

Title (en)

AQUEOUS COOLANT FOR THE RUNNING-IN PERIOD OF AN ENGINE CONTAINING AMMONIUM SALTS OF MONOPHTHALIMIDES

Title (de)

WÄSSRIGE KÜHLMITTEL FÜR DIE MOTORENEINLAUFPHASE ENTHALTEND AMMONIUMSALZE VON PHTHALSÄUREMONOAMIDEN

Title (fr)

LIQUIDES DE REFROIDISSEMENT AQUEUX DESTINES A LA PHASE DE RODAGE D'UN MOTEUR, CONTENANT DES SELS D'AMMONIUM DE MONOAMIDES D'ACIDE PHTALIQUE

Publication

EP 1468060 A1 20041020 (DE)

Application

EP 03729478 A 20030116

Priority

- DE 10201446 A 20020116
- EP 0300422 W 20030116

Abstract (en)

[origin: WO03060036A1] The invention relates to aqueous coolants with corrosion-inhibiting properties for the wet circuit, in particular for the running-in period of internal combustion engines, after which the coolant is drained off (engine running-in fluids), which comprise at least one ammonium salt of a monophthalimide of general formula (I), in which R₁ and R₂ independently or together = H, a linear, branched cyclic or acyclic C₁₋₂₀ alkyl group and A⁺ = an ammonium cation.

IPC 1-7

C09K 5/10

IPC 8 full level

F01P 11/14 (2006.01); **C09K 5/10** (2006.01); **C23F 11/14** (2006.01)

CPC (source: EP KR US)

C09K 5/10 (2013.01 - EP KR US); **C23F 11/145** (2013.01 - EP US)

Citation (search report)

See references of WO 03060036A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT SE SI SK TR

DOCDB simple family (publication)

WO 03060036 A1 20030724; AR 038290 A1 20050112; AU 2003210163 A1 20030730; BR 0306938 A 20060411; CA 2473430 A1 20030724; CN 1271166 C 20060823; CN 1633491 A 20050629; DE 10201446 A1 20030724; EP 1468060 A1 20041020; JP 2005525491 A 20050825; JP 4002241 B2 20071031; KR 20040081459 A 20040921; MX PA04006904 A 20041011; PL 373535 A1 20050905; US 2005040362 A1 20050224; US 2008017828 A1 20080124; ZA 200405631 B 20060726

DOCDB simple family (application)

EP 0300422 W 20030116; AR P030100062 A 20030110; AU 2003210163 A 20030116; BR 0306938 A 20030116; CA 2473430 A 20030116; CN 03803998 A 20030116; DE 10201446 A 20020116; EP 03729478 A 20030116; JP 2003560125 A 20030116; KR 20047011115 A 20030116; MX PA04006904 A 20030116; PL 37353503 A 20030116; US 50154904 A 20040716; US 78242807 A 20070724; ZA 200405631 A 20040715