

Title (en)

Low sulfur, low ash, and low phosphorus lubricant additive package using overbased calcium oleate

Title (de)

Schmierstoffadditivpaket mit niedrigem Gehalt an Schwefel, Asche und Phosphor enthaltend überbasisches Kalziumoleat

Title (fr)

Mélange d'additifs contenant du oléate de calcium surbasique à faible teneur en soufre, en cendre et en phosphore

Publication

EP 1479751 A2 20041124 (EN)

Application

EP 04252558 A 20040430

Priority

US 42819403 A 20030501

Abstract (en)

A low sulfur, low ash, and low phosphorus oil soluble lubricant additive package comprising an overbased metal carboxylate.

IPC 1-7

C10M 163/00

IPC 8 full level

C10M 129/10 (2006.01); **C10M 129/54** (2006.01); **C10M 133/12** (2006.01); **C10M 133/56** (2006.01); **C10M 135/04** (2006.01); **C10M 135/10** (2006.01); **C10M 135/24** (2006.01); **C10M 137/10** (2006.01); **C10M 143/04** (2006.01); **C10M 159/20** (2006.01); **C10M 159/22** (2006.01); **C10M 159/24** (2006.01); **C10M 163/00** (2006.01); **C10N 10/02** (2006.01); **C10N 10/04** (2006.01); **C10N 20/00** (2006.01); **C10N 20/04** (2006.01); **C10N 30/02** (2006.01); **C10N 30/04** (2006.01); **C10N 30/10** (2006.01); **C10N 40/02** (2006.01); **C10N 40/04** (2006.01); **C10N 40/12** (2006.01); **C10N 40/25** (2006.01)

CPC (source: EP US)

C10M 163/00 (2013.01 - EP US); **C10M 2207/026** (2013.01 - EP US); **C10M 2207/027** (2013.01 - EP US); **C10M 2207/028** (2013.01 - EP US); **C10M 2207/26** (2013.01 - EP US); **C10M 2207/262** (2013.01 - EP US); **C10M 2215/064** (2013.01 - EP US); **C10M 2215/28** (2013.01 - EP US); **C10M 2217/043** (2013.01 - EP US); **C10M 2219/022** (2013.01 - EP US); **C10M 2219/044** (2013.01 - EP US); **C10M 2219/046** (2013.01 - EP US); **C10M 2219/087** (2013.01 - EP US); **C10M 2219/088** (2013.01 - EP US); **C10M 2219/089** (2013.01 - EP US); **C10M 2223/045** (2013.01 - EP US); **C10N 2010/04** (2013.01 - EP US); **C10N 2030/04** (2013.01 - EP US); **C10N 2030/42** (2020.05 - EP US); **C10N 2030/43** (2020.05 - EP US); **C10N 2030/45** (2020.05 - EP US); **C10N 2040/04** (2013.01 - EP US); **C10N 2040/042** (2020.05 - EP US); **C10N 2040/044** (2020.05 - EP US); **C10N 2040/12** (2013.01 - EP US); **C10N 2040/25** (2013.01 - EP US); **C10N 2040/252** (2020.05 - EP US)

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EP 1479751 A2 20041124; **EP 1479751 A3 20070214**; AU 2004201446 A1 20041118; AU 2004201446 B2 20060615; CA 2462996 A1 20041101; CN 1550543 A 20041201; JP 2004331973 A 20041125; SG 148014 A1 20081231; US 2004220059 A1 20041104

DOCDB simple family (application)

EP 04252558 A 20040430; AU 2004201446 A 20040406; CA 2462996 A 20040401; CN 200410043093 A 20040430; JP 2004136694 A 20040430; SG 2004027090 A 20040429; US 42819403 A 20030501