

Title (en)  
POLYOL ESTER LUBRICANTS FOR HIGH EFFICIENCY REFRIGERATORS.

Title (de)  
POLYOLESTER ALS SCHMIERMITTEL FOR HOCHEFFIZIENTE KÄLTEMASCHINEN.

Title (fr)  
LUBRIFIANTS A BASE D'ESTERS DE POLYOLS POUR REFRIGERATEURS A GRAND RENDEMENT.

Publication  
**EP 0648251 A1 19950419 (EN)**

Application  
**EP 93914088 A 19930527**

Priority  
• CA 2137252 A 19930603  
• US 9304889 W 19930527  
• US 9204438 W 19920603  
• US 2919693 A 19930310

Abstract (en)  
[origin: WO9324588A1] A nearly ideal lubricant for high efficiency home refrigerators, especially those using chlorine free hydrofluorocarbon refrigerant working fluids, is the ester of trimethylolpropane with pentanoic acid. Mixtures including substantial quantities of this ester along with some other esters of hindered polyols having no more than four hydroxyl groups and acyl groups with predominantly no more than five carbon atoms are also satisfactory.

IPC 1-7  
**C09K 5/04**; **C10M 171/00**; **C10M 105/38**

IPC 8 full level  
**C09K 5/04** (2006.01); **C10M 105/38** (2006.01); **C10M 105/40** (2006.01); **C10M 169/04** (2006.01); **C10M 171/00** (2006.01); **C10N 20/02** (2006.01); **C10N 30/02** (2006.01); **C10N 30/08** (2006.01)

CPC (source: EP)  
**C09K 5/045** (2013.01); **C10M 105/38** (2013.01); **C10M 169/04** (2013.01); **C10M 171/008** (2013.01); **C09K 2205/24** (2013.01); **C10M 2203/06** (2013.01); **C10M 2205/026** (2013.01); **C10M 2207/023** (2013.01); **C10M 2207/024** (2013.01); **C10M 2207/026** (2013.01); **C10M 2207/027** (2013.01); **C10M 2207/121** (2013.01); **C10M 2207/122** (2013.01); **C10M 2207/123** (2013.01); **C10M 2207/125** (2013.01); **C10M 2207/128** (2013.01); **C10M 2207/129** (2013.01); **C10M 2207/16** (2013.01); **C10M 2207/22** (2013.01); **C10M 2207/281** (2013.01); **C10M 2207/282** (2013.01); **C10M 2207/283** (2013.01); **C10M 2207/2835** (2013.01); **C10M 2207/284** (2013.01); **C10M 2207/285** (2013.01); **C10M 2207/286** (2013.01); **C10M 2207/287** (2013.01); **C10M 2207/288** (2013.01); **C10M 2207/289** (2013.01); **C10M 2207/30** (2013.01); **C10M 2207/301** (2013.01); **C10M 2207/325** (2013.01); **C10M 2207/34** (2013.01); **C10M 2209/084** (2013.01); **C10M 2211/022** (2013.01); **C10M 2211/06** (2013.01); **C10M 2215/04** (2013.01); **C10M 2215/06** (2013.01); **C10M 2215/064** (2013.01); **C10M 2215/065** (2013.01); **C10M 2215/066** (2013.01); **C10M 2215/067** (2013.01); **C10M 2215/068** (2013.01); **C10M 2215/08** (2013.01); **C10M 2215/082** (2013.01); **C10M 2215/102** (2013.01); **C10M 2215/12** (2013.01); **C10M 2215/14** (2013.01); **C10M 2215/22** (2013.01); **C10M 2215/221** (2013.01); **C10M 2215/223** (2013.01); **C10M 2215/224** (2013.01); **C10M 2215/225** (2013.01); **C10M 2215/226** (2013.01); **C10M 2215/26** (2013.01); **C10M 2215/28** (2013.01); **C10M 2215/30** (2013.01); **C10M 2217/028** (2013.01); **C10M 2217/06** (2013.01); **C10M 2219/02** (2013.01); **C10M 2219/022** (2013.01); **C10M 2219/024** (2013.01); **C10M 2219/044** (2013.01); **C10M 2219/062** (2013.01); **C10M 2219/066** (2013.01); **C10M 2219/068** (2013.01); **C10M 2219/082** (2013.01); **C10M 2219/087** (2013.01); **C10M 2219/088** (2013.01); **C10M 2219/089** (2013.01); **C10M 2219/10** (2013.01); **C10M 2219/102** (2013.01); **C10M 2219/104** (2013.01); **C10M 2219/106** (2013.01); **C10M 2219/108** (2013.01); **C10M 2223/04** (2013.01); **C10M 2223/041** (2013.01); **C10M 2223/042** (2013.01); **C10M 2223/043** (2013.01); **C10M 2223/045** (2013.01); **C10M 2223/047** (2013.01); **C10M 2223/06** (2013.01); **C10M 2223/061** (2013.01); **C10M 2223/065** (2013.01); **C10M 2227/061** (2013.01); **C10M 2229/02** (2013.01); **C10M 2229/05** (2013.01); **C10N 2010/10** (2013.01); **C10N 2040/00** (2013.01); **C10N 2040/30** (2013.01); **C10N 2040/32** (2013.01); **C10N 2040/34** (2013.01); **C10N 2040/36** (2013.01); **C10N 2040/38** (2020.05); **C10N 2040/40** (2020.05); **C10N 2040/42** (2020.05); **C10N 2040/44** (2020.05); **C10N 2040/50** (2020.05)

C-Set (source: EP)  
**C10M 2207/2835** + **C10M 2207/2835**

Citation (search report)  
See references of WO 9324588A1

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

DOCDB simple family (publication)  
**WO 9324588 A1 19931209**; CA 2136851 A1 19931209; EP 0648251 A1 19950419; JP H07507347 A 19950810

DOCDB simple family (application)  
**US 9304889 W 19930527**; CA 2136851 A 19930527; EP 93914088 A 19930527; JP 50067693 A 19930527