

Title (en)

Power transmission fluids with enhanced extreme pressure and antiwear characteristics

Title (de)

Kraftübertragungsfluide mit verbesserten Höchstdruck- und Verschleißschutzeigenschaften

Title (fr)

Fluides de transport de force motrice ayant des caractéristiques de pression extrême et d'anti-usure améliorées

Publication

EP 1624043 A3 20090624 (EN)

Application

EP 05012489 A 20050610

Priority

- US 59172204 P 20040728
- US 96321604 A 20041011

Abstract (en)

[origin: EP1624043A2] A fluid composition is described for extreme pressure applications. The fluid composition includes a base oil, and an additive composition comprising sulfurized fatty oil in an amount sufficient to provide at least 1,000 ppm sulfur to the fluid composition, and dialkyl thiadiazole in an amount sufficient to provide at least 500 ppm sulfur to the fluid composition. Fluids containing these respective amounts of sulfurized fatty oil and dialkyl thiadiazole exhibit failure loads which equal or exceed 794 kg (1750 pounds) at 100°C and 150°C, respectively, as measured according to a Falex EP test of ASTM D-3233.

IPC 8 full level

C10M 141/08 (2006.01); **C10M 135/06** (2006.01); **C10M 135/36** (2006.01); **C10N 40/04** (2006.01)

CPC (source: EP KR US)

C10L 1/10 (2013.01 - EP US); **C10L 10/08** (2013.01 - EP US); **C10M 125/06** (2013.01 - KR); **C10M 141/08** (2013.01 - EP US); **C10M 169/04** (2013.01 - EP US); **C10M 2219/022** (2013.01 - EP US); **C10M 2219/024** (2013.01 - EP US); **C10M 2219/106** (2013.01 - EP US); **C10N 2020/02** (2013.01 - EP US); **C10N 2030/06** (2013.01 - EP US); **C10N 2040/04** (2013.01 - EP US); **C10N 2040/042** (2020.05 - EP US); **C10N 2040/044** (2020.05 - EP US); **C10N 2040/045** (2020.05 - EP US)

Citation (search report)

- [X] EP 1231256 A2 20020814 - ETHYL CORP [US]
- [X] EP 0280580 A2 19880831 - EXXON CHEMICAL PATENTS INC [US]
- [X] EP 1428866 A1 20040616 - NIPPON OIL CORP [JP]

Cited by

EP1857533A1; US10428293B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR LV MK YU

DOCDB simple family (publication)

EP 1624043 A2 20060208; **EP 1624043 A3 20090624**; **EP 1624043 B1 20130522**; AU 2005203052 A1 20060216; CA 2507461 A1 20060128; CN 1727460 A 20060201; CN 1727460 B 20100623; JP 2006037096 A 20060209; JP 4388914 B2 20091224; KR 100714739 B1 20070504; KR 20060048888 A 20060518; SG 119313 A1 20060228; US 2006025314 A1 20060202

DOCDB simple family (application)

EP 05012489 A 20050610; AU 2005203052 A 20050713; CA 2507461 A 20050516; CN 200510087935 A 20050727; JP 2005187146 A 20050627; KR 20050069130 A 20050728; SG 200504413 A 20050713; US 96321604 A 20041011