

Title (en)
LOW PHOSPHORUS LUBRICANTS

Publication
EP 0280580 B1 19921104 (EN)

Application
EP 88301712 A 19880226

Priority
GB 8704682 A 19870227

Abstract (en)
[origin: EP0280580A2] Lubricants having antiwear, corrosion inhibition and antioxidant performance appropriate to modern oil requirements with reduced or zero amounts of phosphorous and without the need for large amounts and/or expensive forms of antioxidant comprise 5 to 500 parts per million by weight (ppm) of added copper present in oil-soluble form, one or more added oil-soluble sulphur-containing compounds and a bearing corrosion inhibitor.

IPC 1-7
C10M 135/00; C10M 141/08; C10M 141/12; C10M 161/00; C10M 167/00

IPC 8 full level
C10M 163/00 (2006.01); **C10M 135/00** (2006.01); **C10M 141/08** (2006.01); **C10M 141/12** (2006.01); **C10M 161/00** (2006.01); **C10M 167/00** (2006.01); **C10N 10/02** (2006.01); **C10N 10/08** (2006.01); **C10N 30/10** (2006.01); **C10N 30/12** (2006.01); **C10N 40/00** (2006.01); **C10N 40/25** (2006.01)

CPC (source: EP KR)
C10M 129/10 (2013.01 - EP); **C10M 129/38** (2013.01 - EP); **C10M 129/42** (2013.01 - EP); **C10M 129/58** (2013.01 - EP); **C10M 133/52** (2013.01 - EP); **C10M 135/04** (2013.01 - EP); **C10M 135/06** (2013.01 - EP); **C10M 135/18** (2013.01 - EP); **C10M 135/20** (2013.01 - EP); **C10M 135/30** (2013.01 - EP); **C10M 135/36** (2013.01 - EP); **C10M 139/00** (2013.01 - EP); **C10M 141/08** (2013.01 - KR); **C10M 141/12** (2013.01 - EP); **C10M 145/12** (2013.01 - EP); **C10M 145/16** (2013.01 - EP); **C10M 149/04** (2013.01 - EP); **C10M 149/10** (2013.01 - EP); **C10M 149/22** (2013.01 - EP); **C10M 159/20** (2013.01 - EP); **C10M 159/24** (2013.01 - EP); **C10M 161/00** (2013.01 - EP); **C10M 167/00** (2013.01 - EP); **C10M 2207/023** (2013.01 - EP); **C10M 2207/024** (2013.01 - EP); **C10M 2207/026** (2013.01 - EP); **C10M 2207/027** (2013.01 - EP); **C10M 2207/028** (2013.01 - EP); **C10M 2207/09** (2013.01 - EP); **C10M 2207/123** (2013.01 - EP); **C10M 2207/125** (2013.01 - EP); **C10M 2207/127** (2013.01 - EP); **C10M 2207/129** (2013.01 - EP); **C10M 2207/144** (2013.01 - EP); **C10M 2207/146** (2013.01 - EP); **C10M 2207/16** (2013.01 - EP); **C10M 2207/22** (2013.01 - EP); **C10M 2207/26** (2013.01 - EP); **C10M 2207/262** (2013.01 - EP); **C10M 2207/289** (2013.01 - EP); **C10M 2209/082** (2013.01 - EP); **C10M 2209/086** (2013.01 - EP); **C10M 2215/04** (2013.01 - EP); **C10M 2215/042** (2013.01 - EP); **C10M 2215/064** (2013.01 - EP); **C10M 2215/065** (2013.01 - EP); **C10M 2215/08** (2013.01 - EP); **C10M 2215/082** (2013.01 - EP); **C10M 2215/086** (2013.01 - EP); **C10M 2215/22** (2013.01 - EP); **C10M 2215/221** (2013.01 - EP); **C10M 2215/225** (2013.01 - EP); **C10M 2215/226** (2013.01 - EP); **C10M 2215/24** (2013.01 - EP); **C10M 2215/26** (2013.01 - EP); **C10M 2215/28** (2013.01 - EP); **C10M 2215/30** (2013.01 - EP); **C10M 2217/022** (2013.01 - EP); **C10M 2217/023** (2013.01 - EP); **C10M 2217/028** (2013.01 - EP); **C10M 2217/046** (2013.01 - EP); **C10M 2217/06** (2013.01 - EP); **C10M 2219/022** (2013.01 - EP); **C10M 2219/024** (2013.01 - EP); **C10M 2219/044** (2013.01 - EP); **C10M 2219/046** (2013.01 - EP); **C10M 2219/062** (2013.01 - EP); **C10M 2219/066** (2013.01 - EP); **C10M 2219/068** (2013.01 - EP); **C10M 2219/08** (2013.01 - EP); **C10M 2219/082** (2013.01 - EP); **C10M 2219/087** (2013.01 - EP); **C10M 2219/088** (2013.01 - EP); **C10M 2219/10** (2013.01 - EP); **C10M 2219/102** (2013.01 - EP); **C10M 2219/104** (2013.01 - EP); **C10M 2219/106** (2013.01 - EP); **C10M 2219/108** (2013.01 - EP); **C10M 2227/00** (2013.01 - EP); **C10M 2227/06** (2013.01 - EP); **C10M 2227/061** (2013.01 - EP); **C10M 2227/062** (2013.01 - EP); **C10M 2227/063** (2013.01 - EP); **C10M 2227/065** (2013.01 - EP); **C10M 2227/066** (2013.01 - EP); **C10N 2010/00** (2013.01 - EP); **C10N 2010/02** (2013.01 - EP); **C10N 2010/04** (2013.01 - EP); **C10N 2010/12** (2013.01 - EP); **C10N 2040/25** (2013.01 - EP); **C10N 2040/251** (2020.05 - EP); **C10N 2040/255** (2020.05 - EP); **C10N 2040/28** (2013.01 - EP); **C10N 2070/02** (2020.05 - EP)

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EP4357443A1; EP0814148A3; US5731273A; US5558805A; EP1624043A3; US5994277A; EP2337831A4; EP0444830A1; EP0391649A3; GB2623137A; US7612025B2; US8163681B2; US7563752B2; US7625847B2; WO2008079715A1; WO9531522A1; WO0218521A3; WO9525781A1; WO9507962A1; WO2023161795A1

Designated contracting state (EPC)
AT BE CH DE ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)
EP 0280580 A2 19880831; EP 0280580 A3 19890712; EP 0280580 B1 19921104; AR 244317 A1 19931029; AT E82020 T1 19921115; AU 1235188 A 19880901; AU 603186 B2 19901108; BR 8800835 A 19881004; CA 1306741 C 19920825; DE 3875630 D1 19921210; DE 3875630 T2 19930318; DK 103788 A 19880828; DK 103788 D0 19880226; ES 2045102 T3 19940116; GB 8704682 D0 19870401; JP 2505019 B2 19960605; JP S63304096 A 19881212; KR 880010106 A 19881007; KR 960014933 B1 19961021; MX 170110 B 19930909; MY 103223 A 19930529; NO 172853 B 19930607; NO 172853 C 19930915; NO 880846 D0 19880226; NO 880846 L 19880829; SG 50093 G 19930625; ZA 881262 B 19880822

DOCDB simple family (application)
EP 88301712 A 19880226; AR 31018188 A 19880226; AT 88301712 T 19880226; AU 1235188 A 19880226; BR 8800835 A 19880226; CA 560012 A 19880226; DE 3875630 T 19880226; DK 103788 A 19880226; ES 88301712 T 19880226; GB 8704682 A 19870227; JP 4569288 A 19880227; KR 880002058 A 19880227; MX 1058088 A 19880226; MY PI19880200 A 19880226; NO 880846 A 19880226; SG 50093 A 19930417; ZA 881262 A 19880223