

Title (en)
METALWORKING FLUID COMPOSITION AND METHOD FOR ITS USE IN THE MACHINING OF COMPACTED GRAPHITE IRON

Title (de)
METALLBEARBEITUNGSFLÜSSIGKEITZUSAMMENSETZUNG UND VERFAHREN ZU IHRER VERWENDUNG BEI DER BEARBEITUNG VON GUSSEISEN MIT VERMICULARGRAPHIT

Title (fr)
COMPOSITION DE FLUIDE POUR TRAVAIL DES MÉTAUX ET SON PROCÉDÉ D'UTILISATION DANS L'USINAGE DU FER À GRAPHITE COMPACTÉ

Publication
EP 2788461 A4 20150819 (EN)

Application
EP 12856027 A 20121210

Priority
• US 201161568979 P 20111209
• US 2012068708 W 20121210

Abstract (en)
[origin: US2013150271A1] Compositions and methods for reducing toolwear during iron-machining, including applying a composition comprising water; a lubricant ester; and a sulfur-containing lubricant additive.

IPC 8 full level
C10M 105/38 (2006.01)

CPC (source: EP US)
C10M 169/048 (2013.01 - EP US); **C10M 173/00** (2013.01 - EP US); **C10M 2201/087** (2013.01 - EP US); **C10M 2203/1006** (2013.01 - EP US); **C10M 2203/1025** (2013.01 - EP US); **C10M 2203/1065** (2013.01 - EP US); **C10M 2207/125** (2013.01 - EP US); **C10M 2207/126** (2013.01 - EP US); **C10M 2207/28** (2013.01 - EP US); **C10M 2207/2805** (2013.01 - EP US); **C10M 2207/283** (2013.01 - EP US); **C10M 2207/2835** (2013.01 - EP US); **C10M 2207/40** (2013.01 - EP US); **C10M 2207/401** (2013.01 - EP US); **C10M 2209/102** (2013.01 - EP US); **C10M 2209/1023** (2013.01 - EP US); **C10M 2209/104** (2013.01 - EP US); **C10M 2209/1045** (2013.01 - EP US); **C10M 2209/105** (2013.01 - EP US); **C10M 2209/1055** (2013.01 - EP US); **C10M 2209/107** (2013.01 - EP US); **C10M 2209/1075** (2013.01 - EP US); **C10M 2209/109** (2013.01 - EP US); **C10M 2209/1095** (2013.01 - EP US); **C10M 2215/04** (2013.01 - EP US); **C10M 2215/042** (2013.01 - EP US); **C10M 2219/022** (2013.01 - EP US); **C10M 2219/024** (2013.01 - EP US); **C10M 2219/08** (2013.01 - EP US); **C10M 2219/082** (2013.01 - EP US); **C10M 2227/06** (2013.01 - EP US); **C10M 2227/061** (2013.01 - EP US); **C10M 2227/063** (2013.01 - EP US); **C10N 2030/06** (2013.01 - EP US); **C10N 2040/246** (2020.05 - EP US)

Citation (search report)
• [X] US 5391310 A 19950221 - KRUEGER MARK K [US], et al
• [X] GB 701684 A 19531230 - STANDARD OIL DEV CO
• [X] EP 1063280 A1 20001227 - QUAKER CHEM CORP [US]
• [XA] EP 1123971 A1 20010816 - MOBIL OIL FRANCE [FR]
• [XA] US 6245723 B1 20010612 - SIGG KARL [DE], et al
• [A] EP 1245664 A1 20021002 - HENKEL KGAA [DE]
• [A] EP 1944353 A1 20080716 - KOREA HOUGHTON CORP [KR]
• See references of WO 2013086483A1

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

DOCDB simple family (publication)
US 2013150271 A1 20130613; BR 112014013879 A2 20170613; BR 112014013879 A8 20170613; CN 104185675 A 20141203; EP 2788461 A1 20141015; EP 2788461 A4 20150819; HK 1202575 A1 20151002; JP 2015503012 A 20150129; MX 2014006721 A 20141013; WO 2013086483 A1 20130613

DOCDB simple family (application)
US 201213709521 A 20121210; BR 112014013879 A 20121210; CN 201280069244 A 20121210; EP 12856027 A 20121210; HK 15102953 A 20150323; JP 2014546168 A 20121210; MX 2014006721 A 20121210; US 2012068708 W 20121210