

Title (en)

Metal detergent combination in lubricating oil compositions

Title (de)

Metall-Detergentien-Kombination in Schmierölszusammensetzungen

Title (fr)

Combinaison de détergents métalliques dans des compositions d'huiles lubrifiantes

Publication

EP 1724329 A1 20061122 (EN)

Application

EP 06112912 A 20060421

Priority

- EP 05253123 A 20050520
- EP 06112912 A 20060421

Abstract (en)

An internal combustion engine crankcase lubricating oil composition has a phosphorus content of not greater than 0.08 mass % and a metal detergent additive system comprising a calcium salicylate and a magnesium salicylate and having a mass ratio of magnesium atoms to calcium atoms of greater than one.

IPC 8 full level

C10M 159/22 (2006.01)

CPC (source: EP)

C10M 159/22 (2013.01); **C10M 2207/262** (2013.01); **C10N 2010/04** (2013.01); **C10N 2030/06** (2013.01); **C10N 2030/42** (2020.05); **C10N 2030/45** (2020.05); **C10N 2030/52** (2020.05); **C10N 2040/25** (2013.01)

Citation (applicant)

- EP 1338643 A1 20030827 - INFINEUM INT LTD [GB]
- WO 9637582 A1 19961128 - EXXON RESEARCH ENGINEERING CO [US], et al
- EP 0953629 A1 19991103 - SHELL INT RESEARCH [NL]
- EP 1310549 A1 20030514 - INFINEUM INT LTD [GB]
- EP 1329496 A1 20030723 - INFINEUM INT LTD [GB]
- US 4867890 A 19890919 - COLCLOUGH TERENCE [GB], et al
- US 2719125 A 19550927 - ROBERTS EDWARD N
- US 2719126 A 19550927 - FIELDS ELLIS K, et al
- US 3087932 A 19630430 - LITTLE JR RANDEL Q
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Citation (search report)

- [X] EP 0953629 A1 19991103 - SHELL INT RESEARCH [NL]
- [X] EP 1310549 A1 20030514 - INFINEUM INT LTD [GB]
- [X] EP 1329496 A1 20030723 - INFINEUM INT LTD [GB]

Cited by

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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

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DOCDB simple family (publication)

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