

Title (en)
MIXER WITH STIRRER AND GRINDER

Publication
EP 0304604 A3 19890607 (DE)

Application
EP 88111308 A 19880714

Priority
DE 3728710 A 19870828

Abstract (en)
[origin: JPS6490023A] PURPOSE: To make it possible to rapidly and effectively pulverize lumps by disposing a mixer between a pulverizer consisting of two pieces of shearing rings which are concentric with each other and are freely relatively rotatable and the wall surface of a cylindrical container. CONSTITUTION: Mixing means 8 are securely mounted via arms 7 of a radial direction at a freely rotatable shaft 4 of the mixer arranged in the cylindrical container 1. At least one pulverizer 10 mounted at the wall surface of the container 1 is constituted to dispose its pulverizing elements 11, 12 apart a spacing from the container wall surface in such a manner that the mixing means 8 move between the wall surface of the container 1 and the pulverizing elements. The pulverizer 10 comprises two pieces of the shearing rings 13, 14 which are concentric with each other and are freely relatively rotatable. Consequently, the lumps may be rapidly and effectively pulverized.

IPC 1-7
B01F 7/04

IPC 8 full level
B02C 18/18 (2006.01); **C09K 23/16** (2022.01)

CPC (source: EP US)
B01F 23/023 (2022.01 - EP); **B01F 27/70** (2022.01 - EP US); **B01F 33/833** (2022.01 - EP US); **B01F 33/83612** (2022.01 - EP);
B01F 23/023 (2022.01 - US); **B01F 23/50** (2022.01 - EP US); **B01F 27/0726** (2022.01 - EP US); **B01F 33/83612** (2022.01 - US)

Citation (search report)
• [X] EP 0200003 A2 19861105 - DRAISWERKE GMBH [DE]
• [A] GB 1067733 A 19670503 - STUDIENGESELLSCHAFT KOHLE MBH
• [A] DE 1040513 B 19581009 - WILHELM SCHMITZ
• [A] DE 1507889 A1 19700212 - DRAISWERKE GMBH
• [A] FR 2233089 A1 19750110 - JANKE & KUNKEL KG [DE]
• [A] US 2815246 A 19571203 - ERNST NYROP JOHAN
• [A] DE 2823238 B1 19791031 - KERNFORSCHUNGSANLAGE JUELICH
• [A] DE 1140440 B 19621129 - FORSCH INST PROFESSOR ING CHEM
• [A] GB 624107 A 19490527 - FREDERICK DAVID EDWARDS, et al

Cited by
EP0664152A1; DE102008010841A1; EP0836880A1; DE4124984A1; US5413284A; WO2020156806A1

Designated contracting state (EPC)
AT BE CH DE ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)
EP 0304604 A2 19890301; **EP 0304604 A3 19890607**; **EP 0304604 B1 19930804**; AT E92364 T1 19930815; DE 3728710 A1 19890309;
DE 3728710 C2 19970821; DE 3882846 D1 19930909; ES 2043739 T3 19940101; JP H0815538 B2 19960221; JP S6490023 A 19890405;
US 4860960 A 19890829

DOCDB simple family (application)
EP 88111308 A 19880714; AT 88111308 T 19880714; DE 3728710 A 19870828; DE 3882846 T 19880714; ES 88111308 T 19880714;
JP 21351488 A 19880826; US 22667888 A 19880801