

Title (en)
HIGH MOLECULAR WEIGHT AMIDE/ESTER CONTAINING QUATERNARY AMMONIUM SALTS

Title (de)
HOCHMOLEKULARES AMID/ESTER MIT QUATERNÄREN AMMONIUMSALZEN

Title (fr)
AMIDE/ESTER DE POIDS MOLÉCULAIRE ÉLEVÉ CONTENANT DES SELS D'AMMONIUM QUATERNAIRE

Publication
EP 3149125 A1 20170405 (EN)

Application
EP 15727837 A 20150529

Priority
• US 201462005085 P 20140530
• US 2015033170 W 20150529

Abstract (en)
[origin: WO2015184254A1] The present technology is related to amide or ester containing quaternary ammonium salts having a hydrocarbyl substituent of number average molecular weight of 1300 to 3000, and the use of such quaternary ammonium salts in fuel compositions to improve the water shedding performance of the fuel composition.

IPC 8 full level
C10M 133/46 (2006.01); **C10L 1/188** (2006.01); **C10L 1/222** (2006.01); **C10L 1/224** (2006.01); **C10L 1/232** (2006.01); **C10L 1/2383** (2006.01); **C10L 10/18** (2006.01); **C10M 133/56** (2006.01); **C10M 133/58** (2006.01); **C10N 20/04** (2006.01); **C10N 40/25** (2006.01); **C10N 70/00** (2006.01)

CPC (source: CN EP US)
C10L 1/232 (2013.01 - US); **C10L 1/2383** (2013.01 - CN EP US); **C10L 10/04** (2013.01 - CN EP US); **C10L 10/18** (2013.01 - CN EP US); **C10M 133/44** (2013.01 - US); **C10M 133/56** (2013.01 - CN EP US); **C10L 1/1883** (2013.01 - CN EP US); **C10L 2200/0423** (2013.01 - CN EP US); **C10L 2200/0446** (2013.01 - CN EP US); **C10L 2270/023** (2013.01 - US); **C10L 2270/026** (2013.01 - US); **C10M 2207/127** (2013.01 - CN EP US); **C10M 2215/02** (2013.01 - CN EP US); **C10M 2215/04** (2013.01 - CN EP US); **C10M 2215/042** (2013.01 - CN EP US); **C10M 2215/223** (2013.01 - US); **C10M 2215/28** (2013.01 - CN EP US); **C10M 2217/043** (2013.01 - CN EP US); **C10N 2020/04** (2013.01 - CN EP US); **C10N 2030/04** (2013.01 - US); **C10N 2040/25** (2013.01 - CN EP US); **C10N 2040/252** (2020.05 - CN EP US); **C10N 2040/253** (2020.05 - CN EP US); **C10N 2040/255** (2020.05 - CN EP US); **C10N 2040/26** (2013.01 - CN EP US); **C10N 2070/00** (2013.01 - CN EP US)

Citation (search report)
See references of WO 2015184254A1

Citation (examination)
WO 2013017886 A1 20130207 - INNOSPEC LTD [GB], et al

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 2015184254 A1 20151203; BR 112016028067 A2 20170822; CN 106661472 A 20170510; EP 3149125 A1 20170405; SG 11201609817R A 20161229; US 2017096610 A1 20170406

DOCDB simple family (application)
US 2015033170 W 20150529; BR 112016028067 A 20150529; CN 201580041286 A 20150529; EP 15727837 A 20150529; SG 11201609817R A 20150529; US 201515315003 A 20150529