

Title (en)
Multigrade crankcase lubricating oil compositions

Title (de)
Multigrad Schmiermittelzusammensetzungen für Motorgehäuse

Title (fr)
Des compositions lubrifiantes multigrades de carter

Publication
EP 1087008 B2 20080806 (EN)

Application
EP 00203027 A 20000831

Priority
• EP 00203027 A 20000831
• EP 99118605 A 19990921
• US 66679800 A 20000920

Abstract (en)
[origin: EP1087008A1] An SAE 0W-30 or 5W-30 or 5W-20 lubricant has a Noack volatility of less than 15, optionally an M-111 fuel economy of 1.5% or less, and a chlorine content of less than 100 ppm. The lubricant comprises a basestock containing from 0 to less than 10% Group I and/or Group II basestocks, a molybdenum additive providing not greater than 1000 ppm of molybdenum to the lubricant, a calcium detergent providing 10 or greater mmoles of surfactant per kilogram of lubricant, one or more other additives, and a viscosity modifier.

IPC 8 full level
C10M 169/04 (2006.01); **C10N 10/04** (2006.01); **C10N 10/12** (2006.01); **C10N 30/00** (2006.01); **C10N 40/25** (2006.01)

CPC (source: EP)
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Citation (opposition)
Opponent :
• EP 1103749 A2 20010530 - GROHE ARMATUREN FRIEDRICH [DE]
• EP 1041134 A2 20001004 - ETHYL CORP [US]
• EP 0725130 A2 19960807 - TONEN CORP [JP]
• US 6074993 A 20000613 - WADDOUNS MALCOLM [US], et al
• US 5627146 A 19970506 - TANAKA NORIYOSHI [JP], et al

Cited by
EP1386958A1; EP1298189A1; SG118159A1; EP1340804A1; EP1323816A1; EP1321507A1; SG115511A1; CN110506098A; EP1340803A1; SG112875A1; EP1298190A1; EP1321506A3; EP1661971A4; EP1666573A4; EP3587541A4; DE112011103822T5; WO2007061699A3; US7951756B2; US11053451B2; EP2970805B1

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