

Title (en)  
A lubricating oil composition

Title (de)  
Schmierölzusammensetzung

Title (fr)  
Composition d'huile de lubrification

Publication  
**EP 2290041 A3 20110316 (EN)**

Application  
**EP 10171303 A 20100729**

Priority  

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Abstract (en)  
[origin: EP2290041A2] A lubricating oil composition comprising: (A) an oil of lubricating viscosity in a major amount, comprising a Group III base stock; (B) as an additive component in a minor amount, an oil-soluble boron containing compound; and, wherein the lubricating oil composition is contaminated with at least 0.3 mass %, based on the total mass of the lubricating oil composition, of a biofuel or a decomposition product thereof and mixtures thereof.

IPC 8 full level  
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Citation (search report)  

- [X] WO 2008117776 A1 20081002 - IDEMITSU KOSAN CO [JP], et al & EP 2141220 A1 20100106 - IDEMITSU KOSAN CO [JP]
- [X] WO 2009054322 A1 20090430 - IDEMITSU KOSAN CO [JP], et al
- [I] EP 2055761 A2 20090506 - CHEVRON ORONITE CO [US]
- [A] US 5262140 A 19931116 - INOUE KIYOSHI [JP]
- [A] EP 2055762 A2 20090506 - CHEVRON ORONITE CO [US]
- [A] WO 2009085943 A1 20090709 - LUBRIZOL CORP [US], et al
- [X] US 5739088 A 19980414 - INOUE KIYOSHI [JP], et al
- [A] EP 1318188 A1 20030611 - INFINEUM INT LTD [GB]
- [A] US 3829381 A 19740813 - LE SUER W
- [X] US 2006073990 A1 20060406 - WINEMILLER MARK D [US], et al
- [A] CHOUDHARY R B ET AL: "Lubrication potential of boron compounds: An overview", LUBRICATION SCIENCE, LEAF COPPIN PUBLISHING LTD, US LNKD- DOI:10.1002/LS.3010140208, vol. 14, no. 2, 1 February 2002 (2002-02-01), pages 211 - 222, XP007915059, ISSN: 0954-0075, [retrieved on 20060307]

Cited by

EP2692839A1; CN107636130A; CN115992021A; EP2791296A4; CN107418652A; CN109715768A; US10344245B2; US9353327B2; US9193930B2; US10982166B2; WO2020023430A1; WO2016124292A1; WO2018077621A1; WO2018080789A1; US10781394B2

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