

Title (en)

Method and device for crushing in a conical eccentric-drive crusher

Title (de)

Verfahren und Vorrichtung zum Zerkleinern in einem konischen Zerkleinerer mit Exzenterantrieb

Title (fr)

Procédé et dispositif de concassage dans un concasseur excentrique à cône

Publication

EP 2351615 A3 20121114 (EN)

Application

EP 11156410 A 20051214

Priority

- EP 05851127 A 20051214
- RU 2004139141 A 20041222

Abstract (en)

[origin: EP1839753A2] The invention relates to methods for medium and fine crushing and can find the widest use in the building, mining-and-metallurgical and similar industries where material crushing processes in conical eccentric-drive crushers are necessary. The method makes it possible to cut down the crushing and reducing steps by increasing the crushing ratio from 4 to 30 in a single plant, having integrated a fine crushing step and a first reducing step into a single process to substitute thereby at least two crushing plants for one. The method is characterized by a sequence of the conical eccentric-drive crusher operations as follows: first, setting the discharging slot size to zero, followed by charging the crushing chamber with the raw material, followed by starting the crusher, followed by increasing the discharging slot size to achieve the required productivity, and obtaining the required grain-size of the finished product by adjusting the rotational frequency of a drive eccentric. The discharge slot size is selected with taking into account that the greater is the discharging slot size, the greater is the clear opening of the crushing chamber and consequently the intra-layer destruction of the raw material, and the higher is the crushing process productivity.

IPC 8 full level

B02C 2/04 (2006.01)

CPC (source: EP)

B02C 2/042 (2013.01); **B02C 2/047** (2013.01)

Citation (search report)

- [X] US 3454230 A 19690708 - ALLEN WALTER R
- [XA] EP 0848994 A2 19980624 - NORDBERG INC [US]
- [XA] WO 9314870 A1 19930805 - SVEDALA ARBRA AB [SE]
- [XA] US 4967967 A 19901106 - MAGEROWSKI ANTHONY J [US], et al

Cited by

CN111974488A

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 1839753 A2 20071003; EP 1839753 A4 20091223; EP 1839753 B1 20110302; AT E499993 T1 20110315; AU 2005319763 A1 20060629; AU 2005319763 B2 20100819; CA 2593968 A1 20060629; CA 2593968 C 20120925; CN 101142024 A 20080312; CN 101142024 B 20111221; DE 602005026718 D1 20110414; EP 2351615 A2 20110803; EP 2351615 A3 20121114; EP 2351615 B1 20150225; RU 2283697 C2 20060920; WO 2006068539 A2 20060629; WO 2006068539 A3 20061012; ZA 200705517 B 20120926

DOCDB simple family (application)

EP 05851127 A 20051214; AT 05851127 T 20051214; AU 2005319763 A 20051214; CA 2593968 A 20051214; CN 200580048250 A 20051214; DE 602005026718 T 20051214; EP 11156410 A 20051214; RU 2004139141 A 20041222; RU 2005000663 W 20051214; ZA 200705517 A 20070705