

Title (en)

Gear pump for the delivery of fluids

Title (de)

Zahnradpumpe zum Fördern von Fluiden

Title (fr)

Pompe à engrenages pour le déplacement de fluides

Publication

EP 0866224 B1 20011004 (DE)

Application

EP 98103651 A 19980303

Priority

DE 19710804 A 19970317

Abstract (en)

[origin: EP0866224A1] The gear pump has meshing gears of non-ferrous metal, special steel, engineering ceramic, powder metallurgical metal or alloy, optionally filled thermoplastic or thermosetting plastic or synthetic carbon. The gears (6, 9) are surrounded by a work chamber (3) housing which consists of a synthetic material with a carbonised non-graphitic carbon matrix incorporating a filler of 35-97 wt.% graphite, 0-62 wt.% non-graphitised petroleum or hard coal tar pitch coke and 3-20 wt.% mineral components. Preferably, the pores of the housing material are filled with a set impregnant selected from phenolic resins, furan resins, polyester resins, polyamides and fluorinated hydrocarbon resin.

IPC 1-7

F04C 2/08

IPC 8 full level

F04C 2/10 (2006.01); **F01C 21/10** (2006.01); **F04C 2/08** (2006.01); **F04C 15/00** (2006.01); **F04C 2/18** (2006.01)

CPC (source: EP US)

F01C 21/104 (2013.01 - EP US); **F04C 2/082** (2013.01 - EP US); **F04C 2/102** (2013.01 - EP US); **F04C 2/18** (2013.01 - EP US); **F04C 2240/802** (2013.01 - EP US); **F05C 2203/0882** (2013.01 - EP US)

Cited by

EP2208889A1; US6612821B1; US9279424B2; US8951027B2; EP4166751A1; BE1029799B1; WO2010133390A3; WO2023062479A1

Designated contracting state (EPC)

BE CH DE DK ES FR GB IE IT LI NL SE

DOCDB simple family (publication)

EP 0866224 A1 19980923; **EP 0866224 B1 20011004**; DE 19710804 A1 19980924; DE 59801606 D1 20011108; DK 0866224 T3 20020128; ES 2163816 T3 20020201; JP H10259785 A 19980929; KR 19980080338 A 19981125; US 6053718 A 20000425

DOCDB simple family (application)

EP 98103651 A 19980303; DE 19710804 A 19970317; DE 59801606 T 19980303; DK 98103651 T 19980303; ES 98103651 T 19980303; JP 8294198 A 19980313; KR 19980008937 A 19980317; US 4278898 A 19980317