

Title (en)

LUBRICATING OIL ADDITIVE AND METHOD FOR PRODUCING LUBRICATING OIL ADDITIVE

Title (de)

SCHMIERÖLADDITIV UND VERFAHREN ZUR HERSTELLUNG EINES SCHMIERÖLADDITIVS

Title (fr)

ADDITIF POUR HUILE LUBRIFIANTE ET SON PROCÉDÉ DE PRODUCTION

Publication

**EP 3587542 A1 20200101 (EN)**

Application

**EP 18758457 A 20180222**

Priority

- JP 2017031602 A 20170222
- JP 2018006596 W 20180222

Abstract (en)

[Summary][Object]It is an object of this invention to provide a lubricant additive applicable integrally to all of different types of lubricants for various applications.[Means for Achieving the Object]A lubricant additive adapted to be blended to a lubricating oil, which is characterized by comprising a synthesized base oil of the polyolester type, the content of which to be contained in the lubricant additive is in a range of from 30.0 w/w% to 60.0 w/w%, calcium sulfonate containing calcium carbonate formed in the calcite crystal structure, the content of which to be contained in the lubricant additive is in a range of from 5.0 w/w% to 30.0 w/w%, a poly-alpha-olefin oligomer, an anti-oxidant of the zinc dithiophosphate type, succinimide, an extreme pressure agent of the thiadiazole type and an anti-oxidant of the phenol type, is provided.

IPC 8 full level

**C10M 169/04** (2006.01); **C10M 105/38** (2006.01); **C10M 129/10** (2006.01); **C10M 133/16** (2006.01); **C10M 133/56** (2006.01);  
**C10M 135/10** (2006.01); **C10M 135/36** (2006.01); **C10M 137/10** (2006.01); **C10M 143/08** (2006.01); **C10M 177/00** (2006.01);  
**C10N 10/04** (2006.01); **C10N 30/00** (2006.01); **C10N 40/04** (2006.01); **C10N 40/25** (2006.01); **C10N 70/00** (2006.01)

CPC (source: EP KR US)

**C10M 143/08** (2013.01 - US); **C10M 169/04** (2013.01 - KR US); **C10M 169/048** (2013.01 - EP); **C10M 177/00** (2013.01 - EP KR US);  
**C10M 105/38** (2013.01 - KR); **C10M 129/10** (2013.01 - KR); **C10M 133/16** (2013.01 - KR); **C10M 133/56** (2013.01 - KR);  
**C10M 135/10** (2013.01 - KR); **C10M 135/36** (2013.01 - KR); **C10M 137/10** (2013.01 - KR); **C10M 143/08** (2013.01 - KR);  
**C10M 2201/062** (2013.01 - US); **C10M 2201/084** (2013.01 - US); **C10M 2205/028** (2013.01 - EP US); **C10M 2207/023** (2013.01 - US);  
**C10M 2207/026** (2013.01 - EP); **C10M 2207/28** (2013.01 - US); **C10M 2207/2825** (2013.01 - EP); **C10M 2207/2835** (2013.01 - US);  
**C10M 2215/223** (2013.01 - US); **C10M 2215/28** (2013.01 - EP US); **C10M 2219/046** (2013.01 - EP US); **C10M 2219/106** (2013.01 - EP US);  
**C10M 2223/045** (2013.01 - EP US); **C10N 2020/02** (2013.01 - US); **C10N 2030/02** (2013.01 - EP US); **C10N 2030/06** (2013.01 - EP US);  
**C10N 2030/54** (2020.05 - EP); **C10N 2030/76** (2020.05 - EP); **C10N 2040/02** (2013.01 - EP); **C10N 2040/04** (2013.01 - EP);  
**C10N 2040/042** (2020.05 - EP); **C10N 2040/045** (2020.05 - EP); **C10N 2040/08** (2013.01 - EP); **C10N 2040/252** (2020.05 - EP US);  
**C10N 2070/00** (2013.01 - EP); **C10N 2070/02** (2020.05 - 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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**EP 3587542 A1 20200101; EP 3587542 A4 20201209; EP 3587542 B1 20230823; EP 3587542 C0 20230823;** AU 2018224752 A1 20190822;  
AU 2018224752 B2 20230601; CN 110300796 A 20191001; JP 6465536 B2 20190206; JP WO2018155601 A1 20190228;  
KR 102345529 B1 20211230; KR 20190117525 A 20191016; SG 11201907681Q A 20190927; US 2020002639 A1 20200102;  
WO 2018155601 A1 20180830

DOCDB simple family (application)

**EP 18758457 A 20180222;** AU 2018224752 A 20180222; CN 201880012065 A 20180222; JP 2018006596 W 20180222;  
JP 2018527256 A 20180222; KR 20197023655 A 20180222; SG 11201907681Q A 20180222; US 201816484276 A 20180222