

Title (en)
METHOD FOR REGENERATING LUBE OIL DISPERSANT

Title (de)
VERFAHREN ZUR WIEDERHERSTELLUNG EINES SCHMIERÖL-DISPERGIERMITTELS

Title (fr)
PROCÉDÉ DE RÉGÉNÉRATION D'UN DISPERSANT HUILEUX DE GRAISSAGE

Publication
EP 2121883 A4 20110504 (EN)

Application
EP 08743921 A 20080314

Priority
• US 2008057049 W 20080314
• US 89513307 P 20070315

Abstract (en)
[origin: WO2008112998A1] A method of regenerating used dispersant incorporated into lubricating oil is provided. The method comprises the steps of supplying used lubricating oil having dispersant molecules suspending particulate matter into a regenerating chamber; releasing the particulate matter by creating a stress on the bond between the dispersant molecules and the suspended particulate matter; permitting the released particulate matter to agglomerate; removing the agglomerated particulate matter from the lubricating oil; and discharging the lubricating oil back to the engine. An alternative method comprises the steps of supplying used lubricating oil having non-metallic polymer dispersant molecules suspending particulate matter into a capturing chamber, the dispersant molecules having polar ends and non-polar tails; interacting the used lubricating oil with an oil-insoluble capturing composition having a binding affinity for the particulate matter that is greater than that of the polar ends of the dispersant molecules to displace the suspended particulate matter and bind the particulate matter to the capturing composition within the capturing chamber; and discharging the lubricating oil back to the engine.

IPC 8 full level
C10M 175/00 (2006.01); **C10M 175/06** (2006.01)

CPC (source: EP US)
C10M 175/0008 (2013.01 - EP US); **C10M 175/0058** (2013.01 - EP US); **C10M 2205/04** (2013.01 - EP US); **C10M 2207/283** (2013.01 - EP US); **C10M 2215/28** (2013.01 - EP US); **C10M 2217/043** (2013.01 - EP US); **C10N 2030/04** (2013.01 - EP US)

Citation (search report)
• [X] US 2006260874 A1 20061123 - LOCKLEDGE SCOTT P [US], et al
• [X] US 5932104 A 19990803 - KAWAMURA MASUHIKO [JP]
• [X] WO 2006066767 A1 20060629 - INFINEUM INT LTD [GB], et al
• [X] US 2004099595 A1 20040527 - VAN NOLAND MILTON CHARLES [US]
• See references of WO 2008112998A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2008112998 A1 20080918; EP 2121883 A1 20091125; EP 2121883 A4 20110504; US 2008227674 A1 20080918

DOCDB simple family (application)
US 2008057049 W 20080314; EP 08743921 A 20080314; US 4884708 A 20080314