

Title (en)
FABRICATION FLUIDS

Title (de)
FERTIGUNGSFLUIDE

Title (fr)
FLUIDES DE FABRICATION

Publication
EP 3694961 A4 20210728 (EN)

Application
EP 18866521 A 20181008

Priority
• US 201762570617 P 20171010
• US 2018054800 W 20181008

Abstract (en)
[origin: WO2019074814A1] A fabrication fluid composition, such as a metal cutting fluid concentrate, contains water, a first surfactant which is an anionic surfactant, a second surfactant which is an amphoteric surfactant, a third surfactant which is selected from an anionic surfactant and an amphoteric surfactant, the third surfactant being different from the first and second surfactants, and water, along with at least one of an anti-rust agent, a coloring agent, and a de-foaming agent. The concentrate may be combined with water to provide a fabrication fluid such as a metal cutting fluid composition that may be applied to a piece of metal being cut for a time and in an amount effective to dissipate heat from the metal being cut.

IPC 8 full level
C10M 169/04 (2006.01); **C10M 173/00** (2006.01); **C10M 173/02** (2006.01); **C10N 10/04** (2006.01); **C10N 30/02** (2006.01); **C10N 30/12** (2006.01); **C10N 30/18** (2006.01); **C10N 40/06** (2006.01); **C10N 40/20** (2006.01); **C10N 40/22** (2006.01)

CPC (source: EP KR US)
C10M 169/06 (2013.01 - US); **C10M 173/00** (2013.01 - US); **C10M 173/02** (2013.01 - EP KR); **C10M 2201/02** (2013.01 - EP KR); **C10M 2201/081** (2013.01 - EP); **C10M 2201/083** (2013.01 - EP US); **C10M 2209/126** (2013.01 - EP KR US); **C10M 2215/04** (2013.01 - EP); **C10M 2215/08** (2013.01 - EP KR); **C10M 2215/28** (2013.01 - US); **C10M 2219/042** (2013.01 - EP KR US); **C10M 2219/044** (2013.01 - EP KR US); **C10M 2229/02** (2013.01 - EP KR US); **C10N 2010/02** (2013.01 - US); **C10N 2010/04** (2013.01 - EP KR US); **C10N 2030/12** (2013.01 - EP US); **C10N 2030/18** (2013.01 - US); **C10N 2040/22** (2013.01 - EP KR); **C10N 2040/245** (2020.05 - EP KR US); **C10N 2040/246** (2020.05 - EP KR US); **C10N 2040/247** (2020.05 - EP KR US)

C-Set (source: EP)
C10N 2010/04 + **C10M 2201/06**

Citation (search report)
• [X] US 4151099 A 19790424 - MAXWELL JERROLD F [US], et al
• [X] US 3215630 A 19651102 - MARYANN COMPTON, et al
• [A] US 2017056698 A1 20170302 - PAI CHIEN NAN [TW], et al
• [X] CN 103013638 A 20130403 - ZHEJIANG RUIYI NEW MATERIALS CO LTD
• [XI] JP 2000313896 A 20001114 - SHIBAFU ENGINEERING KK, et al
• See also references of WO 2019074814A1

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)
WO 2019074814 A1 20190418; CA 3078786 A1 20190418; CN 111511884 A 20200807; EP 3694961 A1 20200819; EP 3694961 A4 20210728; JP 2020537033 A 20201217; JP 7414722 B2 20240116; KR 20200096757 A 20200813; TW 201923055 A 20190616; TW I793193 B 20230221; US 2020318030 A1 20201008

DOCDB simple family (application)
US 2018054800 W 20181008; CA 3078786 A 20181008; CN 201880079195 A 20181008; EP 18866521 A 20181008; JP 2020541644 A 20181008; KR 20207013316 A 20181008; TW 107135460 A 20181008; US 201816755131 A 20181008