

Title (en)
ADDITIVES AND FUEL OIL COMPOSITIONS

Title (de)
ZUSÄTZE UND BRENNÖLZUSAMMENSETZUNGEN

Title (fr)
ADDITIFS ET COMPOSITIONS DE CARBURANT LES CONTENANT

Publication
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Application
EP 96927008 A 19960711

Priority
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Abstract (en)
[origin: WO9704044A1] Fuel oil compositions containing specific mixtures of esters of unsaturated monocarboxylic acids show improved lubricity properties.

IPC 8 full level
C10L 1/18 (2006.01); **C10L 1/14** (2006.01); **C10L 1/19** (2006.01); **C10L 10/04** (2006.01); **C10L 10/08** (2006.01); **C10L 1/16** (2006.01); **C10L 1/22** (2006.01); **C10L 1/24** (2006.01)

CPC (source: EP KR)
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Citation (opposition)
Opponent :
• CA 2112732 A1 19940708 - WENDEROTH BERND [DE], et al
• CZ 275894 B6
• US 2496328 A 19500207 - CARR BELL ADAM, et al
• EP 0739970 A1 19961030 - KAO CORP [JP]
• The Merck Index, 10th edition, pages 979-980
• Handbook of Industrial Chemistry; 9th edition, pages 273-279
• Edenor GMO product specification (Henkel KGaA)
• Römpf Chemie Lexikon; 9th edition, Page 1611
• Data sheet from Henkel "Produktpalette-Product Range", August 1991
• Data sheet from Fina chemicals "Radia Oleochamikalien", 3/93
• Ullmann's Encyklopädie der Technischen Chemie, 4th edition, vol. 11, page 457

Cited by
FR3055135A1; RU2596269C1; EA034613B1; US10280380B2; US7041738B2; WO2013120985A1; US6835217B1; WO2014029770A1; WO2017034443A3; WO2018033684A1; US10752852B2; EP1408101A1; US6743266B2; US10533144B2

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WO 9704044 A1 19970206; AT E176274 T1 19990215; AU 6699596 A 19970218; AU 704905 B2 19990506; BR 9609767 A 19990126; CA 2223653 A1 19970206; CA 2223653 C 20080122; DE 69601472 D1 19990311; DE 69601472 T2 19990916; DE 69601472 T3 20061123; DK 0839174 T3 19990913; DK 0839174 T4 20060626; EP 0839174 A1 19980506; EP 0839174 B1 19990127; EP 0839174 B2 20060524; ES 2127022 T3 19990401; ES 2127022 T5 20070301; FI 120975 B 20100531; FI 980047 A0 19980113; FI 980047 A 19980113; GB 9514480 D0 19950913; JP 3827327 B2 20060927; JP H11509255 A 19990817; KR 100365079 B1 20030220; KR 19990028955 A 19990415; MX 200712 B 20010126; MX 9800443 A 19980430; NO 329622 B1 20101122; NO 980143 D0 19980113; NO 980143 L 19980306; RU 2158750 C2 20001110; ZA 966013 B 19970131

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