

Title (en)
METHOD FOR CRUSHING IN A CONICAL ECCENTRIC-DRIVE CRUSHER

Title (de)
VERFAHREN ZUM SCHREDDERN IN EINEM KONISCHEN SCHREDDER MIT EXZENTERANTRIEB

Title (fr)
PROCEDE DE CONCASSAGE DANS UN CONCASSEUR EXCENTRIQUE A CONE

Publication
EP 1839753 A4 20091223 (EN)

Application
EP 05851127 A 20051214

Priority
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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.

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B02C 2/04 (2006.01)

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

Citation (search report)
• [X] US 3700175 A 19721024 - SAITO HISATUNA
• [X] US 5312053 A 19940517 - GANSER IV WILLIAM A [US]
• [A] FR 2170387 A5 19730914 - THALMANN ERNST MAGDEBURG [DD]
• See references of WO 2006068539A2

Cited by
US11007532B2

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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

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