

Title (en)
Silicone fluids for viscous couplings.

Title (de)
Silikonflüssigkeiten für Visco-Kupplungen.

Title (fr)
Fluides de silicone pour accouplements visqueux.

Publication
EP 0397507 A1 19901114 (EN)

Application
EP 90305069 A 19900510

Priority

- JP 2870090 A 19900207
- JP 3099090 A 19900209
- JP 3336890 A 19900213
- JP 11626589 A 19890510
- JP 31270089 A 19891130

Abstract (en)
An organopolysiloxane, containing a C1-18, optionally halogenated, hydrocarbon group, is used as the fluid in a viscous coupling, with as additive:
a) a phosphorus type anti-wear agent (27 formulae are given), e.g. a triaryl phosphate, optionally also with a sulfur or zinc dithiophosphate agent, each in amount of 0.01 - 5 wt %; or b) a metal deactivator, e.g. benzotriazole or other heterocyclic compound or an organic acid, and or a corrosion inhibitor, e.g. a stearate, each in amount of 0.001 to 1 wt %. An antioxidant may also be added, e.g. an amine, in amount of 0.001 to 5 wt %. The fluids are exemplified as used in a coupling having 111 metal discs, with 25 to 50 rpm difference in speeds of rotation, at 130 DEG C for up to 100 hours; they have improved heat-resistance, and so suffer little change in viscosity or torque in use.

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C10M 169/04; C10N 40/04

IPC 8 full level
C10M 169/04 (2006.01)

CPC (source: EP)
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Citation (search report)

- [Y] GB 2206887 A 19890118 - COSMO OIL CO LTD, et al
- [Y] FR 2455079 A1 19801121 - OLIN CORP [US]
- [X] US 3532730 A 19701006 - CULPEPPER ALAN L
- [X] US 4744915 A 19880517 - BUDNIK RICHARD A [US]
- [X] GB 695308 A 19530805 - DOW CORNING LTD
- [A] GB 1296163 A 19721115
- [A] GB 2203750 A 19881026 - DOW CORNING

Cited by
EP0599251A1; US5334320A; EP0462777A3; US5334319A; EP0636682A1; US5656577A; DE4310593A1; US5399615A; WO2018185026A1; WO2006024451A1; EP0465156B1

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