

Title (en)  
Lubricating oil additive concentrates

Title (de)  
Additivkonzentrate für Schmiermittel

Title (fr)  
Concentrés d'additifs de lubrifiants

Publication  
**EP 1657292 B1 20190515 (EN)**

Application  
**EP 05110044 A 20051026**

Priority  
• EP 04257106 A 20041116  
• EP 05110044 A 20051026

Abstract (en)  
[origin: EP1657292A1] Lubricating oil additive concentrates containing oil of lubricating viscosity, at least one basic metal complex, an oil-soluble hydrocarbyl phenol aldehyde condensate, and an organic friction modifier containing at least one hydroxyl and/or amino group.

IPC 8 full level  
**C10M 163/00** (2006.01); **C10M 169/04** (2006.01)

CPC (source: EP)  
**C10M 163/00** (2013.01); **C10M 169/045** (2013.01); **C10M 2207/024** (2013.01); **C10M 2207/028** (2013.01); **C10M 2207/26** (2013.01); **C10M 2207/262** (2013.01); **C10M 2207/282** (2013.01); **C10M 2207/283** (2013.01); **C10M 2215/042** (2013.01); **C10M 2215/225** (2013.01); **C10M 2219/046** (2013.01); **C10N 2010/04** (2013.01); **C10N 2030/00** (2013.01); **C10N 2040/25** (2013.01)

Citation (examination)  
EP 0389237 A2 19900926 - ETHYL PETROLEUM ADDITIVES LTD [GB]

Cited by  
GB2498635A; WO2010124859A1; US9528067B2; WO2011066141A3; US9163196B2; US9175241B2; US9193934B2; US10190071B2

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

DOCDB simple family (publication)  
**EP 1657292 A1 20060517; EP 1657292 B1 20190515**

DOCDB simple family (application)  
**EP 05110044 A 20051026**