

Title (en)
FLUIDISED BED-COUNTER JET MILL

Publication
EP 0139279 B1 19880309 (DE)

Application
EP 84112177 A 19841011

Priority
DE 3338138 A 19831020

Abstract (en)
[origin: US4602743A] The apparatus disclosed relates to a fluidized bed jet mill having a grinding chamber which is free of fixtures which is provided in its bottom region with a nozzle with a gas jet emerging vertically upward. The jet mill is configured such that when the grinding chamber is filled with the material to be reduced in size, material and gas emerge from the bed of material as a column of little speed. The column serves as a feeder for a classifier provided above the surface of the material bed and driven independently from the impulse of the jet emerging from the bottom nozzle. For improving the efficiency of energy utilization in grinding, a plurality of additional nozzles are provided. The additional nozzles discharge below the surface of the bed of material and into the grinding chamber. The orifices of the additional nozzles are uniformly distributed in a plane running perpendicular to the axis of the bottom nozzle. The additional nozzles are distributed about the circumference of a circle within the plane and coaxial with the axis of the bottom nozzle. The axes of the additional nozzles all intersect at a point on the axis of the bottom nozzle below the plane of the nozzle orifices.

IPC 1-7
B02C 19/06

IPC 8 full level
B02C 19/06 (2006.01)

CPC (source: EP US)
B02C 19/068 (2013.01 - EP US)

Cited by
EP3988214A1; US5247052A; EP0488637A3; EP0377170A3; EP0362525A3; US11339021B2; US11654605B2; WO2008046727A3; WO2014080035A1; US7850102B2; US8039105B2; DE102010052028A1; WO2012069041A1; US9249365B2; DE102020006008B3; US11833523B2; TWI446970B

Designated contracting state (EPC)
AT BE CH FR GB LI LU NL SE

DOCDB simple family (publication)
EP 0139279 A2 19850502; EP 0139279 A3 19851002; EP 0139279 B1 19880309; AT E32837 T1 19880315; DE 3338138 A1 19850509; DE 3338138 C2 19860116; JP S60168547 A 19850902; JP S628215 B2 19870221; US 4602743 A 19860729

DOCDB simple family (application)
EP 84112177 A 19841011; AT 84112177 T 19841011; DE 3338138 A 19831020; JP 21877784 A 19841019; US 66281584 A 19841019