

Title (en)
HYDROXYCHROMAN DERIVATIVES AS ANTIOXIDANTS

Title (de)
HYDROXYCHROMANDERIVATE ALS ANTIOXIDANTIEN

Title (fr)
DÉRIVÉS D'HYDROXYCHROMANE COMME ANTIOXYDANTS

Publication
EP 2614131 B1 20160511 (EN)

Application
EP 11755481 A 20110830

Priority
• US 38041210 P 20100907
• US 2011049622 W 20110830

Abstract (en)
[origin: WO2012033668A1] A lubricant and concentrate composition comprises a hydroxychroman derived antioxidant and a method for improving the performance of a lubricant composition, especially a lubricant composition for an internal combustion engine, comprising the use of a lubricant containing said antioxidant.

IPC 8 full level
C10L 1/18 (2006.01); **C10L 1/185** (2006.01); **C10L 1/19** (2006.01); **C10L 1/223** (2006.01); **C10L 1/224** (2006.01); **C10L 1/24** (2006.01); **C10L 10/00** (2006.01); **C10M 129/20** (2006.01); **C10M 141/06** (2006.01); **C10M 141/10** (2006.01); **C10N 10/04** (2006.01); **C10N 30/10** (2006.01); **C10N 40/02** (2006.01); **C10N 40/04** (2006.01); **C10N 40/08** (2006.01); **C10N 40/20** (2006.01); **C10N 40/25** (2006.01); **C10N 40/26** (2006.01); **C10N 50/10** (2006.01)

CPC (source: EP US)
C10L 1/1855 (2013.01 - EP US); **C10L 1/19** (2013.01 - EP US); **C10L 1/2235** (2013.01 - EP US); **C10L 1/224** (2013.01 - EP US); **C10L 1/2412** (2013.01 - EP US); **C10L 1/2425** (2013.01 - EP US); **C10L 10/00** (2013.01 - EP US); **C10M 129/20** (2013.01 - EP US); **C10M 141/06** (2013.01 - EP US); **C10M 141/10** (2013.01 - EP US); **C10L 2230/081** (2013.01 - EP US); **C10M 2203/1006** (2013.01 - EP US); **C10M 2203/1025** (2013.01 - EP US); **C10M 2207/044** (2013.01 - EP US); **C10M 2215/02** (2013.01 - EP US); **C10M 2215/06** (2013.01 - EP US); **C10M 2215/064** (2013.01 - EP US); **C10M 2223/045** (2013.01 - EP US); **C10N 2030/10** (2013.01 - EP US); **C10N 2030/40** (2020.05 - EP US); **C10N 2030/42** (2020.05 - EP US); **C10N 2030/43** (2020.05 - EP US); **C10N 2030/45** (2020.05 - EP US); **C10N 2040/02** (2013.01 - EP US); **C10N 2040/042** (2020.05 - EP US); **C10N 2040/08** (2013.01 - EP US); **C10N 2040/13** (2013.01 - EP US); **C10N 2040/25** (2013.01 - EP US); **C10N 2040/252** (2020.05 - EP US); **C10N 2040/253** (2020.05 - EP US); **C10N 2040/255** (2020.05 - EP US); **C10N 2040/26** (2013.01 - EP US); **C10N 2050/10** (2013.01 - EP US)

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

DOCDB simple family (publication)
WO 2012033668 A1 20120315; BR 112013005296 A2 20160816; CA 2809975 A1 20120315; CA 2809975 C 20180918; CN 103201361 A 20130710; EP 2614131 A1 20130717; EP 2614131 B1 20160511; EP 3070153 A1 20160921; EP 3070153 B1 20181205; ES 2586242 T3 20161013; US 2013165355 A1 20130627

DOCDB simple family (application)
US 2011049622 W 20110830; BR 112013005296 A 20110830; CA 2809975 A 20110830; CN 201180053393 A 20110830; EP 11755481 A 20110830; EP 16164519 A 20110830; ES 11755481 T 20110830; US 201113819458 A 20110830