The Director of the United States Patent and Trademark Office

Has received an application for a patent for a new and useful invention. The title and description of the invention are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the invention shall be granted under the law.

Therefore, this

United States Patent

Grants to the person(s) having title to this patent the right to exclude others from making, using, offering for sale, or selling the invention throughout the United States of America or importing the invention into the United States of America, and if the invention is a process, of the right to exclude others from using, offering for sale or selling throughout the United States of America, or importing into the United States of America, products made by that process, for the term set forth in 35 U.S.C. 154(a)(2) or (c)(1), subject to the payment of maintenance fees as provided by 35 U.S.C. 41(b). See the Maintenance Fee Notice on the inside of the cover.

[Signature]

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If the application for this patent was filed on or after June 8, 1995, the term of this patent begins on the date on which this patent issues and ends twenty years from the filing date of the application or, if the application contains a specific reference to an earlier filed application or applications under 35 U.S.C. 120, 121, 365(c), or 386(c), twenty years from the filing date of the earliest such application (“the twenty-year term”), subject to the payment of maintenance fees as provided by 35 U.S.C. 41(b), and any extension as provided by 35 U.S.C. 154(b) or 156 or any disclaimer under 35 U.S.C. 253.

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MOBILE APPARATUS FOR COMMUNITING LUMPS Material

Kormann

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Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 35 days.

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Field of Classification Search
CPC ........... B02C 23/12; B02C 23/02; B02C 21/026
See application file for complete search history.

References Cited
U.S. PATENT DOCUMENTS
6,877,610 B2 4/2005 Boast
241/101.76

FOREIGN PATENT DOCUMENTS
DE 10105348 A1 8/2002

OTHER PUBLICATIONS

Abstract
A mobile apparatus for comminuting lumpy material, especially rock, includes a chassis, a crushe arranged on the chassis, a feed device, provided on the chassis, for the lumpy material to be fed to the crusher and comminuted, a removal conveying device having a sieving device for the material comminuted by the crusher and a return conveying device for returning material held back by the sieve device to the feed device. In order to ensure easy separation of comminuted material of different grain sizes despite high crushing throughput, one conveying section of the return conveying device including at least two conveying sections is secured to the device by at least one rotational joint such that it can be turned away from the feed device.

9 Claims, 2 Drawing Sheets