

Title (en)
COOLING AND FLAME-RETARDANT LUBRICATING COMPOSITION FOR A PROPULSION SYSTEM OF AN ELECTRIC OR HYBRID VEHICLE

Title (de)
KÜHL- UND FLAMMSCHUTZMITTELZUSAMMENSETZUNG FÜR EIN ANTRIEBSSYSTEM EINES ELEKTRISCHEN ODER HYBRIDFAHRZEUGS

Title (fr)
COMPOSITION DE LUBRIFICATION REFROIDISSANTE ET IGNIFUGEANTE POUR SYSTEME DE PROPULSION D'UN VEHICULE ELECTRIQUE OU HYBRIDE

Publication
EP 3820977 A1 20210519 (FR)

Application
EP 19737543 A 20190710

Priority
• FR 1856470 A 20180713
• EP 2019068617 W 20190710

Abstract (en)
[origin: WO2020011889A1] The invention relates to a composition for lubricating a propulsion system of an electric or hybrid vehicle, comprising at least one base oil and at least one flame retardant of formula (I) RF-L-RH (I), where RF is a perfluorinated or partially fluorinated group, RH is a hydrocarbon group, and L is a linking agent. The invention also relates to the use of at least one flame retardant of formula (I) in a lubricating composition for a propulsion system of an electric or hybrid vehicle comprising at least one battery, in order to impart flame-retardant properties thereto. Finally, the invention relates to a method for cooling and fireproofing a battery of a propulsion system of an electric or hybrid vehicle, comprising at least one step of bringing at least one battery, in particular a lithium-ion or nickel-cadmium battery, into contact with a composition according to the invention.

IPC 8 full level
C10M 135/02 (2006.01); **C10M 105/52** (2006.01); **C10M 105/54** (2006.01); **C10M 105/72** (2006.01); **C10M 105/74** (2006.01); **C10M 131/02** (2006.01); **C10M 131/04** (2006.01); **C10M 131/10** (2006.01); **C10M 137/04** (2006.01)

CPC (source: EP KR US)
C09K 5/10 (2013.01 - US); **C10M 105/52** (2013.01 - EP KR); **C10M 105/54** (2013.01 - EP KR); **C10M 105/72** (2013.01 - EP KR); **C10M 105/74** (2013.01 - EP KR); **C10M 131/02** (2013.01 - EP KR); **C10M 131/04** (2013.01 - EP KR US); **C10M 131/08** (2013.01 - US); **C10M 131/10** (2013.01 - EP KR); **C10M 135/02** (2013.01 - EP KR); **C10M 137/04** (2013.01 - EP KR US); **C10M 169/04** (2013.01 - US); **C09K 2205/112** (2013.01 - US); **C10M 2205/0285** (2013.01 - EP KR US); **C10M 2207/2805** (2013.01 - EP KR US); **C10M 2209/1033** (2013.01 - EP KR US); **C10M 2211/022** (2013.01 - EP KR US); **C10M 2211/0225** (2013.01 - EP KR); **C10M 2211/042** (2013.01 - EP KR US); **C10M 2211/0425** (2013.01 - EP KR); **C10M 2219/082** (2013.01 - EP KR); **C10M 2219/083** (2013.01 - EP KR); **C10M 2223/02** (2013.01 - US); **C10M 2223/04** (2013.01 - EP KR US); **C10M 2223/0405** (2013.01 - EP KR); **C10N 2020/02** (2013.01 - US); **C10N 2030/00** (2013.01 - EP KR); **C10N 2030/08** (2013.01 - EP KR); **C10N 2040/04** (2013.01 - EP KR); **C10N 2040/14** (2013.01 - EP KR US); **C10N 2040/16** (2013.01 - EP KR US); **Y02E 60/10** (2013.01 - EP); **Y02T 10/70** (2013.01 - EP)

Citation (search report)
See references of WO 2020011889A1

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)
WO 2020011889 A1 20200116; CN 112673081 A 20210416; EP 3820977 A1 20210519; FR 3083800 A1 20200117; FR 3083800 B1 20201225; JP 2021524529 A 20210913; KR 20210104641 A 20210825; MX 2021000451 A 20210527; US 11591538 B2 20230228; US 2021277322 A1 20210909

DOCDB simple family (application)
EP 2019068617 W 20190710; CN 201980058806 A 20190710; EP 19737543 A 20190710; FR 1856470 A 20180713; JP 2021500787 A 20190710; KR 20217004061 A 20190710; MX 2021000451 A 20190710; US 201917259285 A 20190710