

Title (en)
Lubricating oil providing enhanced piston cleanliness

Title (de)
Schmieröl zur Verbesserung der Kolbensauberkeit

Title (fr)
Huile de lubrification destinée à améliorer la propreté de piston

Publication
EP 1942177 A3 20100623 (EN)

Application
EP 07254942 A 20071219

Priority
US 61301506 A 20061219

Abstract (en)
[origin: EP1942177A2] Provided are formulations, methods of making, and methods of using one or more reaction products of polyisobutylenes and monounsaturated acylating agents of the present invention in a low sulfur, low sulfated ash, and low phosphorus lubricant to enhance piston cleanliness in internal combustion engines.

IPC 8 full level
C10M 163/00 (2006.01); **C10M 167/00** (2006.01); **C10N 10/02** (2006.01); **C10N 10/12** (2006.01); **C10N 20/04** (2006.01); **C10N 30/04** (2006.01); **C10N 40/25** (2006.01)

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C10M 163/00 (2013.01 - EP US); **C10M 167/00** (2013.01 - EP US); **C10M 2205/022** (2013.01 - EP US); **C10M 2207/028** (2013.01 - EP US); **C10M 2207/129** (2013.01 - EP US); **C10M 2207/26** (2013.01 - EP US); **C10M 2207/262** (2013.01 - EP US); **C10M 2209/084** (2013.01 - EP US); **C10M 2215/064** (2013.01 - EP US); **C10M 2215/086** (2013.01 - EP US); **C10M 2215/28** (2013.01 - EP US); **C10M 2219/046** (2013.01 - EP US); **C10M 2219/089** (2013.01 - EP US); **C10M 2223/045** (2013.01 - EP US); **C10M 2227/061** (2013.01 - EP US); **C10M 2227/09** (2013.01 - EP US); **C10M 2229/02** (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 2040/25** (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)

Citation (search report)
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• [X] EP 1479752 A2 20041124 - CHEVRON ORONITE CO [US], et al
• [A] US 4502970 A 19850305 - SCHETELICH ALAN A [US], et al
• [A] EP 1512737 A1 20050309 - INFINEUM INT LTD [GB]

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Designated extension state (EPC)
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DOCDB simple family (application)
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