

Title (en)

Viscosity index improver, with a dispersant activity.

Title (de)

Dispergierwirksame Viskositäts-Index-Verbesserer.

Title (fr)

Produit améliorant l'indice de viscosité, à action dispersante.

Publication

EP 0418610 B1 19940119 (DE)

Application

EP 90116624 A 19900830

Priority

DE 3930142 A 19890909

Abstract (en)

[origin: EP0418610A1] The invention relates to polyalkyl (meth)acrylates suitable for improving the viscosity index for use as oil additives having an improved dispersing and detergent action in diesel engines and spark-ignition engines, the polyalkyl (meth)acrylates being copolymers of 80 - 99.5 parts by weight of alkyl (meth)acrylates of the formula <IMAGE> in which R is hydrogen or methyl and R1 is an alkyl radical having 6 to 24 carbon atoms, preferably 8 to 20 carbon atoms, together with 0.5 - 20 parts by weight of at least one functionalised alkyl methacrylate of the formula II <IMAGE> in which R' is hydrogen or methyl and R2 is an alkyl radical having 2 to 6 carbon atoms and substituted by at least one OH group or is a poly-alkoxylated radical <IMAGE> in which R3 and R4 are hydrogen or methyl, R5 is an alkyl radical having 1 to 40 carbon atoms and n is an integer from 1 to 60, the total of the monomers of the formulae (I) and (II) being 100 parts by weight, and, if appropriate, 0 - 20 parts by weight of one or more monomers of the formula III <IMAGE> in which R" is hydrogen or methyl and R6 is an alkyl radical having 1 to 5 carbon atoms

IPC 1-7

C10M 145/14; C10M 159/00; C10M 157/00; C08F 220/18; C08F 255/00

IPC 8 full level

C08F 220/18 (2006.01); **C08F 255/00** (2006.01); **C08L 33/04** (2006.01); **C08L 33/10** (2006.01); **C10M 145/14** (2006.01); **C10M 149/06** (2006.01); **C10M 149/10** (2006.01); **C10M 157/00** (2006.01); **C10M 159/00** (2006.01); **C10N 30/00** (2006.01); **C10N 30/02** (2006.01); **C10N 30/04** (2006.01); **C10N 40/25** (2006.01); **F02B 1/04** (2006.01); **F02B 3/06** (2006.01); **F02F 7/00** (2006.01)

CPC (source: EP US)

C10M 143/00 (2013.01 - EP US); **C10M 145/14** (2013.01 - EP US); **C10M 157/00** (2013.01 - EP US); **C10M 2205/00** (2013.01 - EP US); **C10M 2205/02** (2013.01 - EP US); **C10M 2205/06** (2013.01 - EP US); **C10M 2209/084** (2013.01 - EP US); **C10M 2209/104** (2013.01 - EP US); **C10M 2209/105** (2013.01 - EP US); **C10M 2217/023** (2013.01 - EP US); **C10M 2217/024** (2013.01 - EP US); **C10M 2217/028** (2013.01 - EP US); **C10M 2217/06** (2013.01 - EP US); **C10N 2040/25** (2013.01 - EP US); **C10N 2040/251** (2020.05 - EP US); **C10N 2040/252** (2020.05 - EP US); **C10N 2040/253** (2020.05 - EP US); **C10N 2040/255** (2020.05 - EP US); **C10N 2040/28** (2013.01 - EP US); **F02B 1/04** (2013.01 - EP US); **F02B 3/06** (2013.01 - EP US); **F02F 7/006** (2013.01 - EP US)

Cited by

EP0697457A1; EP0566048A1; EP2235149A4; US6409778B1; EP0644252A3; EP0542111A3; DE102004037929A1; EP0691355A3; US5712359A; RU2749905C2; US6475964B1; EP0708170A1; EP0570093A1; EP0569639A1; EP1808476A4; US8728997B2; WO9927037A1; US8846589B2; DE102010001040A1; WO2011088929A1; US8540869B2; US9200233B2

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB IT LI NL SE

DOCDB simple family (publication)

EP 0418610 A1 19910327; **EP 0418610 B1 19940119**; AT E100489 T1 19940215; DE 3930142 A1 19910321; DE 59004308 D1 19940303; DK 0418610 T3 19940411; ES 2062234 T3 19941216; HK 155396 A 19960823; JP 2941392 B2 19990825; JP H03100099 A 19910425; US 5188770 A 19930223

DOCDB simple family (application)

EP 90116624 A 19900830; AT 90116624 T 19900830; DE 3930142 A 19890909; DE 59004308 T 19900830; DK 90116624 T 19900830; ES 90116624 T 19900830; HK 155396 A 19960815; JP 23731090 A 19900910; US 57667090 A 19900831