

Title (en)

Cooling lubricants containing partially neutralised phosphoric acid esters as extreme-pressure additives.

Title (de)

Kühlschmierstoffe mit teilneutralisierten Phosphorsäureestern als EP-Additive.

Title (fr)

Lubrifiants de refroidissement contenant des esters d'acide phosphorique partiellement neutralisés comme additifs extrême-pression.

Publication

EP 0605839 A1 19940713 (DE)

Application

EP 93120595 A 19931221

Priority

DE 4244317 A 19921228

Abstract (en)

A cooling lubricant which contains, as an extreme-pressure additive, an alkali metal salt or alkaline earth metal salt of a compound of the formula <IMAGE> is distinguished by an improved additive effect as compared with products which contain amine salts. It is free of diethanolamine and can therefore not form any nitrosamine in use.

Abstract (de)

Ein Kühlschmierstoff, welcher als EP-Additiv ein Alkali- oder Erdalkalisalz einer Verbindung der Formel <IMAGE> enthält, zeichnet sich durch eine bessere Additivwirkung aus im Vergleich zu Produkten, die Aminsalze enthalten. Er ist frei von Diethanolamin und kann deswegen beim Einsatz kein Nitrosamin bilden.

IPC 1-7

C10M 137/06; C10M 173/00

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

- [X] US 2285854 A 19420609 - BAXTER DOWNING FREDERICK, et al
- [X] GB 2194782 A 19880316 - CIBA GEIGY AG
- [A] US 2328540 A 19430907 - HOCHWALT CARROLL A
- [A] US 2959549 A 19601108 - FUREY MICHAEL J
- [A] WO 8803144 A1 19880505 - LUBRIZOL CORP [US]
- [A] DATABASE WPI Section Ch Week 7251, Derwent World Patents Index; Class E11, AN 72-80200T

Cited by

WO0037591A1

Designated contracting state (EPC)

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DOCDB simple family (application)

EP 93120595 A 19931221; AU 5270593 A 19931224; FI 935826 A 19931223; JP 34935793 A 19931228; NO 934835 A 19931227; ZA 939708 A 19931227