

Title (en)

Agitator mill with separator for retaining milling beads

Title (de)

Rührwerksmühle mit Separator zur Zurückhaltung von Mahlperlen

Title (fr)

Broyeur agitateur avec séparateur pour la rétention de perles de broyage

Publication

EP 0719585 B1 19990616 (DE)

Application

EP 95119228 A 19951206

Priority

DE 4447321 A 19941231

Abstract (en)

[origin: EP0719585A1] Stirred grinding mill with continuous flow between inlet(4) and outlet (21) includes a rotating shaft carrying agitators (3). The mill vessel (1) is charged with grinding beads, which are retained by a rotary separator located on the shaft, in advance of the outlet. The separator has radial openings which extend from an annular, internal region about the shaft, through to an outer, annular space forming part of the main grinding volume. In this novel design, the rotary (6) separator is designed to classify by centrifugal force. The radial openings are formed by gaps between adjacent rotor blades (10). The finest particles achieve the outlet by axial travel, but coarse material is flung outwards to return to the mill. Also claimed is a grinding circuit, in which the mill described, has a centrifuge (or similar) at the outlet, to return any oversize to the lower input of the mill, and deliver the fines as product.

IPC 1-7

B02C 17/16

IPC 8 full level

B02C 17/16 (2006.01); **B02C 17/18** (2006.01)

CPC (source: EP US)

B02C 17/161 (2013.01 - EP US)

Cited by

DE19832769C2; CN105327743A; EP2106859A3; CN104289279A; CN104888973A; CN111215200A

Designated contracting state (EPC)

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