

Title (en)  
COOLING LUBRICANT

Title (de)  
KÜHLSCHMIERMITTEL

Title (fr)  
LUBRIFIANT DE REFROIDISSEMENT

Publication  
**EP 3974500 A1 20220330 (DE)**

Application  
**EP 21198607 A 20210923**

Priority  
EP 20198328 A 20200925

Abstract (de)  
Ein Kühlsmiermittel (1) für die Wärmeabfuhr und/oder Verminderung der Reibung zwischen einem Werkzeug (2), insbesondere einem Bohrer, und einem Werkstück (4), umfasst eine wässrige Lösung und ein oder mehrere Polyole und/oder ein oder mehrere Polymere von einem oder mehreren Polyolen. Das Kühlsmiermittel (1) liegt vorzugsweise als Gel vor.

IPC 8 full level  
**C10M 173/02** (2006.01); **C10N 30/06** (2006.01); **C10N 40/20** (2006.01); **C10N 40/22** (2006.01); **C10N 50/10** (2006.01)

CPC (source: EP)  
**C10M 173/02** (2013.01); **C10M 2207/0225** (2013.01); **C10M 2209/084** (2013.01); **C10M 2209/126** (2013.01); **C10N 2030/06** (2013.01);  
**C10N 2040/22** (2013.01); **C10N 2040/243** (2020.05); **C10N 2040/246** (2020.05); **C10N 2050/10** (2013.01)

Citation (search report)  
• [A] US 4781847 A 19881101 - WEITZ GENE C [US]  
• [Y] DE 2043885 A1 19720309  
• [Y] EP 0653473 A1 19950517 - WIEMELER WALTER H MARIA [DE]  
• [A] RATHAPON A-SASUTJARIT ET AL: "Viscoelastic Properties of Carbopol 940 Gels and Their Relationships to Piroxicam Diffusion Coefficients in Gel Bases", PHARMACEUTICAL RESEARCH, KLUWER ACADEMIC PUBLISHERS-PLENUM PUBLISHERS, NL, vol. 22, no. 12, 1 December 2005 (2005-12-01), pages 2134 - 2140, XP019370766, ISSN: 1573-904X, DOI: 10.1007/S11095-005-8244-2  
• [A] MELINDER AKE: "Thermophysical properties of aqueous solutions used as secondary working fluids", 1 January 2007 (2007-01-01), Stockholm, pages 1 - 144, XP055779723, ISBN: 978-91-7-178707-1, Retrieved from the Internet <URL:<http://www.diva-portal.org/smash/get/diva2:12169/FULLTEXT01.pdf>> [retrieved on 20210225]  
• [A] LANCIA A ET AL: "VAPOR-LIQUID EQUILIBRIA FOR MIXTURES OF ETHYLENE GLYCOL, PROPYLENE GLYCOL, AND WATER BETWEEN 98° AND 122°C", JOURNAL OF CHEMICAL ENGINEERING OF JAPAN, SOCIETY OF CHEMICAL ENGINEERS, JP, vol. 29, no. 3, 1 June 1996 (1996-06-01), pages 449 - 455, XP000629064, ISSN: 0021-9592, DOI: 10.1252/JCEJ.29.449

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
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