

Title (en)

USE OF VISCOSITY MODIFIER IN HIGH VISCOSITY INDEX LUBRICATING OIL BASE STOCK COMBINATIONS

Title (de)

VERWENDUNG EINES VISKOSITÄTSVERBESSERERS IN KOMBINATIONEN AUS BASISÖLEN MIT HOHEM VISKOSITÄTSINDEX

Title (fr)

UTILISATION D'UN MODIFICATEUR DE VISCOSITÉ DANS DES COMBINAISONS D'HUILES DE BASE À HAUT INDICE DE VISCOSITÉ

Publication

**EP 2912151 A1 20150902 (EN)**

Application

**EP 13773574 A 20130927**

Priority

- US 201261717947 P 20121024
- US 2013062147 W 20130927

Abstract (en)

[origin: US2014113847A1] A lubricating composition including a first base stock component including: one or more metallocene catalyzed polyalphaolefins (mPAOs), each mPAO having a kinematic viscosity (Kv100) from 40 cSt to 155 cSt and a viscosity index (VI) from 150 to 207; a second base stock including one or more polyalphaolefins (PAOs), each PAO having a kinematic viscosity (Kv100) less than 10 cSt and a VI from 130 to 145; and a viscosity modifier including a copolymer having units derived from monomers of (i) an  $\alpha$ -olefin and (ii) an ethylenically unsaturated carboxylic acid or derivatives thereof esterified with an alcohol. A lubricant including the above lubricating composition. A method for improving fuel efficiency, while maintaining or improving wear control, load carrying capacity and/or traction reduction in a driveline device, e.g., gears and transmissions, lubricated with a lubricating oil, by using as the lubricating oil the above lubricant.

IPC 8 full level

**C10M 169/04** (2006.01); **C10M 107/10** (2006.01); **C10M 145/14** (2006.01); **C10M 149/00** (2006.01); **C10N 20/02** (2006.01); **C10N 20/04** (2006.01); **C10N 30/02** (2006.01); **C10N 30/04** (2006.01); **C10N 30/06** (2006.01); **C10N 30/08** (2006.01); **C10N 30/10** (2006.01); **C10N 40/04** (2006.01)

CPC (source: EP US)

**C10M 145/12** (2013.01 - US); **C10M 145/16** (2013.01 - US); **C10M 149/04** (2013.01 - US); **C10M 149/06** (2013.01 - US); **C10M 169/041** (2013.01 - EP US); **C10M 2205/0285** (2013.01 - EP US); **C10M 2209/084** (2013.01 - EP US); **C10M 2217/06** (2013.01 - EP US); **C10N 2020/019** (2020.05 - EP US); **C10N 2030/02** (2013.01 - EP US); **C10N 2030/04** (2013.01 - EP US); **C10N 2030/06** (2013.01 - EP US); **C10N 2030/08** (2013.01 - EP US); **C10N 2030/10** (2013.01 - EP US); **C10N 2030/68** (2020.05 - EP US); **C10N 2040/04** (2013.01 - EP US); **C10N 2040/044** (2020.05 - EP US)

Citation (search report)

See references of WO 2014065984A1

Cited by

CN107955680A

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)

**US 2014113847 A1 20140424**; EP 2912151 A1 20150902; EP 2912151 B1 20190807; SG 10201703150V A 20170629; SG 11201501766X A 20150429; WO 2014065984 A1 20140501

DOCDB simple family (application)

**US 201314034864 A 20130924**; EP 13773574 A 20130927; SG 10201703150V A 20130927; SG 11201501766X A 20130927; US 2013062147 W 20130927