

Title (en)

ALTERNATIVE COMPOSITION AND ALTERNATIVE METHOD FOR EFFECTIVELY PHOSPHATING METAL SURFACES

Title (de)

ALTERNATIVE ZUSAMMENSETZUNG UND ALTERNATIVES VERFAHREN ZUR EFFEKTIVEN PHOSPHATIERUNG VON METALLISCHEN OBERFLÄCHEN

Title (fr)

COMPOSITION ALTERNATIVE ET PROCÉDÉ ALTERNATIF DE PHOSPHATATION EFFECTIVE DE SURFACES MÉTALLIQUES

Publication

EP 3918108 B1 20230308 (DE)

Application

EP 20700942 A 20200123

Priority

- EP 19154196 A 20190129
- EP 2020051585 W 20200123

Abstract (en)

[origin: WO2020156913A1] The present invention relates to an alternative acidic, aqueous composition for effectively phosphating metal surfaces, said composition comprising, in addition to zinc ions, manganese ions, phosphate ions and preferably nickel ions, at least one accelerator of the formula R1R2R3C-NO2, wherein each of the substituents R1, R2 and R3 on the C atom is selected, independently of the others, from the group consisting of hydroxymethyl, 1-hydroxyethyl, 2-hydroxyethyl, 1-hydroxypropyl, 2-hydroxypropyl, 3-hydroxypropyl, 1-hydroxy-1-methylethyl, and 2-hydroxy-1-methylethyl. The invention also relates to a method for preparing such a composition, to an alternative method for phosphating metal surfaces, and to the use of phosphate coatings produced therewith.

IPC 8 full level

C23C 22/22 (2006.01); **C23C 22/18** (2006.01); **C23C 22/34** (2006.01); **C23C 22/78** (2006.01); **C23C 22/82** (2006.01)

CPC (source: EP KR US)

C23C 22/184 (2013.01 - EP KR); **C23C 22/34** (2013.01 - EP); **C23C 22/365** (2013.01 - KR US); **C23C 22/82** (2013.01 - EP KR US); **C23C 22/78** (2013.01 - EP KR)

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 2020156913 A1 20200806; BR 112021012507 A2 20210914; CN 113366147 A 20210907; CN 113366147 B 20240723; EP 3918108 A1 20211208; EP 3918108 B1 20230308; ES 2946018 T3 20230711; JP 2022523717 A 20220426; JP 7516398 B2 20240716; KR 20210116498 A 20210927; MX 2021009075 A 20210910; US 2022119957 A1 20220421; ZA 202106147 B 20240327

DOCDB simple family (application)

EP 2020051585 W 20200123; BR 112021012507 A 20200123; CN 202080011352 A 20200123; EP 20700942 A 20200123; ES 20700942 T 20200123; JP 2021544333 A 20200123; KR 20217023667 A 20200123; MX 2021009075 A 20200123; US 202017425042 A 20200123; ZA 202106147 A 20210825