

Title (en)
Use of a lubricating additive

Title (de)
Verwendung eines Schmieröladditivs

Title (fr)
Utilisation d'additif lubrifiant

Publication
EP 2365049 B1 20130403 (EN)

Application
EP 11169302 A 20100729

Priority

- EP 10171307 A 20100729
- GB 0917983 A 20091014
- EP 09010811 A 20090824
- EP 11169302 A 20100729

Abstract (en)
[origin: EP2365049A1] The use in the lubrication of a compression-ignited internal combustion engine which is fuelled with biodiesel, of a metal detergent system comprising one or more oil-soluble overbased alkaline earth metal salicylates, as an additive component in a minor amount, in a lubricating oil composition to reduce and/or inhibit oxidation of the lubricating oil composition during operation of the engine, wherein the lubricating oil composition becomes contaminated with biodiesel or a decomposition product thereof during operation of the engine.

IPC 8 full level
C10M 129/54 (2006.01); **C10N 10/02** (2006.01); **C10N 10/04** (2006.01); **C10N 10/12** (2006.01); **C10N 30/04** (2006.01); **C10N 30/10** (2006.01); **C10N 30/12** (2006.01); **C10N 40/25** (2006.01); **C10N 40/26** (2006.01); **C10N 70/00** (2006.01)

CPC (source: EP)
C10M 159/22 (2013.01); **C10M 2203/1006** (2013.01); **C10M 2207/026** (2013.01); **C10M 2207/028** (2013.01); **C10M 2207/262** (2013.01); **C10M 2207/281** (2013.01); **C10M 2215/064** (2013.01); **C10M 2219/044** (2013.01); **C10M 2219/046** (2013.01); **C10M 2219/068** (2013.01); **C10M 2223/045** (2013.01); **C10N 2010/02** (2013.01); **C10N 2010/04** (2013.01); **C10N 2010/12** (2013.01); **C10N 2030/04** (2013.01); **C10N 2030/10** (2013.01); **C10N 2030/12** (2013.01); **C10N 2030/42** (2020.05); **C10N 2030/45** (2020.05); **C10N 2030/52** (2020.05); **C10N 2030/70** (2020.05); **C10N 2030/78** (2020.05); **C10N 2040/251** (2020.05); **C10N 2040/253** (2020.05); **C10N 2040/255** (2020.05); **C10N 2040/26** (2013.01); **C10N 2070/02** (2020.05)

C-Set (source: EP)

1. **C10M 2219/068 + C10N 2010/12**
2. **C10M 2207/028 + C10N 2010/04**
3. **C10M 2207/262 + C10N 2010/04**
4. **C10M 2219/044 + C10N 2010/04**
5. **C10M 2219/046 + C10N 2010/04**
6. **C10M 2223/045 + C10N 2010/04**
7. **C10M 2203/1006 + C10N 2020/02**

Citation (examination)

- O'CONNOR S ET AL: "Overbased Lubricant Detergents - a Comparative Study", LUBRICATION SCIENCE, LEAF COPPIN PUBLISHING LTD, US, vol. 6, no. 4, 1 January 1994 (1994-01-01), pages 297 - 325, XP007909653, ISSN: 0954-0075, DOI: 10.1002/LS.3010060402
- A. B. VIPPER: "Antioxidant properties of engine oil detergent additives", LUBRICATION SCIENCE, vol. 9, no. 1, 1 November 1996 (1996-11-01), pages 61 - 70, XP055028584, ISSN: 0954-0075, DOI: 10.1002/ls.3010090103

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
EP 2290038 A2 20110302; **EP 2290038 A3 20110316**; **EP 2290038 B1 20120321**; AT E550411 T1 20120415; EP 2365049 A1 20110914; EP 2365049 B1 20130403

DOCDB simple family (application)
EP 10171307 A 20100729; AT 10171307 T 20100729; EP 11169302 A 20100729