

Title (en)
Dispersion apparatus and dispersion method

Title (de)
Vorrichtung und Verfahren zum Dispergieren

Title (fr)
Dispositif et procédé de dispersion

Publication
EP 1358940 A1 20031105 (EN)

Application
EP 03008822 A 20030424

Priority
JP 2002128986 A 20020430

Abstract (en)
A dispersion apparatus and a dispersion method are provided which enable process material to be dispersed efficiently without causing an increase in driving force, and the quality of processed material to be improved. In this dispersion apparatus and method, rotors (19) and agitating discs (18) are fixed alternately on a main shaft (15) in a cylinder (11) to rotate in unison. The outside diameter of the rotors (19) is D1, the inside diameter of the cylinder is D2, and D1/D2 is set in a range of 0.4 to 0.7. The ratio D1/P of the array pitch P of the agitating discs (18) and the outside diameter D1 of the rotors is set in a range of 1.4 to 3.0. <IMAGE>

IPC 1-7
B02C 17/16

IPC 8 full level
B01F 3/12 (2006.01); **B01F 7/10** (2006.01); **B01F 13/10** (2006.01); **B01F 15/06** (2006.01); **B01F 27/73** (2022.01); **B02C 17/16** (2006.01);
B02C 17/18 (2006.01); **B01F 7/00** (2006.01)

CPC (source: EP)
B01F 23/53 (2022.01); **B01F 27/73** (2022.01); **B01F 33/8305** (2022.01); **B01F 33/83613** (2022.01); **B01F 35/95** (2022.01); **B02C 17/16** (2013.01);
B02C 17/163 (2013.01); **B02C 17/166** (2013.01); **B02C 17/1815** (2013.01); **B01F 27/1151** (2022.01); **B01F 2215/0409** (2013.01)

Citation (search report)
• [XY] EP 0704245 A1 19960403 - MITSUBISHI HEAVY IND LTD [JP]
• [X] US 2448042 A 19480831 - HAVEN MILLER BRUCE DE
• [Y] PATENT ABSTRACTS OF JAPAN vol. 1998, no. 01 30 January 1998 (1998-01-30)

Cited by
CN112999911A; JP2015112549A; CN108654762A; EP4108339A4

Designated contracting state (EPC)
CH DE LI

DOCDB simple family (publication)
EP 1358940 A1 20031105; EP 1358940 B1 20070815; CN 100512938 C 20090715; CN 1454704 A 20031112; DE 60315540 D1 20070927;
DE 60315540 T2 20080430

DOCDB simple family (application)
EP 03008822 A 20030424; CN 03122063 A 20030424; DE 60315540 T 20030424