

Title (en)

LOW VISCOSITY FUNCTIONAL FLUID COMPOSITION

Title (de)

NIEDRIGVISOSE FUNKTIONELLE FLÜSSIGKEITSZUSAMMENSETZUNG

Title (fr)

COMPOSITION DE FLUIDE FONCTIONNEL À FAIBLE VISCOSETÉ

Publication

**EP 4305131 A1 20240117 (EN)**

Application

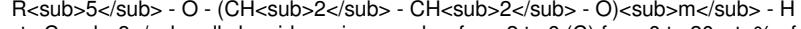
**EP 22701202 A 20220114**

Priority

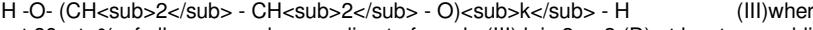
- EP 21162202 A 20210312
- EP 2022050757 W 20220114

Abstract (en)

[origin: EP4056669A1] This invention relates to a functional fluid, comprising(A) from 8 to 80% by weight, based on the total composition, of one or more ortho-ester according to formula (I)whereinR1, R2, R3are independently selected from H or C<sub>1</sub> to C<sub>8</sub> alkyl groups, preferably methyl or butyl,R4means H or C<sub>1</sub> to C<sub>8</sub> alkyl, preferably H or methyl,a, b, care independently numbers from 0 to 6, preferably 3 or 4,with the proviso that a+b+c is at least 1,(B) from 10 to 87% by weight, based on the total composition, of one or more alkoxy glycol according to formula (II)



(II)whereinR<sub>5</sub>-is a C<sub>1</sub> to C<sub>8</sub> alkyl residue,mis a number from 2 to 6,(C) from 0 to 20 wt.-% of at least one compound according to formula (III)



wherein k is a number of 2 or higher, with the proviso that in at least 80 wt.-% of all compounds according to formula (III) k is 2 or 3,(D) at least one additive, selected from the group consisting of corrosion inhibitor, alkalinity agents, aging protection agents, defoamers and lubricants,the fluid comprising at most 3 wt.-% of an ester between boric acid and a glycol or polyglycol compound, andwith the proviso that the combined amount of component (A) and component (B) adds up to at least 70 % of the total fluid weight.

IPC 8 full level

**C10M 107/34** (2006.01)

CPC (source: EP)

**C10M 107/34** (2013.01); **C10M 2207/04** (2013.01); **C10M 2207/046** (2013.01); **C10M 2207/124** (2013.01); **C10M 2209/1045** (2013.01);  
**C10M 2209/1085** (2013.01); **C10N 2020/02** (2013.01); **C10N 2030/02** (2013.01); **C10N 2030/26** (2020.05); **C10N 2040/08** (2013.01)

C-Set (source: EP)

**C10M 2209/1045 + C10M 2209/1085**

Citation (search report)

See references of WO 2022189047A1

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

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

**EP 4056669 A1 20220914**; EP 4305131 A1 20240117; WO 2022189047 A1 20220915

DOCDB simple family (application)

**EP 21162202 A 20210312**; EP 2022050757 W 20220114; EP 22701202 A 20220114