

Title (en)  
REFRIGERATING MACHINE OIL

Title (de)  
KÜHLMASCHINENÖL

Title (fr)  
HUILE POUR MACHINE FRIGORIFIQUE

Publication  
**EP 3492563 B1 20230614 (EN)**

Application  
**EP 17834535 A 20170728**

Priority  
• JP 2016148479 A 20160728  
• JP 2017027449 W 20170728

Abstract (en)  
[origin: EP3492563A1] The present invention provides a refrigerating machine oil including a lubricating base oil and a compound represented by the following formula (A): wherein Rand Reach independently represent a monoivalent hydrocarbon group, R represents a divalent hydrocarbon group, X represents a polar group, and Z and Zeach independently represent oxygen atom or sulfur atom.

IPC 8 full level

**C10M 137/04** (2006.01); **C10M 105/32** (2006.01); **C10M 107/34** (2006.01); **C10M 129/18** (2006.01); **C10M 137/02** (2006.01);  
**C10M 137/10** (2006.01); **C10N 30/06** (2006.01); **C10N 40/30** (2006.01)

CPC (source: EP KR US)  
**C10M 105/18** (2013.01 - KR); **C10M 105/32** (2013.01 - KR US); **C10M 107/34** (2013.01 - US); **C10M 129/18** (2013.01 - KR US);  
**C10M 137/02** (2013.01 - EP US); **C10M 137/04** (2013.01 - US); **C10M 137/12** (2013.01 - KR); **C10M 137/14** (2013.01 - KR);  
**C10M 169/04** (2013.01 - US); **C10M 171/008** (2013.01 - EP US); **C10M 2207/0406** (2013.01 - EP US); **C10M 2207/042** (2013.01 - EP US);  
**C10M 2207/2805** (2013.01 - US); **C10M 2207/2835** (2013.01 - EP US); **C10M 2207/301** (2013.01 - EP US); **C10M 2209/043** (2013.01 - EP US);  
**C10M 2209/1013** (2013.01 - US); **C10M 2209/1085** (2013.01 - EP US); **C10M 2223/041** (2013.01 - US); **C10N 2020/101** (2020.05 - EP US);  
**C10N 2030/06** (2013.01 - EP US); **C10N 2040/30** (2013.01 - EP US)

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

DOCDB simple family (publication)

**EP 3492563 A1 20190605**; **EP 3492563 A4 20190731**; **EP 3492563 B1 20230614**; CN 109072114 A 20181221; CN 109072114 B 20220318;  
JP 6964586 B2 20211110; JP WO2018021533 A1 20190523; KR 102328774 B1 20211119; KR 20190034138 A 20190401;  
US 2019161701 A1 20190530; WO 2018021533 A1 20180201

DOCDB simple family (application)

**EP 17834535 A 20170728**; CN 201780026257 A 20170728; JP 2017027449 W 20170728; JP 2018530422 A 20170728;  
KR 20187024670 A 20170728; US 201716320803 A 20170728