

Title (en)
FLUIDIZED-BED DEVICE FOR CONTINUOUSLY SEPARATING TWO MIXED SOLID PHASES

Publication
EP 0187730 B1 19911127 (FR)

Application
EP 86420003 A 19860106

Priority
FR 8500468 A 19850108

Abstract (en)
[origin: ES8705256A1] In a fluidized bed apparatus for separation of two mixed solid phases of which one is formed by a fluidizable powdery material and the other is formed by a material which is not fluidizable under the conditions of fluidization of the former, an enclosure is suspended by springs and formed by a lower casing portion (1) for a flow of gas and an upper casing portion (2) for a flow of fluidized powdery materials, between which there is disposed a porous fluidization wall (3), at least one conduit (4) for feeding gas to the lower casing portion (1) and at least one conduit (5) for discharging the fluidization gas from the upper casing portion (2). The upper casing (2) includes an inlet (6) for the regular introduction of the mixture of the two solid phases to be separated, an overflow (7) on a face of the enclosure for discharge of the fluidized solid phase, and an outlet for discharge of the settled solid phase. The outlet is formed by an opening (13) disposed at the level of the horizontal porous fluidization wall (3) in the partition (12) which is itself disposed towards the end of the upper casing portion (2) opposite the overflow (7). Also included is a vibrator (9) for producing periodic vibration for communicating to the porous wall a vibration having a component oriented in the opposite direction to the overflow.

IPC 1-7
B03B 4/00; C25C 3/14

IPC 8 full level
B07B 4/08 (2006.01); **B03B 4/02** (2006.01); **B07B 11/06** (2006.01); **C25C 3/14** (2006.01)

CPC (source: EP US)
B03B 4/02 (2013.01 - EP US); **B07B 11/06** (2013.01 - EP US); **C25C 3/14** (2013.01 - EP US)

Cited by
US5071541A; CZ299946B6; EP0615786A1; US6382881B1; EP0506180A1; DE102008021346A1; WO9962800A1

Designated contracting state (EPC)
DE FR GB IT SE

DOCDB simple family (publication)
EP 0187730 A2 19860716; EP 0187730 A3 19890503; EP 0187730 B1 19911127; AU 5188586 A 19860717; AU 576043 B2 19880811; BR 8600027 A 19860923; CA 1291968 C 19911112; CN 1005460 B 19891018; CN 86100050 A 19860702; DE 3682594 D1 19920109; EG 17836 A 19910630; ES 550700 A0 19870501; ES 8705256 A1 19870501; FR 2575680 A1 19860711; FR 2575680 B1 19870703; GR 860026 B 19860624; HU 196918 B 19890228; HU T43350 A 19871028; IE 58687 B1 19931103; IE 860033 L 19860708; JP H0611432 B2 19940216; JP S61164687 A 19860725; MX 166710 B 19930129; NO 167263 B 19910715; NO 167263 C 19911023; NO 855220 L 19860709; NZ 214719 A 19880429; US 4741443 A 19880503; YU 206685 A 19880430; YU 44020 B 19900228; ZA 86107 B 19861029

DOCDB simple family (application)
EP 86420003 A 19860106; AU 5188586 A 19860107; BR 8600027 A 19860107; CA 499157 A 19860107; CN 86100050 A 19860107; DE 3682594 T 19860106; EG 686 A 19860107; ES 550700 A 19860107; FR 8500468 A 19850108; GR 860100026 A 19860107; HU 4286 A 19860107; IE 3386 A 19860107; JP 122886 A 19860107; MX 117886 A 19860108; NO 855220 A 19851220; NZ 21471986 A 19860106; US 81714686 A 19860108; YU 206685 A 19851230; ZA 86107 A 19860107