

Title (en)
BRANCHED AMINE CONTAINING QUATERNARY AMMONIUM SALTS

Title (de)
QUATERNÄRE AMMONIUMSALZE MIT VERZWEIGTEM AMIN

Title (fr)
SELS D'AMMONIUM QUATERNAIRES CONTENANT DES AMINES RAMIFIÉES

Publication
EP 3149128 A1 20170405 (EN)

Application
EP 15729657 A 20150529

Priority
• US 201462005146 P 20140530
• US 2015033164 W 20150529

Abstract (en)
[origin: WO2015184251A1] The present technology is related to branched amine containing quaternary ammonium salts, and the use of such quaternary ammonium salts in fuel and oil compositions.

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 1/221 (2013.01 - US); **C10L 1/2222** (2013.01 - CN); **C10L 1/224** (2013.01 - CN); **C10L 1/2383** (2013.01 - CN EP US); **C10L 1/2437** (2013.01 - EP US); **C10L 10/04** (2013.01 - CN EP US); **C10L 10/18** (2013.01 - CN EP US); **C10M 133/16** (2013.01 - CN); **C10M 133/56** (2013.01 - EP US); **C10M 149/02** (2013.01 - CN); **C10L 1/1883** (2013.01 - EP US); **C10L 2200/0259** (2013.01 - US); **C10L 2230/086** (2013.01 - CN); **C10L 2270/026** (2013.01 - CN); **C10M 2207/127** (2013.01 - EP US); **C10M 2215/02** (2013.01 - EP US); **C10M 2215/04** (2013.01 - EP US); **C10M 2215/042** (2013.01 - EP US); **C10M 2215/28** (2013.01 - EP US); **C10M 2217/043** (2013.01 - EP US); **C10N 2020/04** (2013.01 - EP US); **C10N 2030/04** (2013.01 - CN); **C10N 2030/06** (2013.01 - CN); **C10N 2030/12** (2013.01 - CN); **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 - EP US)

Citation (search report)
See references of WO 2015184251A1

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 2015184251 A1 20151203; BR 112016028075 A2 20170822; CN 106574197 A 20170419; EP 3149128 A1 20170405; SG 11201609885X A 20161229; US 2017096611 A1 20170406

DOCDB simple family (application)
US 2015033164 W 20150529; BR 112016028075 A 20150529; CN 201580040010 A 20150529; EP 15729657 A 20150529; SG 11201609885X A 20150529; US 201515315064 A 20150529