

Title (en)  
Lubricant composition

Title (de)  
Schmiermittelzusammensetzung

Title (fr)  
Composition lubrifiante

Publication  
**EP 2626405 A1 20130814 (EN)**

Application  
**EP 12179747 A 20120808**

Priority  
FI 2012050131 W 20120210

Abstract (en)  
The present invention describes a lubricant composition comprising a base oil component, at least one viscosity index improver, at least one metal salt of an organic acid and at least one metal salt of an inorganic acid and from 0.00005 wt% to 0.01 wt% abrasive particles, wherein the lubricant composition comprises at most 0.2 wt%, especially at most 0.1 wt%, preferably at most 0.05 wt%, more preferably at most 0.03 wt%, more preferably at most 0.02 wt% and most preferably at most 0.01 wt% of sulfur.

IPC 8 full level  
**C10M 141/00** (2006.01); **C10N 20/06** (2006.01); **C10N 40/25** (2006.01)

CPC (source: EP)  
**C10M 141/00** (2013.01); **C10M 2201/061** (2013.01); **C10M 2201/062** (2013.01); **C10M 2201/08** (2013.01); **C10M 2201/087** (2013.01); **C10M 2205/00** (2013.01); **C10M 2207/10** (2013.01); **C10M 2209/084** (2013.01); **C10N 2010/04** (2013.01); **C10N 2020/019** (2020.05); **C10N 2020/04** (2013.01); **C10N 2020/055** (2020.05); **C10N 2020/06** (2013.01); **C10N 2030/42** (2020.05); **C10N 2030/43** (2020.05); **C10N 2030/45** (2020.05); **C10N 2030/68** (2020.05); **C10N 2040/04** (2013.01); **C10N 2040/25** (2013.01); **C10N 2040/252** (2020.05); **C10N 2040/253** (2020.05)

Citation (applicant)  
• US 4431553 A 19840214 - FODOR JOZSEF [HU], et al  
• RU 2277579 C1 20060610  
• EP 0776959 A2 19970604 - SHELL INT RESEARCH [NL]  
• EP 0668342 A1 19950823 - SHELL INT RESEARCH [NL]  
• WO 9721788 A1 19970619 - EXXON RESEARCH ENGINEERING CO [US]  
• WO 0015736 A2 20000323 - EXXON RESEARCH ENGINEERING CO [US]  
• WO 0014188 A2 20000316 - EXXON RESEARCH ENGINEERING CO [US]  
• WO 0014187 A2 20000316 - EXXON RESEARCH ENGINEERING CO [US]  
• WO 0014183 A1 20000316 - EXXON RESEARCH ENGINEERING CO [US]  
• WO 0014179 A1 20000316 - EXXON RESEARCH ENGINEERING CO [US]  
• WO 0008115 A1 20000217 - EXXON RESEARCH ENGINEERING CO [US]  
• WO 9941332 A1 19990819 - EXXON RESEARCH ENGINEERING CO [US]  
• EP 1029029 A1 20000823 - MOBIL OIL CORP [US]  
• WO 0118156 A1 20010315 - TOTAL RAFFINAGE DISTRIBUTION [FR], et al  
• WO 0157166 A1 20010809 - MOBIL OIL CORP [US]  
• EP 0440506 A2 19910807 - EXXON CHEMICAL PATENTS INC [US]  
• EP 1493800 A1 20050105 - INFINEUM INT LTD [GB]  
• EP 1925657 A2 20080528 - INFINEUM INT LTD [GB]  
• US 5130359 A 19920714 - OHSUMI TATSUYA [JP], et al  
• US 6746993 B2 20040608 - YUKI TSUYOSHI [JP], et al  
• US 2737496 A 19560306 - CATLIN WILLARD E  
• US 4021357 A 19770503 - MORDUCHOWITZ ABRAHAM, et al  
• US 3249545 A 19660503 - VOORT HENRICUS G P VAN DER, et al  
• US 6331510 B1 20011218 - CURTIS THOMAS T [GB], et al  
• US 6204224 B1 20010320 - QUINTERO LIRIO [US], et al  
• US 6372696 B1 20020416 - TIPTON CRAIG D [US]  
• WO 2008055976 A2 20080515 - SHELL INT RESEARCH [NL], et al  
• US 5141996 A 19920825 - ZON ARIE V [NL], et al  
• WO 9813443 A1 19980402 - SHELL INT RESEARCH [NL]  
• WO 9921902 A1 19990506 - CASTROL LTD [GB], et al  
• US 4146489 A 19790327 - STAMBAUGH ROBERT L, et al  
• US 4292414 A 19810929 - SAITO AKIRA, et al  
• US 4506056 A 19850319 - GAYLORD NORMAN G [US]  
• WO 2004087850 A1 20041014 - ROHMAX ADDITIVES GMBH [DE], et al  
• WO 2006105926 A1 20061012 - ROHMAX ADDITIVES GMBH [DE], et al  
• WO 2006007934 A1 20060126 - ROHMAX ADDITIVES GMBH [DE], et al  
• WO 2005097956 A1 20051020 - ROHMAX ADDITIVES GMBH [DE], et al  
• "Engine Oil Licensing and Certification System", December 1996, AMERICAN PETROLEUM INSTITUTE (API) PUBLICATION  
• W. W. YAU; J.J. KIRKLAND; D.D. BLY: "Modern Size Exclusion Liquid Chromatography", 1979, JOHN WILEY AND SONS  
• J POLYMER SCIENCE, PART A: POLYMER CHEMISTRY, vol. 26, 1988, pages 1189 - 1198  
• J. POLYMER SCIENCE, POLYMER LETTERS, vol. 20, 1982, pages 481 - 486  
• J. POLYMER SCIENCE, POLYMER LETTERS, vol. 21, 1983, pages 23 - 30  
• GAYLORD; MEHTA; MEHTA: "Gaylord and Mehta and Degradation and Crosslinking of Ethylene-Propylene Copolymer Rubber on Reaction with Maleic Anhydride and/or Peroxides", J. APPLIED POLYMER SCIENCE, vol. 33, 1987, pages 2549 - 2558  
• "Lubricants and Lubrication", 2001, WILEY-VCH  
• "Chemistry and Technology of Lubricants", 1997, BLACKIE ACADEMIC & PROFESSIONAL  
• J. BARTZ: "Additive fur Schmierstoffe", 1994, EXPERT-VERLAG

Citation (search report)

- [AD] US 4431553 A 19840214 - FODOR JOZSEF [HU], et al
- [A] EP 0007703 A1 19800206 - TAPTRUST LTD [GB]
- [I] DATABASE WPI Week 201064, Derwent World Patents Index; AN 2010-M55640, XP002684665

Cited by

US2024150669A1; WO2023153953A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**EP 2626405 A1 20130814; EP 2626405 B1 20150527**

DOCDB simple family (application)

**EP 12179747 A 20120808**