

Title (en)  
Lubricating oil compositions

Title (de)  
Schmierölszusammensetzungen

Title (fr)  
Compositions d'huiles lubrifiantes

Publication  
**EP 1538193 B1 20180425 (EN)**

Application  
**EP 04256985 A 20041111**

Priority  
US 72794103 A 20031204

Abstract (en)  
[origin: EP1538193A1] Soot induced kinematic viscosity increase of lubricating oil compositions for diesel engines can be ameliorated by combined use of derivatized high molecular weight olefin copolymers and high molecular weight nitrogen-containing dispersant.

IPC 8 full level  
**C10M 169/04** (2006.01); **C10M 101/02** (2006.01); **C10M 129/10** (2006.01); **C10M 133/52** (2006.01); **C10M 135/30** (2006.01); **C10M 139/00** (2006.01); **C10M 159/16** (2006.01); **C10M 159/22** (2006.01); **C10M 161/00** (2006.01); **C10N 10/02** (2006.01); **C10N 10/04** (2006.01); **C10N 20/00** (2006.01); **C10N 20/02** (2006.01); **C10N 30/04** (2006.01); **C10N 40/25** (2006.01)

CPC (source: EP US)  
**C10M 161/00** (2013.01 - EP US); **C10M 169/044** (2013.01 - EP US); **C10M 169/048** (2013.01 - EP US); **C10M 2203/1006** (2013.01 - EP US); **C10M 2203/1025** (2013.01 - EP US); **C10M 2203/1065** (2013.01 - EP US); **C10M 2205/022** (2013.01 - EP US); **C10M 2205/024** (2013.01 - EP US); **C10M 2207/026** (2013.01 - EP US); **C10M 2207/028** (2013.01 - EP US); **C10M 2207/289** (2013.01 - EP US); **C10M 2215/28** (2013.01 - EP US); **C10M 2217/06** (2013.01 - EP US); **C10M 2223/045** (2013.01 - EP US); **C10N 2010/04** (2013.01 - EP US); **C10N 2020/01** (2020.05 - EP US); **C10N 2020/04** (2013.01 - EP US); **C10N 2030/02** (2013.01 - EP US); **C10N 2030/04** (2013.01 - EP US); **C10N 2030/041** (2020.05 - EP US); **C10N 2030/41** (2020.05 - EP US); **C10N 2030/42** (2020.05 - EP US); **C10N 2030/43** (2020.05 - EP US); **C10N 2030/44** (2020.05 - EP US); **C10N 2030/45** (2020.05 - EP US); **C10N 2040/252** (2020.05 - EP US); **C10N 2060/09** (2020.05 - EP US)

C-Set (source: EP US)  
1. **C10M 2205/024 + C10M 2205/022**  
2. **C10M 2205/024 + C10M 2205/022 + C10N 2060/09**

Cited by  
EP1741772A3; AU2008249847B2; EP1992677A1; US8741824B2; US9909082B2; US11820955B2; WO2013122898A3; WO2008139142A1; WO2006066649A3

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

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**EP 1538193 A1 20050608; EP 1538193 B1 20180425**; CA 2489035 A1 20050604; CA 2489035 C 20150224; CN 100532517 C 20090826; CN 1654612 A 20050817; JP 2005163048 A 20050623; JP 4871504 B2 20120208; SG 112950 A1 20050728; US 2005124509 A1 20050609

DOCDB simple family (application)  
**EP 04256985 A 20041111**; CA 2489035 A 20041203; CN 200410096939 A 20041206; JP 2004351596 A 20041203; SG 200407208 A 20041203; US 72794103 A 20031204