

Title (en)
USE OF LUBRICATING OIL COMPOSITION

Title (de)
VERWENDUNG EINER SCHMIERÖLZUSAMMENSETZUNG

Title (fr)
UTILISATION D'UNE COMPOSITION D'HUILE LUBRIFIANTE

Publication
EP 3192858 A1 20170719 (EN)

Application
EP 16151609 A 20160115

Priority
EP 16151609 A 20160115

Abstract (en)
The invention provides the use of an overbased metal detergent in which two or more different surfactant groups, one being a hydrocarbyl-substituted hydroxybenzoate and another being a sulfonate group, are incorporated therein during its overbasing, and which has been manufactured in the presence of at least one amide-or ester-based co-surfactant, said use being as an additive in a motor vehicle lubricating oil composition to provide lubricant frictional benefits, exemplified by improved high frequency reciprocating rig performance thereof, and/or improved stability of the overbased detergent in the composition in comparison with an analogous lubricating oil compositions made by admixing said overbased metal detergent and said at least one amide-or ester-based co-surfactant.

IPC 8 full level
C10M 159/20 (2006.01); **C10N 10/04** (2006.01); **C10N 30/06** (2006.01); **C10N 40/25** (2006.01)

CPC (source: EP)
C10M 159/20 (2013.01); **C10M 2207/262** (2013.01); **C10M 2207/289** (2013.01); **C10M 2215/08** (2013.01); **C10M 2215/082** (2013.01); **C10M 2219/046** (2013.01); **C10N 2010/04** (2013.01); **C10N 2030/04** (2013.01); **C10N 2030/06** (2013.01); **C10N 2040/25** (2013.01)

Citation (applicant)
• EP 1710294 A1 20061011 - INFINEUM INT LTD [GB]
• EP 2045314 A1 20090408 - INFINEUM INT LTD [GB]
• US 7935664 B2 20110503 - DOWDING PETER J [GB], et al
• EP 2045313 A1 20090408 - INFINEUM INT LTD [GB]
• WO 9746643 A1 19971211 - EXXON CHEMICAL PATENTS INC [US], et al
• WO 9746644 A1 19971211 - EXXON CHEMICAL PATENTS INC [US], et al
• WO 9746645 A1 19971211 - EXXON CHEMICAL PATENTS INC [US], et al
• WO 9746646 A1 19971211 - EXXON CHEMICAL PATENTS INC [US], et al
• WO 9746647 A1 19971211 - EXXON CHEMICAL PATENTS INC [US], et al
• US 4867890 A 19890919 - COLCLOUGH TERENCE [GB], et al
• US 3202678 A 19650824 - STUART FRANK A, et al
• US 3154560 A 19641027 - CARL OSUCH
• US 3172892 A 19650309
• US 3024195 A 19620306 - DRUMMOND ALAN Y, et al
• US 3024237 A 19620306 - DRUMMOND ALAN Y, et al
• US 3219666 A 19651123
• US 3216936 A 19651109 - LE SUER WILLIAM M
• US 3087936 A 19630430 - LE SUER WILLIAM M
• US 3254025 A 19660531 - LE SUER WILLIAM M
• EP 2090642 A1 20090819 - INFINEUM INT LTD [GB]
• US 3113986 A 19631210 - BRESLOW DAVID S, et al
• US 3700633 A 19721024 - WALD MILTON M, et al
• US 3634595 A 19720111 - PASQUALI GIORGIO
• US 3670054 A 19720613 - MARE HAROLD E DE LA, et al
• US RE27145 E 19710622
• "Engine Oil Licensing and Certification System", December 1996, AMERICAN PETROLEUM INSTITUTE
• W. W. YAU; J. J. KIRKLAND; D. D. BLY: "Modern Size Exclusion Liquid Chromatography", 1979, JOHN WILEY AND SONS

Citation (search report)
• [IY] EP 2045313 A1 20090408 - INFINEUM INT LTD [GB]
• [Y] EP 1018539 A2 20000712 - INFINEUM INTERNATIONAL LIMITED [GB]
• [Y] WO 9746646 A1 19971211 - EXXON CHEMICAL PATENTS INC [US], et al

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 3192858 A1 20170719; EP 3192858 B1 20180822

DOCDB simple family (application)
EP 16151609 A 20160115