

Title (en)

Use of oily liquids to improve the oxidation stability of fuel oils

Title (de)

Verwendung von öligen Flüssigkeiten zur Verbesserung der Oxidationsstabilität der Brennstofföle

Title (fr)

Utilisation de liquides huileux contre l'oxydation des huiles combustibles

Publication

EP 1380633 B1 20140326 (DE)

Application

EP 03013092 A 20030611

Priority

- DE 10252972 A 20021114
- DE 10230771 A 20020709

Abstract (en)

[origin: EP1380633A1] Oily liquids comprise: (a) an ester of a C1-C5 monohydric alcohol with fatty acids containing 8-30 carbon atoms, at least 50% of the fatty acids having at least one double bond; and (b) a resin produced by condensing an aldehyde or ketone with an alkylphenol having at least one alkyl or alkenyl group of 6-24 carbon atoms to give a product comprising 2-50 alkylphenol units. An Independent claim is also included for fuel oils with a sulfur content of no more than 0.035 wt.% containing 0.001-0.5 wt.% of a composition as above.

IPC 8 full level

C10L 1/14 (2006.01); **C10L 1/192** (2006.01); **C10L 1/08** (2006.01); **C10L 1/18** (2006.01); **C10L 1/19** (2006.01); **C10L 1/198** (2006.01); **C10L 1/22** (2006.01); **C10L 1/222** (2006.01); **C10L 10/04** (2006.01); **C10L 10/08** (2006.01); **C10M 105/08** (2006.01); **C10M 169/04** (2006.01)

CPC (source: EP US)

C10L 1/143 (2013.01 - EP US); **C10L 10/08** (2013.01 - EP US); **C10M 169/04** (2013.01 - EP US); **C10M 169/044** (2013.01 - EP US); **C10L 1/1835** (2013.01 - EP US); **C10L 1/19** (2013.01 - EP US); **C10L 1/1905** (2013.01 - EP US); **C10L 1/1981** (2013.01 - EP US); **C10L 1/221** (2013.01 - EP US); **C10L 1/224** (2013.01 - EP US); **C10L 1/2364** (2013.01 - EP US); **C10M 2205/022** (2013.01 - EP US); **C10M 2207/282** (2013.01 - EP US); **C10M 2209/101** (2013.01 - EP US); **C10N 2020/013** (2020.05 - EP US); **C10N 2020/067** (2020.05 - EP US); **C10N 2030/06** (2013.01 - EP US); **C10N 2030/10** (2013.01 - EP US); **C10N 2030/43** (2020.05 - EP US)

Cited by

DE102005045134A1; EP1767610A3; DE102005045134B4; US8298402B2

Designated contracting state (EPC)

DE ES FR GB HU IT NL SE

DOCDB simple family (publication)

EP 1380633 A1 20040114; **EP 1380633 B1 20140326**; CA 2431748 A1 20040109; CA 2431748 C 20101109; ES 2464840 T3 20140604; JP 2004043800 A 20040212; JP 4754773 B2 20110824; US 2004006912 A1 20040115; US 2008262252 A1 20081023

DOCDB simple family (application)

EP 03013092 A 20030611; CA 2431748 A 20030611; ES 03013092 T 20030611; JP 2003166759 A 20030611; US 39088406 A 20060328; US 45890603 A 20030611