

Title (en)

USE OF ETHYLENE COPOLYMERS AS MINERAL OIL ADDITIVES

Publication

EP 0111883 B2 19881026 (DE)

Application

EP 83112556 A 19831214

Priority

DE 3247753 A 19821223

Abstract (en)

[origin: US4772673A] Waxy highly branched copolymers having a molecular weight of 500 to 20,000 comprised of at least 60% by weight of ethylene, 1 to 39% by weight of an alkene carboxylic acid ester and/or a vinyl ester and 1-30% by weight of a vinyl ketone produced by polymerization at 100 to 350 DEG C. and a pressure of about 1,000 to 8,000 bar in the presence of a radical forming initiator and in the absence of a solvent useful as oil additives to improve flow characteristics of crude oils and middle distillates derived from crude oil.

IPC 1-7

C10L 1/18

IPC 8 full level

C10L 1/18 (2006.01); **C10L 1/195** (2006.01); **C10L 1/16** (2006.01)

CPC (source: EP US)

C10L 1/195 (2013.01 - EP US); **C10L 1/1641** (2013.01 - EP US); **C10L 1/1955** (2013.01 - EP US); **C10L 1/1963** (2013.01 - EP US); **C10L 1/1973** (2013.01 - EP US)

Cited by

EP0463518A1; US5200484A; WO2011071756A1; US6495495B1; WO2004078891A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

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EP 83112556 A 19831214; AT 83112556 T 19831214; DE 3247753 A 19821223; DE 3360622 T 19831214; NO 834647 A 19831216; US 3854487 A 19870415