

Title (en)

BORON-CONTAINING HETEROCYCLIC COMPOUNDS AND LUBRICATING OILS CONTAINING SAME.

Title (de)

BOR ENTHALTENDE HETEROCYCLISCHE VERBINDUNGEN UND SCHMIERÖLE DIE DIESE ENTHALTEN.

Title (fr)

COMPOSES HETEROCLIQUES CONTENANT DU BORE ET HUILES DE GRAISSAGE CONTENANT LESDITS COMPOSES.

Publication

EP 0120036 A1 19841003 (EN)

Application

EP 83902871 A 19830822

Priority

- US 41819682 A 19820915
- US 43460282 A 19821015
- US 47651383 A 19830318

Abstract (en)

[origin: WO8401169A1] Certain boron-containing, heterocyclic compounds which impart extreme pressure, anti-wear and friction reducing properties to lubricating oils. Such lubricating oils may be further provided with a hydrocarbon polysulfide derivative of 2, 5-dimercapto -1, 3, 4-thiodiazole as a copper corrosion inhibitor, or terephthalic acid as a lead corrosion inhibitor, or either an alkylated diphenyl amine, a bis (dithio-benzil) metal derivative, a sulfur bridged, bis hindered phenol or an alkyl or dialkyl diphenylamine as an oxidation inhibitor or a mixture thereof.

Abstract (fr)

Sont décrits certains composés hétérocycliques contenant du bore conférant une extrême pression, ainsi que des propriétés de résistance à l'usure et de réduction du frottement aux huiles de graissage. On peut en outre doter de telles huiles de graissage d'un dérivé de polysulfure d'hydrocarbure de 2,5-dimercapto-1,3,4-thiodiazole comme inhibiteur de la corrosion du cuivre, ou d'acide téraphthalique comme inhibiteur de la corrosion du plomb, ou alors d'une diphenylamine alcoyée, d'un dérivé bis(dithio-benzyle) métallique, d'un phénol doublement entravé avec pont de soufre ou d'une diphenylamine d'alcoyle ou de dialkyl comme inhibiteur d'oxydation ou d'un mélange de ceux-ci.

IPC 1-7

C10M 1/54; C10M 1/38; C07F 7/00; C07C 107/02; C07G 17/00

IPC 8 full level

C10M 169/04 (2006.01); **C07F 5/04** (2006.01); **C10M 139/00** (2006.01); **C10M 141/12** (2006.01); **C10N 30/06** (2006.01); **C10N 30/10** (2006.01);
C10N 30/12 (2006.01); **C10N 40/25** (2006.01)

CPC (source: EP US)

C07F 5/04 (2013.01 - EP); **C10M 129/52** (2013.01 - EP); **C10M 133/12** (2013.01 - EP); **C10M 135/14** (2013.01 - EP); **C10M 135/26** (2013.01 - EP);
C10M 135/36 (2013.01 - EP); **C10M 139/00** (2013.01 - EP US); **C10M 141/12** (2013.01 - EP); **C10M 2207/142** (2013.01 - EP);
C10M 2207/284 (2013.01 - EP); **C10M 2207/285** (2013.01 - EP); **C10M 2215/06** (2013.01 - EP); **C10M 2215/064** (2013.01 - EP);
C10M 2215/065 (2013.01 - EP); **C10M 2215/066** (2013.01 - EP); **C10M 2215/067** (2013.01 - EP); **C10M 2215/068** (2013.01 - EP);
C10M 2219/062 (2013.01 - EP); **C10M 2219/084** (2013.01 - EP); **C10M 2219/085** (2013.01 - EP); **C10M 2219/087** (2013.01 - EP);
C10M 2219/088 (2013.01 - EP); **C10M 2219/089** (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 2010/02** (2013.01 - EP); **C10N 2010/04** (2013.01 - EP);
C10N 2010/06 (2013.01 - EP); **C10N 2010/08** (2013.01 - EP); **C10N 2010/10** (2013.01 - EP); **C10N 2010/12** (2013.01 - EP);
C10N 2010/14 (2013.01 - EP US); **C10N 2010/16** (2013.01 - EP US)

Designated contracting state (EPC)

AT BE CH DE FR GB LI LU NL SE

DOCDB simple family (publication)

WO 8401169 A1 19840329; EP 0120036 A1 19841003; EP 0120036 A4 19851014; EP 0241949 A2 19871021; EP 0241949 A3 19881117;
JP S59501788 A 19841025

DOCDB simple family (application)

US 8301295 W 19830822; EP 83902871 A 19830822; EP 87107835 A 19830822; JP 50292883 A 19830822