

Title (en)

Lubricant or lubricant concentrate.

Title (de)

Schmiermittel bzw. Schmiermittelkonzentrat.

Title (fr)

Lubrifiant ou concentré de lubrifiant.

Publication

**EP 0286139 A1 19881012 (DE)**

Application

**EP 88105725 A 19880411**

Priority

DE 3712133 A 19870410

Abstract (en)

A lubricant or lubricant concentrate derived from mineral and/or synthetic oils possessing improved lubricating properties, in particular improved load-bearing, sliding and anti-corrosion properties, contains a) one or more mineral and/or synthetic oils as the basic oil, b) at least one (OH)<sub>4</sub> to (OH)<sub>8</sub> alcohol with at least one quaternary carbon atom and at least one ester bond in the molecule, and having a density d<sub>20</sub> of at least 0.900 and an enthalpy H of at least 350 kcal/kg, c) at least one asymmetrical organo-metallic compound, d) at least one phosphorus carrier, e) at least one sulphur carrier, and f) other usual additives.

Abstract (de)

Schmiermittel bzw. Schmiermittelkonzentrat auf der Basis von Mineral- und/oder Syntheseöl mit verbesserten Schmiereigenschaften, insbesondere verbesserten Lasträge-, Gleit- und Korrosionsschutz-eigenschaften, das enthält a) ein oder mehrere Mineral- und/oder Synthese-Öle als Grundöl, b) mindestens einen 4- bis 8-wertigen Alkohol mit mindestens einem quartären Kohlenstoffatom sowie mindestens einer Esterbindung im Molekül mit einer Dichte d<sub>20</sub> von mindestens 0,900 und einer Enthalpie H von mindestens 350 kcal/kg, c) mindestens eine asymmetrische metallorganische Verbindung, d) mindestens einen Phosphorträger und e) mindestens einen Schwefelträger sowie, f) weitere übliche Zusätze.

IPC 1-7

**C10M 141/10; C10M 169/04**

IPC 8 full level

**C10M 129/74** (2006.01); **C10M 135/36** (2006.01); **C10M 137/02** (2006.01); **C10M 137/10** (2006.01); **C10M 139/00** (2006.01);  
**C10M 141/10** (2006.01); **C10M 141/12** (2006.01); **C10M 161/00** (2006.01); **C10M 169/04** (2006.01); **C10N 10/02** (2006.01); **C10N 10/04** (2006.01);  
**C10N 10/08** (2006.01); **C10N 10/10** (2006.01); **C10N 10/12** (2006.01); **C10N 10/14** (2006.01); **C10N 10/16** (2006.01); **C10N 20/00** (2006.01);  
**C10N 30/06** (2006.01); **C10N 30/12** (2006.01)

CPC (source: EP KR US)

**C10M 101/02** (2013.01 - EP); **C10M 101/04** (2013.01 - EP); **C10M 105/06** (2013.01 - EP); **C10M 105/18** (2013.01 - EP);  
**C10M 105/36** (2013.01 - EP); **C10M 105/38** (2013.01 - EP); **C10M 107/08** (2013.01 - EP); **C10M 107/28** (2013.01 - EP);  
**C10M 107/34** (2013.01 - EP); **C10M 129/74** (2013.01 - EP); **C10M 129/76** (2013.01 - EP); **C10M 135/18** (2013.01 - EP);  
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**C10M 161/00** (2013.01 - EP US); **C10M 169/04** (2013.01 - EP KR); **C10M 169/044** (2013.01 - EP); **C10M 2203/06** (2013.01 - EP);  
**C10M 2203/065** (2013.01 - EP); **C10M 2203/10** (2013.01 - EP); **C10M 2203/1006** (2013.01 - EP); **C10M 2203/102** (2013.01 - EP);  
**C10M 2203/1025** (2013.01 - EP); **C10M 2203/104** (2013.01 - EP); **C10M 2203/1045** (2013.01 - EP); **C10M 2203/106** (2013.01 - EP);  
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**C10M 2207/125** (2013.01 - EP); **C10M 2207/129** (2013.01 - EP); **C10M 2207/281** (2013.01 - EP); **C10M 2207/282** (2013.01 - EP);  
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**C10M 2209/02** (2013.01 - EP); **C10M 2209/08** (2013.01 - EP); **C10M 2209/084** (2013.01 - EP); **C10M 2209/0845** (2013.01 - EP);  
**C10M 2209/086** (2013.01 - EP); **C10M 2209/0863** (2013.01 - EP); **C10M 2209/10** (2013.01 - EP); **C10M 2209/103** (2013.01 - EP);  
**C10M 2209/1033** (2013.01 - EP); **C10M 2209/104** (2013.01 - EP); **C10M 2209/1045** (2013.01 - EP); **C10M 2209/1055** (2013.01 - EP);  
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**C10M 2209/109** (2013.01 - EP); **C10M 2209/1095** (2013.01 - EP); **C10M 2219/066** (2013.01 - EP); **C10M 2219/068** (2013.01 - EP);  
**C10M 2219/10** (2013.01 - EP); **C10M 2219/102** (2013.01 - EP); **C10M 2219/104** (2013.01 - EP); **C10M 2219/106** (2013.01 - EP);  
**C10M 2219/108** (2013.01 - EP); **C10M 2223/02** (2013.01 - EP); **C10M 2223/04** (2013.01 - EP); **C10M 2223/041** (2013.01 - EP);  
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**C10N 2040/28** (2013.01 - EP); **C10N 2070/02** (2020.05 - EP)

Citation (search report)

- [Y] GB 2134538 A 19840815 - IDEMITSU KOSAN CO
- [Y] FR 1543830 A 19681025 - MOBIL OIL CORP
- [A] EP 0208541 A2 19870114 - NIPPON OIL CO LTD [JP]
- [A] WO 8601529 A1 19860313 - EXXON RESEARCH ENGINEERING CO [US]
- [A] FR 2194770 A1 19740301 - CHEVRON RES [US]

Cited by

FR2684108A1; US5507964A; WO9311208A1; WO9305130A1; WO9113955A1; EP0316610B1

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