: B02C 17/22

CN 103596693 B 说明书附图 1/3页

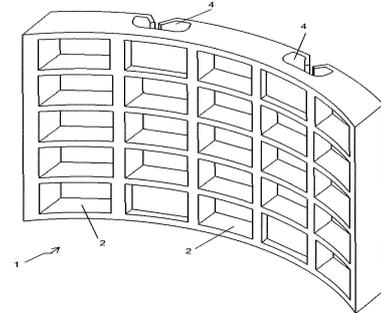


图 1

8

Processing method for refined rice

Publication: [CN 103623889 B 20150520](#)

Applicant: HUBEI JIAMENG GRAIN OIL CO LTD
Inventor: HUANG BAOJIA
Prio:
Appl.No: CN201310628116
IPC: B02B 5/00

Double extrusion roller press

Publication: [CN 103706433 B 20150520](#)

Applicant: JIANGSU PENGFEI GROUP CO LTD
Inventor: LI GANG; LI XIAOPING; LUO XINGHUA; ZHOU QUNYAN
Prio:
Appl.No: CN201410005182
IPC: B02C 4/02

CN 103706433 B 说明书附图 1/2页

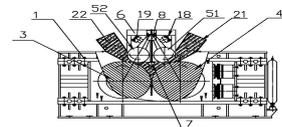


图 1

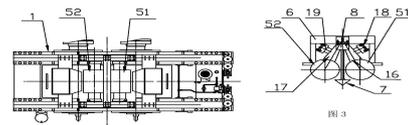


图 2

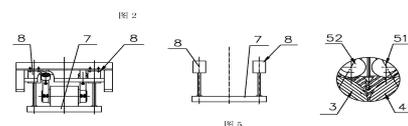


图 3



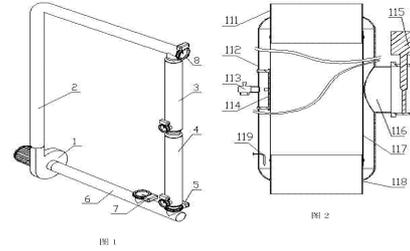
图 4

9

Circulating fluidized bed screening and crushing device and application method thereof

Publication: [CN 103721819 B 20150506](#)
Applicant: KUNMING TEKANG SCIENCE & TECHNOLOGY CO LTD
Inventor: JIA PING; JIA YUNQING; YANG YUNJIE; ZENG YAWEN
Prio:
Appl.No: CN201310748172
IPC: B02C 19/06

CN 103721819 B 说明书附图 1/4页

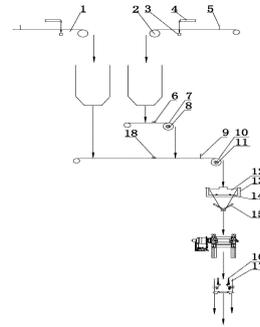


9

High-pressure grinding roll control system with offcut return function

Publication: [CN 103721832 B 20150527](#)
Applicant: NORTHERN ENG & TECH CORP MCC
Inventor: LI GUOZHOU; WEI BINGTUAN; ZHANG TINGDONG
Prio:
Appl.No: CN201310572564
IPC: B02C 25/00

CN 103721832 B 说明书附图 1/1页



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