

Title (en)
Lubricating Oil Compositions

Title (de)
Schmierölszusammensetzungen

Title (fr)
Compositions d'huiles lubrifiantes

Publication
EP 1661970 A1 20060531 (EN)

Application
EP 05110265 A 20051102

Priority
• EP 04257416 A 20041130
• EP 05110265 A 20051102

Abstract (en)
Lubricating oil compositions having a sulfated ash content of no more than 1.0 mass %, which contain a major amount of oil of lubricating viscosity, a minor amount of calcium salicylate detergent, an amount of a magnesium-based detergent providing the lubricating oil composition with at least 200 ppm of magnesium, an amount of a sulfur-containing molybdenum compound providing the lubricating oil composition with at least 20 ppm of molybdenum, and at least one nitrogen-containing dispersant providing the lubricating oil composition with at least 0.9 mass % nitrogen, which compositions provide improved top ring wear protection in internal combustion engines.

IPC 8 full level
C10M 163/00 (2006.01); **C10M 167/00** (2006.01)

CPC (source: EP)
C10M 163/00 (2013.01); **C10M 167/00** (2013.01); **C10M 2207/144** (2013.01); **C10M 2207/262** (2013.01); **C10M 2215/28** (2013.01); **C10M 2219/046** (2013.01); **C10M 2219/068** (2013.01); **C10M 2223/045** (2013.01); **C10N 2010/04** (2013.01); **C10N 2010/12** (2013.01); **C10N 2030/06** (2013.01); **C10N 2030/42** (2020.05); **C10N 2030/43** (2020.05); **C10N 2030/45** (2020.05); **C10N 2040/252** (2020.05)

C-Set (source: EP)
C10M 2215/28 + **C10M 2215/28**

Citation (search report)
• [X] US 2004102335 A1 20040527 - CARRICK VIRGINIA A [US], et al
• [X] EP 1310549 A1 20030514 - INFINEUM INT LTD [GB]
• [X] EP 1203804 A1 20020508 - TONEN CORP [JP]
• [A] EP 1167497 A2 20020102 - CHEVRON ORONITE JAPAN LTD [JP]
• [PX] WO 2005021693 A1 20050310 - EXXONMOBIL RES & ENG CO [US], et al

Cited by
EP1801191A1; US2021002577A1; BE1019018A5; US9303229B2; US8586516B2; US9193931B2; US9523061B2; EP1884557B1; EP1887076A1

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 LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
EP 1661970 A1 20060531; EP 1661970 B1 20120404

DOCDB simple family (application)
EP 05110265 A 20051102