

Title (en)

BRANCHED DIESTERS FOR USE TO REDUCE THE FUEL CONSUMPTION OF AN ENGINE

Title (de)

VERZWEIGTE DIESTER ZUR VERWENDUNG BEI DER SENKUNG DES KRAFTSTOFFVERBRAUCHS EINES MOTORS

Title (fr)

DIESTERS RAMIFIÉS DESTINÉS À LA RÉDUCTION DE LA CONSOMMATION DE CARBURANT D'UN MOTEUR

Publication

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Application

**EP 15179377 A 20150731**

Priority

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Abstract (en)

The invention refers to use of lubricant compositions comprising a specific diester and additives to reduce the fuel consumption of an engine.

IPC 8 full level

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CPC (source: EP US)

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Citation (applicant)

- WO 2012070007 A1 20120531 - TOTAL RAFFINAGE MARKETING [FR], et al
- WO 2013164457 A1 20131107 - TOTAL MARKETING SERVICES [FR], et al
- WO 2008048522 A1 20080424 - CARGILL INC [US], et al
- US 2011113679 A1 20110519 - COHEN STEVEN A [US], et al
- US 2008009635 W 20080811
- US 2010145086 A1 20100610 - SCHRODI YANN [US], et al
- US 4545941 A 19851008 - ROSENBERG DALE W [US]
- US 5312940 A 19940517 - GRUBBS ROBERT H [US], et al
- US 5342909 A 19940830 - GRUBBS ROBERT H [US], et al
- US 5710298 A 19980120 - GRUBBS ROBERT H [US], et al
- US 5728785 A 19980317 - GRUBBS ROBERT H [US], et al
- US 5728917 A 19980317 - GRUBBS ROBERT H [US], et al
- US 5750815 A 19980512 - GRUBBS ROBERT H [US], et al
- US 5831108 A 19981103 - GRUBBS ROBERT H [US], et al
- US 5922863 A 19990713 - GRUBBS ROBERT H [US], et al
- US 6306988 B1 20011023 - GRUBBS ROBERT H [US], et al
- US 6414097 B1 20020702 - GRUBBS ROBERT H [US], et al
- US 6696597 B2 20040224 - PEDERSON RICHARD L [US], et al
- US 6794534 B2 20040921 - GRUBBS ROBERT H [US], et al
- US 7102047 B2 20060905 - GRUBBS ROBERT H [US], et al
- US 7378528 B2 20080527 - HERRMANN WOLFGANG ANTON [DE], et al
- US 2009264672 A1 20091022 - ABRAHAM TIMOTHY W [US], et al
- DODOS, G.S. ET AL.: "Renewable fuels and lubricants from Lunaria annual", IND. CROPS PROD., 2015, Retrieved from the Internet <URL:http://dx.doi.org/10.1016/j.indcrop.2015.05.046>
- MORTIER, ROY M., FOX, MALCOLM F., ORSZULIK, STEFAN: "Chemistry and Technology of Lubricants", 2010
- J.C. MOL, GREEN CHEM., vol. 4, 2002, pages 11 - 12
- J. ORQ. CHEM., vol. 46, 1981, pages 1821
- J. CATAL., vol. 30, 1973, pages 118
- APPL. CATAL., vol. 70, 1991, pages 295
- ORGANOMETALLICS, vol. 13, 1994, pages 635
- IVIN; MOL, OLEFIN METATHESIS AND METATHESIS POLYMERIZATION, 1997
- CHEM. & ENG. NEWS, vol. 80, no. 51, 23 December 2002 (2002-12-23), pages 29

Citation (search report)

- [I] US 2015094246 A1 20150402 - BREDSGUARD JAKOB [US]
- [A] US 2013158277 A1 20130620 - THOMPSON TRAVIS [US], et al
- [A] WO 9810041 A1 19980312 - EXXON CHEMICAL PATENTS INC [US]
- [A] WO 2011037778 A1 20110331 - DOW GLOBAL TECHNOLOGIES INC [US], et al
- [E] WO 2015134251 A1 20150911 - ELEVANCE RENEWABLE SCIENCES [US]

Cited by

FR3069864A1; KR20210104890A; WO2019025446A1; US11162047B2

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