

Title (en)

USE OF A COOLING LUBRICANT EMULSION FOR CHIP-FORMING METALWORKING

Title (de)

VERWENDUNG EINER KÜHLSCHMIERSTOFFEMULSION ZUR SPANABHEBENDEN METALLBEARBEITUNG

Title (fr)

UTILISATION D'UN REFRIGERANT LUBRIFIANT SOUS FORME D'EMULSION POUR L'USINAGE DE METAUX PAR ENLEVEMENT DES COPEAUX

Publication

**EP 0968263 A1 20000105 (DE)**

Application

**EP 98905317 A 19980120**

Priority

- DE 19703085 A 19970129
- EP 9800277 W 19980120

Abstract (en)

[origin: US6245723B1] A process for preparing a stable cooling lubricant emulsion for use in the cutting of metals involves the steps of (a) forming a mixture having an oil component, water and an emulsifier with the oil component being emulsified in the water, then (b) dispersing into 100 parts by weight of the mixture by means of high shear from about 1 to about 14 parts by weight of a natural, water-immiscible cutting oil. The stable oil-in-water cooling lubricant emulsion formed has at least 50 percent of the cutting oil present in the form of particles having a diameter of 0.5 to 8 µm. The cooling lubricant emulsion formed may be used in an extended range of applications.

IPC 1-7

**C10M 173/00**; **C10M 177/00**

IPC 8 full level

**C10M 173/00** (2006.01); **C10M 177/00** (2006.01)

CPC (source: EP US)

**C10M 125/10** (2013.01 - EP US); **C10M 125/26** (2013.01 - EP US); **C10M 129/08** (2013.01 - EP US); **C10M 129/10** (2013.01 - EP US); **C10M 129/16** (2013.01 - EP US); **C10M 129/32** (2013.01 - EP US); **C10M 129/40** (2013.01 - EP US); **C10M 129/42** (2013.01 - EP US); **C10M 129/74** (2013.01 - EP US); **C10M 129/76** (2013.01 - EP US); **C10M 133/08** (2013.01 - EP US); **C10M 133/16** (2013.01 - EP US); **C10M 133/22** (2013.01 - EP US); **C10M 133/44** (2013.01 - EP US); **C10M 135/08** (2013.01 - EP US); **C10M 135/10** (2013.01 - EP US); **C10M 145/36** (2013.01 - EP US); **C10M 159/08** (2013.01 - EP US); **C10M 173/00** (2013.01 - EP US); **C10M 2201/02** (2013.01 - EP US); **C10M 2201/062** (2013.01 - EP US); **C10M 2201/063** (2013.01 - EP US); **C10M 2201/087** (2013.01 - EP US); **C10M 2201/10** (2013.01 - EP US); **C10M 2201/102** (2013.01 - EP US); **C10M 2201/105** (2013.01 - EP US); **C10M 2205/00** (2013.01 - EP US); **C10M 2207/022** (2013.01 - EP US); **C10M 2207/023** (2013.01 - EP US); **C10M 2207/026** (2013.01 - EP US); **C10M 2207/027** (2013.01 - EP US); **C10M 2207/04** (2013.01 - EP US); **C10M 2207/046** (2013.01 - EP US); **C10M 2207/121** (2013.01 - EP US); **C10M 2207/122** (2013.01 - EP US); **C10M 2207/123** (2013.01 - EP US); **C10M 2207/125** (2013.01 - EP US); **C10M 2207/126** (2013.01 - EP US); **C10M 2207/127** (2013.01 - EP US); **C10M 2207/129** (2013.01 - EP US); **C10M 2207/22** (2013.01 - EP US); **C10M 2207/281** (2013.01 - EP US); **C10M 2207/282** (2013.01 - EP US); **C10M 2207/283** (2013.01 - EP US); **C10M 2207/286** (2013.01 - EP US); **C10M 2207/287** (2013.01 - EP US); **C10M 2207/288** (2013.01 - EP US); **C10M 2207/289** (2013.01 - EP US); **C10M 2207/40** (2013.01 - EP US); **C10M 2207/402** (2013.01 - EP US); **C10M 2207/404** (2013.01 - EP US); **C10M 2209/104** (2013.01 - EP US); **C10M 2209/108** (2013.01 - EP US); **C10M 2215/042** (2013.01 - EP US); **C10M 2215/08** (2013.01 - EP US); **C10M 2215/082** (2013.01 - EP US); **C10M 2215/086** (2013.01 - EP US); **C10M 2215/12** (2013.01 - EP US); **C10M 2215/122** (2013.01 - EP US); **C10M 2215/14** (2013.01 - EP US); **C10M 2215/22** (2013.01 - EP US); **C10M 2215/221** (2013.01 - EP US); **C10M 2215/223** (2013.01 - EP US); **C10M 2215/225** (2013.01 - EP US); **C10M 2215/226** (2013.01 - EP US); **C10M 2215/28** (2013.01 - EP US); **C10M 2215/30** (2013.01 - EP US); **C10M 2219/04** (2013.01 - EP US); **C10M 2219/042** (2013.01 - EP US); **C10M 2219/044** (2013.01 - EP US); **C10N 2010/02** (2013.01 - EP US); **C10N 2040/22** (2013.01 - EP US); **C10N 2050/01** (2020.05 - EP US); **C10N 2070/02** (2020.05 - EP US)

Designated contracting state (EPC)

AT BE CH DE DK ES FI FR GB IT LI NL SE

DOCDB simple family (publication)

**US 6245723 B1 20010612**; AT E350437 T1 20070115; DE 19703085 A1 19980730; DE 59813870 D1 20070215; EP 0968263 A1 20000105; EP 0968263 B1 20070103; TR 199901716 T2 19990921; WO 9832818 A1 19980730

DOCDB simple family (application)

**US 35553399 A 19990729**; AT 98905317 T 19980120; DE 19703085 A 19970129; DE 59813870 T 19980120; EP 9800277 W 19980120; EP 98905317 A 19980120; TR 9901716 T 19980120