

Title (en)
USE OF ESTER GROUP-INCLUDING POLYMERS AS ANTIFATIGUE ADDITIVES

Title (de)
VERWENDUNG VON ESTERGRUPPEN-UMFASSENDEN POLYMEREN ALS ANTIFATIGUE-ADDITIVE

Title (fr)
UTILISATION DE POLYMÈRES CONTENANT DES GROUPES ESTERS COMME ADDITIFS ANTIFATIGUE

Publication
EP 2176390 A2 20100421 (DE)

Application
EP 08761249 A 20080620

Priority
• EP 2008057828 W 20080620
• DE 102007036856 A 20070806

Abstract (en)
[origin: WO2009019065A2] The present invention relates to the use of ester group-including polymers having at least one nonpolar segment P and at least one polar segment D, where the polar segment D includes at least 8 repeating units, and the proportion of dispersing repeating units in the polar segment D is at least 30% by weight based on the weight of the polar segment D, as antifatigue additive in lubricants.

IPC 8 full level
C10M 145/14 (2006.01); **C08F 220/10** (2006.01); **C10M 149/10** (2006.01); **C10N 30/06** (2006.01)

CPC (source: EP US)
C08F 265/04 (2013.01 - EP US); **C08F 293/005** (2013.01 - EP US); **C10M 145/14** (2013.01 - EP US); **C10M 149/10** (2013.01 - EP US); **C08F 2438/01** (2013.01 - EP US); **C10M 2207/028** (2013.01 - EP US); **C10M 2209/084** (2013.01 - EP US); **C10M 2217/023** (2013.01 - EP US); **C10M 2225/02** (2013.01 - EP US); **C10N 2030/06** (2013.01 - EP US)

Citation (search report)
See references of WO 2009019065A2

Citation (examination)
EP 1808476 A1 20070718 - NIPPON OIL CORP [JP]

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA MK RS

DOCDB simple family (publication)
WO 2009019065 A2 20090212; **WO 2009019065 A3 20090402**; BR PI0815137 A2 20150203; CA 2695835 A1 20090212; CN 101815779 A 20100825; CN 101815779 B 20131211; DE 102007036856 A1 20090226; EP 2176390 A2 20100421; JP 2010535870 A 20101125; JP 5641933 B2 20141217; KR 101520122 B1 20150518; KR 20100042274 A 20100423; MX 2010001458 A 20100301; RU 2010107871 A 20110920; RU 2515994 C2 20140520; US 2011237473 A1 20110929; US 8859472 B2 20141014

DOCDB simple family (application)
EP 2008057828 W 20080620; BR PI0815137 A 20080620; CA 2695835 A 20080620; CN 200880100890 A 20080620; DE 102007036856 A 20070806; EP 08761249 A 20080620; JP 2010519391 A 20080620; KR 20107002626 A 20080620; MX 2010001458 A 20080620; RU 2010107871 A 20080620; US 67223108 A 20080620