

Title (en)  
QUATERNIZED TERPOLYMER

Title (de)  
QUATERNISIERTES TERPOLYMERISAT

Title (fr)  
TERPOLYMÈRE QUATERNISÉ

Publication  
**EP 2563822 A1 20130306 (DE)**

Application  
**EP 11718329 A 20110426**

Priority  
• EP 10161198 A 20100427  
• EP 2011056513 W 20110426  
• EP 11718329 A 20110426

Abstract (en)  
[origin: WO2011134923A1] Quaternized terpolymer made of (A) ethylene, (B) C2- to C14-alkenyl esters of one or more aliphatic C1- to C20-monocarboxylic acids or C1- to C24-alkyl esters of acrylic acid or methacrylic acid and (Cq) ethylenically unsaturated monomers which contain at least one tertiary nitrogen atom which is to some extent or entirely present in quaternized form. The quaternized terpolymer is suitable as fuel additive for reducing or preventing formation of deposits, for reducing fuel consumption, and also for minimizing power loss in direct-injection diesel engines, in particular in diesel engines with common-rail injection systems.

IPC 8 full level  
**C08F 8/44** (2006.01); **C08F 8/00** (2006.01); **C08F 210/00** (2006.01); **C08F 210/02** (2006.01); **C10L 1/22** (2006.01)

CPC (source: EP KR)  
**C08F 8/00** (2013.01 - EP); **C08F 8/44** (2013.01 - EP KR); **C08F 210/02** (2013.01 - KR); **C08F 220/10** (2013.01 - KR); **C10L 1/22** (2013.01 - KR); **C10L 1/221** (2013.01 - EP); **C10L 1/2366** (2013.01 - EP); **C10L 10/08** (2013.01 - EP); **C08F 210/02** (2013.01 - EP); **C10L 1/1641** (2013.01 - EP); **C10L 1/1963** (2013.01 - EP)

Citation (search report)  
See references of WO 2011134923A1

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

DOCDB simple family (publication)  
**WO 2011134923 A1 20111103**; AU 2011246506 A1 20121101; BR 112012025554 A2 20160628; CA 2795545 A1 20111103; CN 102858811 A 20130102; CN 102858811 B 20150128; EP 2563822 A1 20130306; JP 2013529232 A 20130718; KR 20130060205 A 20130607

DOCDB simple family (application)  
**EP 2011056513 W 20110426**; AU 2011246506 A 20110426; BR 112012025554 A 20110426; CA 2795545 A 20110426; CN 201180020778 A 20110426; EP 11718329 A 20110426; JP 2013506614 A 20110426; KR 20127030748 A 20110426