

Title (en)  
PHOSPHATE ESTER COMPOSITIONS IN A WEIGHT RATIO GREATER THAN 1:1 MONOALKYL TO DIALKYL PHOSPHATE USED AS LUBRICANT ADDITIVES

Title (de)  
DIE VERWENDUNG ALS SCHMIERMITTELZUSÄTZE VON PHOSPHATESTER ZUSAMMENSETZUNGEN DIE MONOALKYL UND DIALKYL PHOSPHAT IM GEWICHTSVERHÄLTNIS GRÖßER ALS 1:1 ENTHALTEN

Title (fr)  
COMPOSITIONS A BASE DE PHOSPHATE ESTERS AVEC RAPPORT DE POIDS MONOALKYL PHOSPATE:DIALKYL PHOSPHATE SUPERIEUR A UN, UTILISEES COMME ADDITIFS POUR LUBRIFIANTS

Publication  
**EP 1151062 A1 20011107 (EN)**

Application  
**EP 99966612 A 19991222**

Priority  
• US 9930762 W 19991222  
• US 11338998 P 19981223

Abstract (en)  
[origin: WO0037591A1] Alkyl phosphate esters having a high monoalkyl content are used as lubricating additives in functional and lubricating fluids. The esters have a weight ratio of monoalkyl phosphate esters to dialkyl phosphate esters of greater than one. The alcohols from which the esters are prepared are preferably non-ethoxylated. The functional or lubricating fluids can be oil-based or aqueous based.

IPC 1-7  
**C10M 137/06**; C10M 137/08; C10M 173/00; C07F 9/11

IPC 8 full level  
**C10M 169/04** (2006.01); **C10M 101/02** (2006.01); **C10M 101/04** (2006.01); **C10M 137/04** (2006.01); **C10M 137/06** (2006.01); **C10M 137/08** (2006.01); **C10M 173/00** (2006.01); **C10N 30/06** (2006.01)

CPC (source: EP KR)  
**C10M 137/04** (2013.01 - KR); **C10M 137/06** (2013.01 - EP); **C10M 137/08** (2013.01 - EP); **C10M 173/00** (2013.01 - EP); C10M 2201/02 (2013.01 - EP); C10M 2207/40 (2013.01 - EP); C10M 2207/404 (2013.01 - EP); C10M 2223/04 (2013.01 - EP); C10M 2223/041 (2013.01 - EP); C10M 2223/042 (2013.01 - EP); C10M 2223/043 (2013.01 - EP); C10M 2225/00 (2013.01 - EP); C10M 2225/02 (2013.01 - EP); C10N 2040/08 (2013.01 - EP); C10N 2040/20 (2013.01 - EP); C10N 2040/22 (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 2050/01 (2020.05 - EP)

Citation (search report)  
See references of WO 0037591A1

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)  
**WO 0037591 A1 20000629**; AU 2212000 A 20000712; AU 772578 B2 20040429; BR 9916476 A 20020129; EP 1151062 A1 20011107; JP 2002533529 A 20021008; KR 20010089678 A 20011008; MX PA01006475 A 20020514

DOCDB simple family (application)  
**US 9930762 W 19991222**; AU 2212000 A 19991222; BR 9916476 A 19991222; EP 99966612 A 19991222; JP 2000589650 A 19991222; KR 20017007990 A 20010622; MX PA01006475 A 19991222