

Title (en)
GREASE COMPOSITION

Title (de)
SCHMIERFETTZUSAMMENSETZUNG

Title (fr)
COMPOSITION DE GRAISSE

Publication
EP 4090724 B1 20230830 (EN)

Application
EP 21700586 A 20210114

Priority
• JP 2020005259 A 20200116
• EP 2021050733 W 20210114

Abstract (en)
[origin: WO2021144384A1] Provided is a lubricating grease used for lubricating mechanical elements having a reciprocating sliding ball interposed therebetween and maintaining flaking resistance even under a high load in mechanical elements having a reciprocating sliding ball interposed therebetween. The present invention therefore provides a grease composition comprising a base oil (a), a diurea compound (b), an amide compound (c), and a thiophosphorous compound or a thiophosphoric acid ester compound (d), wherein the diurea compound (b) includes a compound represented by Formula (1) R1-NHCONH-R2-NHCONH-R3 (1) wherein R1 and R3 represent an acyclic aliphatic hydrocarbon group having from 8 to 20 carbon atoms, and R2 represents a diphenylmethane group.

IPC 8 full level
C10M 169/06 (2006.01); **C10N 20/02** (2006.01); **C10N 30/06** (2006.01); **C10N 40/02** (2006.01); **C10N 50/10** (2006.01)

CPC (source: EP KR US)
C10M 115/08 (2013.01 - US); **C10M 133/20** (2013.01 - US); **C10M 137/02** (2013.01 - US); **C10M 141/10** (2013.01 - US);
C10M 169/00 (2013.01 - US); **C10M 169/06** (2013.01 - EP KR); **C10M 2203/003** (2013.01 - US); **C10M 2203/1006** (2013.01 - EP KR);
C10M 2205/0285 (2013.01 - EP KR); **C10M 2207/0406** (2013.01 - EP KR); **C10M 2207/126** (2013.01 - EP KR); **C10M 2215/04** (2013.01 - EP KR);
C10M 2215/08 (2013.01 - EP KR); **C10M 2215/1026** (2013.01 - EP KR); **C10M 2215/28** (2013.01 - US); **C10M 2223/049** (2013.01 - EP KR US);
C10N 2020/02 (2013.01 - EP KR); **C10N 2030/06** (2013.01 - EP KR); **C10N 2040/02** (2013.01 - EP KR); **C10N 2050/10** (2013.01 - EP KR US)

C-Set (source: EP)
1. **C10M 2207/126 + C10N 2010/04**
2. **C10M 2207/126 + C10N 2010/06**

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)
WO 2021144384 A1 20210722; BR 112022013813 A2 20220913; CN 114945654 A 20220826; EP 4090724 A1 20221123;
EP 4090724 B1 20230830; JP 2021113250 A 20210805; JP 2024051124 A 20240410; JP 2024051125 A 20240410; JP 7448359 B2 20240312;
KR 20220125792 A 20220914; US 2023049828 A1 20230216

DOCDB simple family (application)
EP 2021050733 W 20210114; BR 112022013813 A 20210114; CN 202180008972 A 20210114; EP 21700586 A 20210114;
JP 2020005259 A 20200116; JP 2024029085 A 20240228; JP 2024029086 A 20240228; KR 20227023124 A 20210114;
US 202117785133 A 20210114