

Title (en)  
METHOD FOR WORKING OR FORMING METALS IN THE PRESENCE OF AQUEOUS LUBRICANTS BASED ON METHANESULPHONIC ACID SALTS

Title (de)  
VERFAHREN ZUM BEARBEITEN ODER VERFORMEN VON METALLEN IN GEGENWART VON WÄSSRIGEN GLEITMITTELN AUF BASIS VON METHANSULFONSÄURESALZEN

Title (fr)  
PROCEDE DE TRAVAIL OU MISE EN FORME DES METAUX EN PRESENCE DE LUBRIFIANTS AQUEUX A BASE DE SELS D'ACIDE METHANESULFONIQUE (AMS)

Publication  
**EP 1444313 A2 20040811 (FR)**

Application  
**EP 02803047 A 20021108**

Priority  
• FR 0203847 W 20021108  
• FR 0114787 A 20011115

Abstract (en)  
[origin: WO03042342A2] The invention concerns a method for working or forming metals which consists in using an aqueous lubricant containing as water-soluble extreme pressure additive, methanesulphonic acid or a water-soluble methanesulphonic acid salt. The water-soluble methanesulphonic acid salt is an alkali or alkaline-earth, ammonium, alkanolamine or ethoxylated fatty amine salt. The inventive aqueous lubricants have good extreme pressure properties and good properties with respect to corrosion.

IPC 1-7  
**C10M 173/00**

IPC 8 full level  
**C10M 133/08** (2006.01); **C10M 135/10** (2006.01); **C10M 173/02** (2006.01); **C10N 10/02** (2006.01); **C10N 10/04** (2006.01); **C10N 30/06** (2006.01); **C10N 40/20** (2006.01)

CPC (source: EP KR US)  
**C10M 173/02** (2013.01 - EP KR US); **C10M 2201/062** (2013.01 - EP US); **C10M 2215/04** (2013.01 - EP US); **C10M 2215/042** (2013.01 - EP US); **C10M 2215/06** (2013.01 - EP US); **C10M 2219/044** (2013.01 - EP US); **C10N 2010/02** (2013.01 - EP US); **C10N 2010/04** (2013.01 - EP US); **C10N 2030/12** (2013.01 - EP US); **C10N 2040/20** (2013.01 - EP US); **Y10T 29/49616** (2015.01 - EP US)

Citation (search report)  
See references of WO 03042342A2

Cited by  
EP2105493A1; EP2105494A1

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

DOCDB simple family (publication)  
**WO 03042342 A2 20030522; WO 03042342 A3 20031002**; AT E337392 T1 20060915; AU 2002356233 A1 20030526; BR 0214207 A 20041026; BR 0214207 B1 20130108; BR 0214207 B8 20130219; CA 2466716 A1 20030522; CA 2466716 C 20110614; CN 1269939 C 20060816; CN 1585813 A 20050223; DE 60214221 D1 20061005; DE 60214221 T2 20070712; EP 1444313 A2 20040811; EP 1444313 B1 20060823; FR 2832160 A1 20030516; FR 2832160 B1 20050114; JP 2005509087 A 20050407; JP 4392245 B2 20091224; KR 100935820 B1 20100111; KR 20050044445 A 20050512; US 2005044912 A1 20050303; US 7730618 B2 20100608

DOCDB simple family (application)  
**FR 0203847 W 20021108**; AT 02803047 T 20021108; AU 2002356233 A 20021108; BR 0214207 A 20021108; CA 2466716 A 20021108; CN 02822591 A 20021108; DE 60214221 T 20021108; EP 02803047 A 20021108; FR 0114787 A 20011115; JP 2003544162 A 20021108; KR 20047007276 A 20021108; US 49554004 A 20040513