Title (en)

Agitator mill.

Title (de)

Rührwerksmühle.

Title (fr)

Broyeur agitateur.

Publication

EP 0206207 A2 19861230 (DE)

Application

EP 86108202 A 19860616

Priority

DE 3521668 A 19850618

Abstract (en)

1. Agitator mill, comprising - a grinding body which includes a grinding chamber (18) capable of being filled at least in part with grinding elements (50) and a material (52) to be ground and which has an inlet (28) for material to be ground as well as an outlet (30) for ground stock, - an agitator shaft (22) which has an end portion (38) disposed in the grinding chamber (18) and having formed therein a cavity (40), - and a separator device (42) which, for at least an essential part thereof, is disposed inside the cavity (40) and allows finish-ground stock (52) to flow out of the grinding chamber (18) and towards the outlet (30) for ground stock, but retains grinding elements (50), - the cavity (40) having an open face side at the inner shaft end, so that grinding elements (50) and material (52) to be ground may flow into the cavity through the face side thereof, - and the end portion (38) of the agitator shaft (22) including outlet openings (46) formed around the cavity (40), said outlet openings allowing grinding element (50) which have reached the cavity through the inner shaft end to flow back into the grinding chamber (18), characterized in that at least part of the outlet openings (46) are tangentially oriented with respect to the separator device (42) and face backwards when referred to the rotational direction of the agitator shaft (22) in use.

Abstract (de)

In einem Mahlbehälter (12), der einen mindestens teilweise mit Mahlkörpern (50) und Mahlgut (52) füllbaren Mahlraum (18) enthält und einen Mahlguteinlaß sowie einen Mahlgutauslaß (30) aufweist, ist eine Rührwelle (22) angeordnet, die einen Endabschnitt (38) mit einem am Wellenende offenen Hohlraum (40) hat. Innerhalb des Hohlraums (40) ist eine Trennvorrichtung (42) angeordnet, die fertigbearbeitetes Mahlgut (52) aus dem Hohlraum (40) zum Mahlgutauslaß abströmen läßt, Mahlkörper (50) jedoch zurückhält. Der Endabschnitt (38) der Rührwelle (22) hat Auslaßöffnungen (46), die in den Hohlraum (40) gelangte Mahlkörper (50) abströmen lassen. Das Abströmen der Mahlkörper (50) wird dadurch gefördert, daß mindestens ein Teil der Auslaßöffnungen (46) tangential zur Trennvorrichtung (42) angeordnet und, bezogen auf die Betriebsdrehrichtung der Rührwelle (22), rückwärtsgerichtet ist.

IPC 1-7

B02C 17/16

IPC 8 full level

B02C 17/16 (2006.01)

CPC (source: EP)

B02C 17/161 (2013.01)

Cited by

EP1977832A3; DE4009092C1; EP0448100A1; DE4029139A1; DE4002613A1; DE3727863C1; EP4349488A1; EP0322623B1; EP0439826B1

Designated contracting state (EPC)

BE CH DE FR GB IT LI

DOCDB simple family (publication)

EP 0206207 A2 19861230; **EP 0206207 A3 19871125**; **EP 0206207 B1 19890524**; **EP 0206207 B2 19940302**; DE 3663454 D1 19890629

DOCDB simple family (application)

EP 86108202 A 19860616; DE 3663454 T 19860616