

Title (en)  
ELECTROVISCOUS FLUIDS

Publication  
**EP 0201827 A3 19871007 (DE)**

Application  
**EP 86106109 A 19860505**

Priority  
DE 3517281 A 19850514

Abstract (en)  
[origin: US4668417A] An electroviscous fluid comprising more than 25% by weight of silica gel with a water content of 1 to 15% by weight, a non-conductive oily phase dispersion medium, 1 to 30% by weight of one or more polymers soluble in the dispersion medium, the weight percentage being based on the water-containing silica gel, and the polymers having a molecular weight in the range of from  $5 \times 10^3$  to  $10^6$  and containing 0.1 to 10% by weight of N and/or OH and 25 to 83% by weight of C4 to C24-alkyl groups. Such electroviscous fluids are useful for transmitting powerful forces by means of a low electronic output, for example, in hydraulic valves and shock absorbers.

IPC 1-7  
**C10M 161/00**

IPC 8 full level  
**C09K 23/52** (2022.01); **B01J 13/00** (2006.01); **C08K 3/00** (2006.01); **C08K 3/34** (2006.01); **C08K 3/36** (2006.01); **C08L 101/02** (2006.01); **C10M 161/00** (2006.01); **C10M 169/04** (2006.01); **C10M 171/00** (2006.01); **C10N 20/04** (2006.01); **C10N 30/04** (2006.01); **C10N 40/14** (2006.01)

CPC (source: EP US)  
**C10M 125/26** (2013.01 - EP US); **C10M 143/10** (2013.01 - EP US); **C10M 143/12** (2013.01 - EP US); **C10M 145/02** (2013.01 - EP US); **C10M 149/02** (2013.01 - EP US); **C10M 161/00** (2013.01 - EP US); **C10M 171/001** (2013.01 - EP US); **C10M 2201/087** (2013.01 - EP US); **C10M 2201/10** (2013.01 - EP US); **C10M 2201/102** (2013.01 - EP US); **C10M 2201/105** (2013.01 - EP US); **C10M 2205/04** (2013.01 - EP US); **C10M 2205/06** (2013.01 - EP US); **C10M 2207/289** (2013.01 - EP US); **C10M 2209/02** (2013.01 - EP US); **C10M 2215/22** (2013.01 - EP US); **C10M 2215/221** (2013.01 - EP US); **C10M 2215/225** (2013.01 - EP US); **C10M 2215/226** (2013.01 - EP US); **C10M 2215/30** (2013.01 - EP US); **C10M 2217/02** (2013.01 - EP US); **C10M 2217/022** (2013.01 - EP US); **C10M 2217/023** (2013.01 - EP US); **C10M 2217/024** (2013.01 - EP US); **C10M 2217/026** (2013.01 - EP US); **C10M 2217/028** (2013.01 - EP US); **C10M 2217/06** (2013.01 - EP US); **C10N 2040/14** (2013.01 - EP US); **C10N 2040/16** (2013.01 - EP US); **C10N 2040/17** (2020.05 - EP US); **C10N 2040/175** (2020.05 - EP US); **C10N 2040/18** (2013.01 - EP US); **C10N 2040/185** (2020.05 - EP US)

Citation (search report)  
• [A] US 3047507 A 19620731 - WINSLOW WILLIS M  
• [A] US 3397147 A 19680813 - MARTINEK THOMAS W  
• [A] EP 0082574 A2 19830629 - SHELL INT RESEARCH [NL]  
• [A] DE 1644951 A1 19710513 - SHELL INT RESEARCH

Cited by  
EP0699743A3; EP0699744A3; EP0636683A1; EP0350167A1; AU622910B2

Designated contracting state (EPC)  
DE FR GB IT SE

DOCDB simple family (publication)  
**EP 0201827 A2 19861120**; **EP 0201827 A3 19871007**; **EP 0201827 B1 19891108**; BR 8602157 A 19870113; DE 3517281 A1 19861120; DE 3666835 D1 19891214; JP H0710993 B2 19950208; JP S61259752 A 19861118; US 4668417 A 19870526

DOCDB simple family (application)  
**EP 86106109 A 19860505**; BR 8602157 A 19860513; DE 3517281 A 19850514; DE 3666835 T 19860505; JP 10688486 A 19860512; US 85587386 A 19860424