

Title (en)
SUBSTANTIALLY LINEAR ETHYLENE/ALPHA-OLEFIN POLYMERS AS VISCOSITY INDEX IMPROVERS OR GELLING AGENTS

Title (de)
IM WESENTLICHEN LINEARE POLYMERE VON ETHYLEN UND ALPA OLEFIN ALS VISKOSITÄTSINDEX VERBESSERER ODER GELIERMITTEL

Title (fr)
POLYMERES ETHYLENE/ALPHA-OLEFINES SENSIBLEMENT LINEAIRES SERVANT D'AGENTS ELEVANT L'INDICE DE VISCOSITE OU D'AGENTS GELIFIANTS

Publication
EP 0885277 A1 19981223 (EN)

Application
EP 96938715 A 19961101

Priority
• US 9617529 W 19961101
• US 1305296 P 19960308
• US 2491396 P 19960830

Abstract (en)
[origin: WO9732946A1] Substantially linear ethylene polymers, such as ethylene/octene copolymers and ethylene/propylene/diene modified polymers, when added in a viscosity modifying amount to an oleaginous material, such as a lubricating oil, provides the material with a viscosity index that exceeds that of the material alone. The substantially linear ethylene polymers, prepared by constrained geometry catalysis, may be grafted with one or more unsaturated organic compounds, such as maleic anhydride, that contain ethylenic unsaturation. The grafted polymer may be further functionalized by reactions with, for example, an alcohol or an amine compound. The substantially linear ethylene polymers, when subjected to shearing action either before or after addition to an oleaginous material, improve shear stability of the oleaginous material. The substantially linear ethylene polymers, whether grafted, grafted and further reacted or not, also work as a thickening agent for compositions such as those used in greases, cable filling compounds and cosmetics. In addition, the substantially linear ethylene polymers provide effective results when blended with other components of conventional oleaginous material compositions.

IPC 1-7
C10M 119/02; C10M 143/02; C10M 145/10; C10M 149/02; C10M 157/00

IPC 8 full level
A61K 47/32 (2006.01); **A61K 8/72** (2006.01); **A61K 8/81** (2006.01); **A61K 8/91** (2006.01); **A61Q 19/00** (2006.01); **C08L 83/06** (2006.01); **C09K 3/00** (2006.01); **C09K 8/32** (2006.01); **C10L 1/14** (2006.01); **C10L 1/16** (2006.01); **C10L 1/195** (2006.01); **C10L 1/236** (2006.01); **C10M 119/00** (2006.01); **C10M 119/02** (2006.01); **C10M 119/06** (2006.01); **C10M 119/24** (2006.01); **C10M 143/02** (2006.01); **C10M 145/02** (2006.01); **C10M 145/10** (2006.01); **C10M 149/02** (2006.01); **C10M 149/06** (2006.01); **C10M 149/10** (2006.01); **C10M 157/00** (2006.01); **C10M 157/04** (2006.01); **C10M 171/04** (2006.01); **C10L 1/18** (2006.01); **C10L 1/22** (2006.01); **C10L 1/30** (2006.01); **C10N 20/00** (2006.01); **C10N 20/02** (2006.01); **C10N 30/02** (2006.01); **C10N 40/32** (2006.01); **C10N 50/10** (2006.01)

CPC (source: EP KR)
A61K 8/042 (2013.01 - EP); **A61K 8/8111** (2013.01 - EP); **A61K 8/91** (2013.01 - EP); **A61Q 19/00** (2013.01 - EP); **C09K 3/00** (2013.01 - EP); **C09K 8/32** (2013.01 - EP); **C10L 1/143** (2013.01 - EP); **C10L 1/1633** (2013.01 - EP); **C10L 1/1641** (2013.01 - EP); **C10L 1/195** (2013.01 - EP); **C10L 1/236** (2013.01 - EP); **C10M 119/00** (2013.01 - EP); **C10M 119/02** (2013.01 - KR); **C10M 119/06** (2013.01 - EP); **C10M 119/24** (2013.01 - EP); **C10M 143/02** (2013.01 - EP KR); **C10M 145/10** (2013.01 - EP); **C10M 149/06** (2013.01 - EP); **C10M 149/10** (2013.01 - EP); **C10M 157/00** (2013.01 - EP); **C10M 157/04** (2013.01 - EP); **C10M 171/04** (2013.01 - EP); **C10L 1/1616** (2013.01 - EP); **C10L 1/165** (2013.01 - EP); **C10L 1/1658** (2013.01 - EP); **C10L 1/1666** (2013.01 - EP); **C10L 1/1691** (2013.01 - EP); **C10L 1/1955** (2013.01 - EP); **C10L 1/1963** (2013.01 - EP); **C10L 1/1966** (2013.01 - EP); **C10L 1/1973** (2013.01 - EP); **C10L 1/1985** (2013.01 - EP); **C10L 1/2364** (2013.01 - EP); **C10L 1/2366** (2013.01 - EP); **C10L 1/2368** (2013.01 - EP); **C10L 1/238** (2013.01 - EP); **C10L 1/2383** (2013.01 - EP); **C10L 1/303** (2013.01 - EP); **C10M 2205/00** (2013.01 - EP); **C10M 2205/02** (2013.01 - EP); **C10M 2205/022** (2013.01 - EP); **C10M 2205/04** (2013.01 - EP); **C10M 2205/06** (2013.01 - EP); **C10M 2209/08** (2013.01 - EP); **C10M 2209/084** (2013.01 - EP); **C10M 2209/086** (2013.01 - EP); **C10M 2215/04** (2013.01 - EP); **C10M 2215/26** (2013.01 - EP); **C10M 2217/024** (2013.01 - EP); **C10M 2217/028** (2013.01 - EP); **C10M 2217/046** (2013.01 - EP); **C10M 2217/06** (2013.01 - EP); **C10N 2020/01** (2020.05 - EP); **C10N 2040/00** (2013.01 - EP); **C10N 2040/30** (2013.01 - EP); **C10N 2040/32** (2013.01 - EP); **C10N 2040/34** (2013.01 - EP); **C10N 2040/36** (2013.01 - EP); **C10N 2040/38** (2020.05 - EP); **C10N 2040/40** (2020.05 - EP); **C10N 2040/42** (2020.05 - EP); **C10N 2040/44** (2020.05 - EP); **C10N 2040/50** (2020.05 - EP); **C10N 2070/02** (2020.05 - EP)

Citation (search report)
See references of WO 9732946A1

Designated contracting state (EPC)
BE DE DK ES FI FR GB GR IT NL PT SE

DOCDB simple family (publication)
WO 9732946 A1 19970912; AU 736658 B2 20010802; AU 7602796 A 19970922; BR 9612537 A 19990720; CA 2248368 A1 19970912; CA 2248368 C 20041228; CN 1098344 C 20030108; CN 1214078 A 19990414; EP 0885277 A1 19981223; JP 2000517348 A 20001226; KR 100490071 B1 20050812; KR 19990087593 A 19991227

DOCDB simple family (application)
US 9617529 W 19961101; AU 7602796 A 19961101; BR 9612537 A 19961101; CA 2248368 A 19961101; CN 96180200 A 19961101; EP 96938715 A 19961101; JP 53174497 A 19961101; KR 19980707035 A 19980907