

Title (en)  
LOW SEDIMENT FRICTION MODIFIERS

Title (de)  
SEDIMENTARME REIBUNGSMODIFIKATOREN

Title (fr)  
MODIFICATEURS DE FROTTEMENT A FAIBLE SEDIMENTATION

Publication  
**EP 1699910 A2 20060913 (EN)**

Application  
**EP 04811353 A 20041115**

Priority  
• US 2004038625 W 20041115  
• US 73160003 A 20031209

Abstract (en)  
[origin: US2005124510A1] An additive mixture for lubricant oils includes an overbased alkaline earth metal sulfonate, and at least one friction modifier selected from the group consisting of an overbased alkaline earth carboxylate, the reaction product of an alkanolamine with a fatty acid or a fatty acid ester and the reaction product of thiodiglycol or a dialkylene glycol with a fatty acid or a fatty acid ester. The additive mixture, when combined with a lubricant stock, provides a lubricant composition characterized by less sedimentation during storage.

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

CPC (source: EP US)  
**C10M 163/00** (2013.01 - EP US); **C10M 2203/10** (2013.01 - EP US); **C10M 2203/1065** (2013.01 - EP US); **C10M 2207/123** (2013.01 - EP US); **C10M 2207/129** (2013.01 - EP US); **C10M 2207/26** (2013.01 - EP US); **C10M 2207/283** (2013.01 - EP US); **C10M 2207/289** (2013.01 - EP US); **C10M 2215/042** (2013.01 - EP US); **C10M 2219/046** (2013.01 - EP US); **C10M 2219/084** (2013.01 - EP US); **C10M 2219/085** (2013.01 - EP US); **C10N 2010/04** (2013.01 - EP US); **C10N 2020/06** (2013.01 - EP US); **C10N 2030/06** (2013.01 - EP US); **C10N 2030/52** (2020.05 - EP US); **C10N 2060/04** (2013.01 - EP US)

Citation (search report)  
See references of WO 2005061683A2

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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**US 73160003 A 20031209**; CN 200480036699 A 20041115; EP 04811353 A 20041115; JP 2006543838 A 20041115; US 2004038625 W 20041115