

Title (en)

Magnetorheological fluids and polymer coated magnetic particles

Title (de)

Magnetorheologische Flüssigkeiten und mit Polymer beschichtete, magnetische Teilchen

Title (fr)

Fluides magnétorhéologiques et particules magnétiques revêtues d'un polymère

Publication

**EP 0845790 B1 20020710 (DE)**

Application

**EP 97120063 A 19971117**

Priority

DE 19649321 A 19961128

Abstract (en)

[origin: EP0845790A1] Magneto-rheological fluid consists of magnetisable particles of an oleophilic fluid and optionally a thickener. The magnetisable particles are coated with an organic polymer. Also claimed is the production of the magnetisable particles coated with polymer comprising silanizing the particles by reacting with a silane of formula:  $R_1-Si((R_2)_a)(X_2)_3a$  (where  $R_1$  = 1-20C alkyl or 2-20C alkylene optionally substituted with an amino, isocyanate, methacryloxy, acryloyloxy, epoxy or mercapto group and/or interrupted by O, NH, COO or NHCOO;  $R_2$  = phenyl, or 1-6C alkyl; X = hydrolysable group; and a = 0-2).

IPC 1-7

**H01F 1/44**; **H01F 1/06**

IPC 8 full level

**H01F 1/06** (2006.01); **H01F 1/44** (2006.01)

CPC (source: EP US)

**H01F 1/061** (2013.01 - EP US); **H01F 1/447** (2013.01 - EP US)

Cited by

DE10333703B4; US7959822B2; WO0131662A1; WO0127945A1; DE102010026782A1; WO2012004236A1

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