

Title (en)

LUBRICATING OIL ADDITIVE AND LUBRICATING OIL COMPOSITION CONTAINING THE SAME

Publication

**EP 0206748 B1 19920902 (EN)**

Application

**EP 86304680 A 19860617**

Priority

- BR 8605801 A 19861126
- US 74556585 A 19850617
- US 74566185 A 19850617

Abstract (en)

[origin: EP0206748A2] Fuel consumption in an internal combustion engine is reduced by contacting the moving surfaces thereof with a lubricating oil having present therein a complex obtained by reacting a borated alkyl catechol with an oil-soluble alkyl or alkenyl mono or bis succinimide.

IPC 1-7

**C10M 133/56; C10M 139/00; C10M 141/00; C10M 163/00**

IPC 8 full level

**C10M 133/56** (2006.01); **C10M 139/00** (2006.01); **C10M 141/00** (2006.01); **C10M 163/00** (2006.01)

CPC (source: EP)

**C10M 129/10** (2013.01); **C10M 133/56** (2013.01); **C10M 135/10** (2013.01); **C10M 137/10** (2013.01); **C10M 139/00** (2013.01);  
**C10M 141/00** (2013.01); **C10M 159/22** (2013.01); **C10M 159/24** (2013.01); **C10M 163/00** (2013.01); **C10M 2207/023** (2013.01);  
**C10M 2207/026** (2013.01); **C10M 2207/027** (2013.01); **C10M 2207/028** (2013.01); **C10M 2207/262** (2013.01); **C10M 2215/04** (2013.01);  
**C10M 2215/086** (2013.01); **C10M 2215/26** (2013.01); **C10M 2215/28** (2013.01); **C10M 2217/046** (2013.01); **C10M 2217/06** (2013.01);  
**C10M 2219/044** (2013.01); **C10M 2219/046** (2013.01); **C10M 2219/087** (2013.01); **C10M 2219/088** (2013.01); **C10M 2219/089** (2013.01);  
**C10M 2223/045** (2013.01); **C10M 2227/00** (2013.01); **C10M 2227/06** (2013.01); **C10M 2227/061** (2013.01); **C10M 2227/062** (2013.01);  
**C10M 2227/063** (2013.01); **C10M 2227/065** (2013.01); **C10M 2227/066** (2013.01); **C10N 2010/04** (2013.01); **C10N 2040/25** (2013.01);  
**C10N 2040/251** (2020.05); **C10N 2040/255** (2020.05); **C10N 2040/28** (2013.01); **C10N 2070/02** (2020.05)

Cited by

EP0285088A3; EP0317348A1; EP0317354A1; EP1391500A1; EP0478857A1; US8791055B2; US10501702B2; US6767871B2;  
WO2016144639A1; EP0277729B1; EP0854904B2

Designated contracting state (EPC)

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BE 905818 A 19870316; CA 1273344 A 19900828; NL 8603048 A 19880616; SE 463770 B 19910121; SE 8605064 D0 19861126;  
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DOCDB simple family (application)

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