

Title (en)  
LUBRICANT COMPOSITION

Title (de)  
SCHMIERMITTELZUSAMMENSETZUNG

Title (fr)  
COMPOSITION LUBRIFIANTE

Publication  
**EP 3878931 A4 20220727 (EN)**

Application  
**EP 19881130 A 20191106**

Priority  
• JP 2018209912 A 20181107  
• JP 2019043464 W 20191106

Abstract (en)  
[origin: EP3878931A1] [Problem to be solved] To provide a lubricating oil composition for a supercharged engine, which is capable of having a good balance of caulking resistance, LSPI suppression performance, and high-temperature cleaning properties.[Means to solve the problem] The lubricating oil composition for a supercharged engine according to the present invention is characterized by comprising:(A) a lubricating oil base oil;(B) a calcium-based cleaning agent, wherein the calcium amount is 1100 mass ppm or more to 1900 mass ppm or less on a total amount basis of the lubricant composition;(C) a magnesium-based cleaning agent; and(D) at least one viscosity index improver selected from a styrene-diene copolymer and an ethylene- $\alpha$ -olefin copolymer; and(E) a nitrogen-containing dispersing agent;and containing 700 mass ppm or more of nitrogen component, on a total amount basis of the lubricating oil composition.

IPC 8 full level  
**C10M 167/00** (2006.01); **C10N 20/00** (2006.01); **C10N 20/02** (2006.01); **C10N 20/04** (2006.01); **C10N 30/00** (2006.01); **C10N 30/02** (2006.01); **C10N 30/04** (2006.01); **C10N 30/08** (2006.01); **C10N 30/10** (2006.01); **C10N 40/25** (2006.01)

CPC (source: EP)  
**C10M 167/00** (2013.01); **C10M 2203/1025** (2013.01); **C10M 2205/022** (2013.01); **C10M 2205/04** (2013.01); **C10M 2207/262** (2013.01); **C10M 2207/289** (2013.01); **C10M 2209/084** (2013.01); **C10M 2215/02** (2013.01); **C10M 2215/064** (2013.01); **C10M 2215/28** (2013.01); **C10M 2223/045** (2013.01); **C10N 2020/011** (2020.05); **C10N 2020/04** (2013.01); **C10N 2030/02** (2013.01); **C10N 2030/04** (2013.01); **C10N 2030/08** (2013.01); **C10N 2030/10** (2013.01); **C10N 2030/40** (2020.05); **C10N 2030/42** (2020.05); **C10N 2030/43** (2020.05); **C10N 2030/52** (2020.05); **C10N 2040/25** (2013.01); **C10N 2040/253** (2020.05); **C10N 2040/255** (2020.05)

C-Set (source: EP)  
1. **C10M 2203/1025 + C10N 2020/02**  
2. **C10M 2207/262 + C10N 2010/04**  
3. **C10M 2205/04 + C10M 2205/06**  
4. **C10M 2205/022 + C10M 2205/024**  
5. **C10M 2223/045 + C10N 2010/04**  
6. **C10M 2215/02 + C10N 2010/12**

Citation (search report)  
[AD] KOSUKE FUJIMOTO ET AL: "Engine Oil Development for Preventing Pre-Ignition in Turbocharged Gasoline Engine", SAE INTERNATIONAL JOURNAL OF FUELS AND LUBRICANTS, vol. 7, no. 3, 15 April 2014 (2014-04-15), US, pages 869 - 874, XP055248491, ISSN: 1946-3960, DOI: 10.4271/2014-01-2785

Cited by  
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DOCDB simple family (publication)  
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**EP 19881130 A 20191106**; CN 201980069747 A 20191106; JP 2018209912 A 20181107; JP 2019043464 W 20191106