

Title (en)
BLOCK COPOLYMERS AND THE USE THEREOF FOR IMPROVING THE COLD PROPERTIES OF FUELS OR COMBUSTIBLES

Title (de)
BLOCKCOPOLYMERE UND VERWENDUNG DAVON ZUR VERBESSERUNG DER KÄLTEEIGENSCHAFTEN VON KRAFTSTOFFEN ODER BRENNSTOFFEN

Title (fr)
COPOLYMERES A BLOCS ET LEUR UTILISATION POUR AMELIORER LES PROPRIETES A FROID DE CARBURANTS OU COMBUSTIBLES

Publication
EP 3256506 A1 20171220 (FR)

Application
EP 16703775 A 20160209

Priority
• EP 15305206 A 20150211
• EP 2016052685 W 20160209

Abstract (en)
[origin: WO2016128377A1] The invention relates to a block copolymer and the use thereof as a cold resistance additive of a fuel or combustible. The block copolymer comprises: (i) a block A consisting of a chain of structural motifs derived from at least one α,β -unsaturated alkyl methacrylate or acrylate monomer; and (ii) a block B consisting of a chain of structural motifs derived from at least one α,β -unsaturated monomer selected from styrene derivatives, the aromatic ring of which is substituted by at least one group R selected from the groups: C1 to C24 alkyl esters, and preferably acyclic linear or branched C1 to C12 hydrocarbonated chains, said chain being substituted by at least one group containing a quaternary ammonium salt. The invention also relates to an additive concentrate containing such a copolymer and to the use thereof as an anti-sedimentation additive, and advantageously, as a TLF booster additive.

IPC 8 full level
C08F 293/00 (2006.01); **C09K 23/52** (2022.01); **C10L 1/16** (2006.01); **C10L 1/197** (2006.01); **C10L 1/236** (2006.01); **C10L 10/14** (2006.01)

CPC (source: CN EP KR US)
C08F 293/005 (2013.01 - CN EP KR US); **C10L 1/146** (2013.01 - EP US); **C10L 1/1641** (2013.01 - US); **C10L 1/165** (2013.01 - CN KR); **C10L 1/1963** (2013.01 - US); **C10L 1/1973** (2013.01 - CN EP KR US); **C10L 1/2366** (2013.01 - CN EP KR US); **C10L 10/14** (2013.01 - CN EP KR US); **C08F 2438/01** (2013.01 - CN EP KR US); **C10L 2200/0438** (2013.01 - US); **C10L 2200/0446** (2013.01 - EP US); **C10L 2230/08** (2013.01 - US); **C10L 2250/04** (2013.01 - US)

Citation (search report)
See references of WO 2016128377A1

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)
EP 3056527 A1 20160817; BR 112017017179 A2 20180403; CA 2975028 A1 20160818; CN 107406565 A 20171128; EA 201791783 A1 20171229; EP 3256506 A1 20171220; KR 20170134342 A 20171206; MX 2017010139 A 20171101; US 2018030363 A1 20180201; WO 2016128377 A1 20160818; ZA 201705222 B 20190731

DOCDB simple family (application)
EP 15305206 A 20150211; BR 112017017179 A 20160209; CA 2975028 A 20160209; CN 201680015212 A 20160209; EA 201791783 A 20160209; EP 16703775 A 20160209; EP 2016052685 W 20160209; KR 20177024446 A 20160209; MX 2017010139 A 20160209; US 201615549618 A 20160209; ZA 201705222 A 20170802