

## Title (en)

Corrosion-inhibiting agent for functional fluids, water-miscible lubricating concentrate and its use.

## Title (de)

Korrosionsschutzmittel für funktionelle Flüssigkeiten, wassermischbares Konzentrat und dessen Verwendung

## Title (fr)

Inhibiteur de corrosion pour fluides fonctionnels, concentré de lubrifiant miscible à l'eau et son utilisation

## Publication

**EP 1652909 B2 20110427 (DE)**

## Application

**EP 04024857 A 20041019**

## Priority

EP 04024857 A 20041019

## Abstract (en)

[origin: EP1652909A1] The fatty acid (25-60 wt.%) is mono/di/tri ethanol amine, mono propanol amine, mono isopropanol amine, 2-amino-2-methyl-1-propanol, 2-amino-2-ethyl, 3-propandiol, diglycolamine, coco mono/poly ethanol amide fatty acid or tall oil mono ethanol/propanol amide fatty acid. The alcohol is isopropanol, n-butanol, butyldigcol, hexyleneglycol, butyltriglycol, benzyl alcohol or phenoxyethanol. The carboxylic acid is sebacic acid, undecandioic acid, dodecandioic acid or p-tert-butylbenzoic acid. An independent claim is included for a water-miscible concentrate for functional fluids.

## IPC 8 full level

**C10M 157/04** (2006.01); **C10M 161/00** (2006.01); **C10M 173/00** (2006.01)

## CPC (source: EP US)

**C10M 157/04** (2013.01 - EP US); **C10M 161/00** (2013.01 - EP US); **C10M 173/00** (2013.01 - EP US); **C10M 2201/062** (2013.01 - EP US); **C10M 2203/0206** (2013.01 - EP US); **C10M 2207/021** (2013.01 - EP US); **C10M 2207/0215** (2013.01 - EP US); **C10M 2207/046** (2013.01 - EP US); **C10M 2207/124** (2013.01 - EP US); **C10M 2207/126** (2013.01 - EP US); **C10M 2207/127** (2013.01 - EP US); **C10M 2207/1273** (2013.01 - EP US); **C10M 2207/1403** (2013.01 - EP US); **C10M 2207/141** (2013.01 - EP US); **C10M 2209/103** (2013.01 - EP US); **C10M 2209/104** (2013.01 - EP US); **C10M 2209/108** (2013.01 - EP US); **C10M 2209/109** (2013.01 - EP US); **C10M 2215/04** (2013.01 - EP US); **C10M 2215/042** (2013.01 - EP US); **C10M 2215/08** (2013.01 - EP US); **C10M 2215/0806** (2013.01 - EP US); **C10M 2215/082** (2013.01 - EP US); **C10M 2215/222** (2013.01 - EP US); **C10M 2215/223** (2013.01 - EP US); **C10M 2219/044** (2013.01 - EP US); **C10M 2223/04** (2013.01 - EP US); **C10N 2030/12** (2013.01 - EP US); **C10N 2040/08** (2013.01 - EP US); **C10N 2040/20** (2013.01 - EP US); **C10N 2070/02** (2020.05 - EP US)

## Citation (opposition)

## Opponent :

- US 6511946 B1 20030128 - THEIS HEINZ GERHARD [DE], et al
- US 5534624 A 19960709 - LESMANN JOERG [DE], et al
- DE 4138089 A1 19930527 - CG CHEMIE GMBH [DE]
- US 3573225 A 19710330 - KONDO MASAHIKO, et al
- WO 9405746 A1 19940317 - HENKEL KGAA [DE], et al
- JEAN C. CHILDERS: "Metalworking Fluids", 1994, MARCEL DEKKER, NEW YORK, article JEAN C. CHILDERS: "The Chemistry of MetalworkingFlu", pages: 165 - 189
- Ken klein: "Alkanolamides... Revisited" Cosmetics & Toiletries Magazine. Gefunden im Internet :URL: <http://zenitech.com/documents/amides.pdf>

## Cited by

DE102006035013A1; EP2042587A1; EP1840196A1; PL422735A1; US10440950B2; US9096812B2; WO2007112917A3; WO2009040370A1; WO2013009381A1; US10463041B2; US11051512B2; US11730167B2; EP2318478B1; EP2705128B1

## Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

## Designated extension state (EPC)

AL HR LT LV MK

## DOCDB simple family (publication)

**EP 1652909 A1 20060503**; **EP 1652909 B1 20080305**; **EP 1652909 B2 20110427**; AR 055503 A1 20070822; AT E388218 T1 20080315; AU 2005296748 A1 20060427; AU 2005296748 B2 20100909; CN 101044230 A 20070926; CN 101044230 B 20101110; CY 1108108 T1 20140212; DE 502004006426 D1 20080417; DK 1652909 T3 20080707; DK 1652909 T4 20110815; ES 2304575 T3 20081016; ES 2304575 T5 20111018; HK 1089786 A1 20061208; HR P20080237 T3 20080630; HR P20080237 T4 20110831; MX 2007004705 A 20070907; PL 1652909 T3 20080829; PL 1652909 T5 20110930; PT 1652909 E 20080609; RU 2007118665 A 20081127; RU 2397275 C2 20100820; SI 1652909 T1 20080831; SI 1652909 T2 20110930; US 2007298983 A1 20071227; US 7851420 B2 20101214; WO 2006042730 A1 20060427; ZA 200701941 B 20081029

## DOCDB simple family (application)

**EP 04024857 A 20041019**; AR P050104363 A 20051019; AT 04024857 T 20041019; AU 2005296748 A 20051017; CN 200580035806 A 20051017; CY 081100572 T 20080602; DE 502004006426 T 20041019; DK 04024857 T 20041019; EP 2005011149 W 20051017; ES 04024857 T 20041019; HK 06111658 A 20061023; HR P20080237 T 20080529; MX 2007004705 A 20051017; PL 04024857 T 20041019; PT 04024857 T 20041019; RU 2007118665 A 20051017; SI 200430722 T 20041019; US 66516005 A 20051017; ZA 200701941 A 20070306