

Title (en)
IMPROVED WATER SOLUBLE METAL WORKING FLUIDS

Title (de)
VERBESSERTE WASSERLÖSLICHE FLÜSSIGKEITEN ZUR METALLBEHANDLUNG

Title (fr)
FLUIDES HYDRO-SOLUBLES AMELIORES DE TRANSFORMATION DES METAUX

Publication
EP 0854905 A4 19991215 (EN)

Application
EP 96928010 A 19960719

Priority

- US 9611993 W 19960719
- US 1810295 P 19950720
- US 217895 P 19950811
- US 501795 P 19951010

Abstract (en)
[origin: WO9704052A1] There are disclosed improved water-soluble metal working fluids comprising polyaspartic acid, amides and salts thereof, a corrosion inhibitor(s) and a basic additive said additive having sufficient basicity and buffering power to maintain the pH of the composition above about 8.5 and preferably above about 9. Such compositions are useful as lubricants in processes to cut, bend, grind and shape both ferrous and non-ferrous metals and tend to maintain higher pH values due to the incorporation of a basic additive. The polyaspartic acid and salts thereof are particularly advantageous in that the fluids can be easily disposed of after use without special treatment because polyaspartic acid and salts thereof are readily biodegradable.

IPC 1-7
C10M 173/02; **C10M 149/04**

IPC 8 full level
C10M 149/04 (2006.01); **C10M 173/02** (2006.01); **C10N 40/20** (2006.01); **C10N 40/22** (2006.01)

CPC (source: EP KR)
C10M 125/10 (2013.01 - EP); **C10M 125/24** (2013.01 - EP); **C10M 125/26** (2013.01 - EP); **C10M 133/44** (2013.01 - EP); **C10M 149/04** (2013.01 - KR); **C10M 149/14** (2013.01 - EP); **C10M 149/18** (2013.01 - EP); **C10M 173/02** (2013.01 - EP KR); **C23F 11/08** (2013.01 - EP); **C23F 11/10** (2013.01 - EP); **C10M 2201/02** (2013.01 - EP); **C10M 2201/041** (2013.01 - EP); **C10M 2201/042** (2013.01 - EP); **C10M 2201/062** (2013.01 - EP); **C10M 2201/066** (2013.01 - EP); **C10M 2201/085** (2013.01 - EP); **C10M 2201/087** (2013.01 - EP); **C10M 2201/10** (2013.01 - EP); **C10M 2201/102** (2013.01 - EP); **C10M 2201/105** (2013.01 - EP); **C10M 2205/14** (2013.01 - EP); **C10M 2205/16** (2013.01 - EP); **C10M 2205/17** (2013.01 - EP); **C10M 2207/024** (2013.01 - EP); **C10M 2207/125** (2013.01 - EP); **C10M 2207/129** (2013.01 - EP); **C10M 2215/22** (2013.01 - EP); **C10M 2215/221** (2013.01 - EP); **C10M 2215/223** (2013.01 - EP); **C10M 2215/225** (2013.01 - EP); **C10M 2215/226** (2013.01 - EP); **C10M 2215/30** (2013.01 - EP); **C10M 2217/041** (2013.01 - EP); **C10M 2217/042** (2013.01 - EP); **C10M 2217/043** (2013.01 - EP); **C10M 2217/044** (2013.01 - EP); **C10M 2217/045** (2013.01 - EP); **C10M 2219/068** (2013.01 - EP); **C10M 2223/04** (2013.01 - EP); **C10M 2223/042** (2013.01 - EP); **C10M 2223/045** (2013.01 - EP); **C10N 2010/02** (2013.01 - EP); **C10N 2010/04** (2013.01 - EP); **C10N 2010/12** (2013.01 - EP); **C10N 2040/22** (2013.01 - EP); **C10N 2040/24** (2013.01 - EP); **C10N 2040/241** (2020.05 - EP); **C10N 2040/242** (2020.05 - EP); **C10N 2040/243** (2020.05 - EP); **C10N 2040/244** (2020.05 - EP); **C10N 2040/245** (2020.05 - EP); **C10N 2040/246** (2020.05 - EP); **C10N 2040/247** (2020.05 - EP); **C10N 2050/01** (2020.05 - EP); **C10N 2070/02** (2020.05 - EP)

Citation (search report)

- [X] DE 4311237 A1 19941013 - BASF AG [DE]
- [A] PATENT ABSTRACTS OF JAPAN vol. 005, no. 124 (C - 066) 11 August 1981 (1981-08-11)
- See references of WO 9704052A1

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

DOCDB simple family (publication)
WO 9704052 A1 19970206; AU 6762596 A 19970218; BR 9610062 A 19990302; CA 2227330 A1 19970206; CN 1196079 A 19981014; EP 0854905 A1 19980729; EP 0854905 A4 19991215; JP 2002503260 A 20020129; KR 19990029090 A 19990415; NO 980239 D0 19980119; NO 980239 L 19980319; PL 324550 A1 19980608

DOCDB simple family (application)
US 9611993 W 19960719; AU 6762596 A 19960719; BR 9610062 A 19960719; CA 2227330 A 19960719; CN 96196974 A 19960719; EP 96928010 A 19960719; JP 50691097 A 19960719; KR 19980700394 A 19980119; NO 980239 A 19980119; PL 32455096 A 19960719