

Title (en)

BIODEGRADABLE GREASE COMPOSITION FOR AEROGENERATOR

Title (de)

BIOLOGISCH ABBAUBARE FETTZUSAMMENSETZUNG FÜR WINDGENERATOR

Title (fr)

COMPOSITION DE GRAISSE BIODÉGRADABLE POUR AÉROGÉNÉRATEUR

Publication

EP 3018192 B1 20220105 (EN)

Application

EP 15192511 A 20151102

Priority

JP 2014225309 A 20141105

Abstract (en)

[origin: EP3018192A1] An object of the present invention is to provide a biodegradable grease composition which is excellent in fretting resistance, extreme pressure property, low temperature property, and biodegradability as well, and has a small effect to the environment even if released to a natural environment. The grease composition comprises a base oil composed of an ester oil having a kinematic viscosity at 40°C of 60 to 160 mm²/s and a thickener composed of a diurea compound obtained by allowing an amine mixture comprising a 4-8C alicyclic monoamine and a 20-24C aliphatic monoamine to react with a diisocyanate compound, wherein a content molar ratio of the alicyclic monoamine and the aliphatic monoamine in the amine mixture is 7:3 to 9:1, the content of the thickener in a total amount of the base oil and the thickener is 7 to 11 % by mass and a penetration is 265 to 340.

IPC 8 full level

C10M 169/02 (2006.01); **C10N 20/00** (2006.01); **C10N 20/02** (2006.01); **C10N 30/00** (2006.01); **C10N 30/06** (2006.01); **C10N 40/02** (2006.01); **C10N 50/10** (2006.01)

CPC (source: EP)

C10M 169/02 (2013.01); **C10M 2207/2815** (2013.01); **C10M 2207/289** (2013.01); **C10M 2215/1026** (2013.01); **C10M 2215/225** (2013.01); **C10M 2219/046** (2013.01); **C10M 2223/043** (2013.01); **C10N 2020/02** (2013.01); **C10N 2020/081** (2020.05); **C10N 2030/06** (2013.01); **C10N 2030/64** (2020.05); **C10N 2030/68** (2020.05); **C10N 2040/02** (2013.01); **C10N 2050/10** (2013.01)

C-Set (source: EP)

C10M 2219/046 + C10N 2010/04

Cited by

RU2713451C1; CN109370720A; EP3763805A4; US11697786B2; US11155766B2

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 3018192 A1 20160511; EP 3018192 B1 20220105; CN 105567386 A 20160511; CN 105567386 B 20201002; DK 3018192 T3 20220131; ES 2904491 T3 20220405; JP 2016089040 A 20160523; JP 6348050 B2 20180627

DOCDB simple family (application)

EP 15192511 A 20151102; CN 201510736916 A 20151103; DK 15192511 T 20151102; ES 15192511 T 20151102; JP 2014225309 A 20141105