

Title (en)
LOW VISCOSITY GEAR LUBRICANTS

Title (de)
NIEDRIGVISKOSE GETRIEBESCHMIERMITTEL

Title (fr)
LUBRIFIANT D'ENGRENAGE À FAIBLE VISCOSITÉ

Publication
EP 3371290 A1 20180912 (EN)

Application
EP 16794148 A 20161027

Priority
• US 201562251886 P 20151106
• US 2016059009 W 20161027

Abstract (en)
[origin: WO2017079017A1] A lubricant composition of 40 to 95 % of an oil having a kinematic viscosity at 100 °C of 3 to 7.5; 0.3 to 2 % of an amine salt of a phosphorus compound obtained by reacting phosphorus pentasulfide with one or more alcohols having 4 to about 13, or 4 to 8, or 6, carbon atoms, with an alkylene oxide, and further with phosphorus pentoxide, and salting the resulting material with one or more amines having 2 to 20 or 12 to 24 carbon atoms; and an active-sulfur containing agent in an amount to provide 0.5 to 7 % sulfur to the composition provides good wear protection to gears at a relatively low viscosity of the composition.

IPC 8 full level
C10M 169/04 (2006.01)

CPC (source: EP US)
C10M 101/02 (2013.01 - US); **C10M 105/04** (2013.01 - US); **C10M 135/04** (2013.01 - US); **C10M 137/105** (2013.01 - US); **C10M 169/04** (2013.01 - EP US); **C10M 2203/024** (2013.01 - US); **C10M 2203/1006** (2013.01 - EP US); **C10M 2203/1025** (2013.01 - EP US); **C10M 2205/0285** (2013.01 - EP US); **C10M 2209/084** (2013.01 - EP US); **C10M 2209/086** (2013.01 - EP US); **C10M 2219/022** (2013.01 - EP US); **C10M 2223/043** (2013.01 - EP US); **C10M 2223/047** (2013.01 - EP US); **C10M 2223/049** (2013.01 - EP US); **C10N 2020/02** (2013.01 - EP US); **C10N 2030/02** (2013.01 - EP US); **C10N 2030/06** (2013.01 - EP US); **C10N 2030/42** (2020.05 - EP US); **C10N 2030/43** (2020.05 - EP US); **C10N 2040/02** (2013.01 - EP US); **C10N 2040/04** (2013.01 - EP US); **C10N 2060/14** (2013.01 - EP US)

Citation (search report)
See references of WO 2017079017A1

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 2017079017 A1 20170511; CA 3004417 A1 20170511; CN 108431189 A 20180821; EP 3371290 A1 20180912; EP 3371290 B1 20200708; EP 3786264 A1 20210303; US 2018312775 A1 20181101

DOCDB simple family (application)
US 2016059009 W 20161027; CA 3004417 A 20161027; CN 201680077049 A 20161027; EP 16794148 A 20161027; EP 20184071 A 20161027; US 201715772843 A 20170511