

Title (en)
LUBRICATING OIL COMPOSITION

Title (de)
SCHMIERÖLZUSAMMENSETZUNG

Title (fr)
COMPOSITION D'HUILE DE GRAISSAGE

Publication
EP 3950904 A1 20220209 (EN)

Application
EP 20781970 A 20200325

Priority
• JP 2019065482 A 20190329
• JP 2020013227 W 20200325

Abstract (en)
Provided is a lubricating oil composition for a gas engine, comprising a base oil (A), a calcium-based detergent (B), and an alkenyl succinimide (C), wherein a content of calcium atoms is 0.09 to 0.17 mass% based on the total amount of the lubricating oil composition, the component (C) comprises a non-boron-modified alkenyl bis-succinimide (C1), and a content of boron atoms derived from the component (C) is less than 0.02 mass % based on the total amount of the lubricating oil composition.

IPC 8 full level
C10M 133/56 (2006.01); **C10M 137/10** (2006.01); **C10M 139/00** (2006.01); **C10M 159/22** (2006.01); **C10N 10/04** (2006.01); **C10N 20/04** (2006.01); **C10N 30/04** (2006.01); **C10N 40/12** (2006.01); **C10N 40/25** (2006.01)

CPC (source: EP US)
C10M 129/54 (2013.01 - US); **C10M 133/44** (2013.01 - US); **C10M 137/10** (2013.01 - US); **C10M 139/00** (2013.01 - US); **C10M 141/12** (2013.01 - US); **C10M 163/00** (2013.01 - EP); **C10M 169/04** (2013.01 - EP US); **C10M 2203/003** (2013.01 - US); **C10M 2203/1025** (2013.01 - EP); **C10M 2207/026** (2013.01 - EP); **C10M 2207/144** (2013.01 - US); **C10M 2207/262** (2013.01 - EP); **C10M 2215/064** (2013.01 - EP); **C10M 2215/28** (2013.01 - EP); **C10M 2215/30** (2013.01 - US); **C10M 2219/046** (2013.01 - EP); **C10M 2223/045** (2013.01 - US); **C10M 2227/061** (2013.01 - US); **C10N 2030/02** (2013.01 - EP); **C10N 2030/04** (2013.01 - US); **C10N 2030/40** (2020.05 - US); **C10N 2040/25** (2013.01 - EP US)

C-Set (source: EP)
1. **C10M 2215/28 + C10N 2060/14**
2. **C10M 2207/262 + C10N 2010/04**

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 3950904 A1 20220209; **EP 3950904 A4 20221207**; JP 7454556 B2 20240322; JP WO2020203525 A1 20201008; US 2022169946 A1 20220602; WO 2020203525 A1 20201008

DOCDB simple family (application)
EP 20781970 A 20200325; JP 2020013227 W 20200325; JP 2021511525 A 20200325; US 202017442769 A 20200325