

Title (en)

LUBRICATING ENGINE OIL FOR IMPROVED WEAR PROTECTION AND FUEL EFFICIENCY

Title (de)

SCHMIERÖL FÜR MOTOREN FÜR VERBESSERTEN VERSCHLEISSCHUTZ UND VERBESSERTE KRAFTSTOFFEFFIZIENZ

Title (fr)

HUILE LUBRIFIANTE POUR MOTEUR POUR UNE PROTECTION AMÉLIORÉE CONTRE L'USURE ET UNE EFFICACITÉ AMÉLIORÉE DU CARBURANT

Publication

EP 3494200 A1 20190612 (EN)

Application

EP 17754537 A 20170803

Priority

- US 201662370371 P 20160803
- US 201715667066 A 20170802
- US 2017045207 W 20170803

Abstract (en)

[origin: US2018037841A1] Provided are lubricating engine oils including a lubricating oil base stock as a major component having a base oil viscosity at 100 deg. C. ranging from 4.5 to 7.5 cSt, and a carboxylic functionalized polymer dispersant with aromatic amine functionality, as a minor component, wherein the lubricating engine oils have a cold crank simulator viscosity at -30 deg. C. of less than 8500 mPa.s. The lubricating engine oils may provide improved engine wear protection at equivalent fuel efficiency or improved fuel efficiency at equivalent engine wear protection compared to a lubricating engine oil containing a dispersant as a minor component other than the carboxylic functionalized polymer with aromatic amine functionality. Methods of making the lubricating engine oil are also provided. The lubricating engine oils are useful in internal combustion engines including direct injection, gasoline and diesel engines.

IPC 8 full level

C10M 133/56 (2006.01); **C10M 149/06** (2006.01)

CPC (source: EP US)

C10M 101/02 (2013.01 - US); **C10M 133/56** (2013.01 - EP US); **C10M 149/06** (2013.01 - EP US); **C10M 159/12** (2013.01 - US); **C10M 169/041** (2013.01 - US); **C10M 2203/003** (2013.01 - US); **C10M 2203/1006** (2013.01 - EP US); **C10M 2203/1025** (2013.01 - EP US); **C10M 2205/022** (2013.01 - EP US); **C10M 2205/0285** (2013.01 - EP US); **C10M 2207/34** (2013.01 - EP US); **C10M 2215/28** (2013.01 - EP US); **C10M 2217/043** (2013.01 - EP US); **C10M 2217/06** (2013.01 - EP US); **C10N 2030/02** (2013.01 - EP US); **C10N 2030/06** (2013.01 - EP US); **C10N 2030/54** (2020.05 - EP US); **C10N 2030/68** (2020.05 - EP US); **C10N 2040/25** (2013.01 - EP US); **C10N 2040/252** (2020.05 - US); **C10N 2040/255** (2020.05 - US); **F01M 9/02** (2013.01 - US)

C-Set (source: EP US)

1. **C10M 2203/1025 + C10N 2020/02**
2. **C10M 2205/022 + C10M 2205/024 + C10M 2209/084 + C10N 2060/09**
3. **C10M 2205/022 + C10M 2205/024 + C10M 2205/08 + C10M 2209/086 + C10N 2060/09**
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Citation (search report)

See references of WO 2018026982A1

Designated contracting state (EPC)

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DOCDB simple family (application)

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