

Title (en)
AQUEOUS CLEANING SOLUTION TO REMOVE ROUGING LININGS ON SURFACES OF STAINLESS STEELS IN CONTACT WITH MEDIA, USE OF SAME, AND METHOD FOR THEIR PREPARATION

Title (de)
WÄSSRIGE REINIGUNGSLÖSUNG ZUM ENTFERNEN VON ROUGINGBELÄGEN AUF MEDIENBERÜHRTEN OBERFLÄCHEN NICHTROSTENDER STÄHLE, VERWENDUNG DAVON UND VERFAHREN ZU DEREN HERSTELLUNG

Title (fr)
SOLUTION DE NETTOYAGE AQUEUSE DESTINÉE À ÉLIMINER ROUGING SUR DES SURFACES EN CONTACT AVEC LE FLUIDE D'ACIERS INOXYDABLES, SON UTILISATION ET SON PROCÉDÉ DE FABRICATION

Publication
EP 3337916 B1 20190612 (DE)

Application
EP 16769870 A 20160819

Priority
• EP 15181647 A 20150819
• EP 2016069742 W 20160819

Abstract (en)
[origin: WO2017029405A1] An aqueous cleaning solution for removing rouging deposits on media-contacted surfaces of stainless steels comprises a first component and a second component. The first component is an alkali metal sulphite and the second component is an alkali metal formate, the concentrations thereof being such that formate is present relative to sulphite in a molar ratio of 1.5 to 4.2, and that the pH of the cleaning solution is 4.0 to 4.8. For preparation of the aqueous cleaning solution, an aqueous solution of an alkali metal hydroxide is initially charged, then a first amount of concentrated aqueous formic acid is mixed in in an excess so as to establish a pH of 3.5 to 4.5, then a second amount of solid alkali metal sulphite is mixed in according to the sulphite concentration to be established, resulting in a pH of 5.5 to 6.5, and finally a third amount of concentrated aqueous formic acid is mixed in until a pH of 4.0 to 4.8 is attained.

IPC 8 full level
C23G 1/08 (2006.01); **C11D 3/00** (2006.01); **C11D 3/20** (2006.01); **C11D 7/26** (2006.01); **C11D 11/00** (2006.01); **C23G 1/02** (2006.01)

CPC (source: EP US)
C11D 7/06 (2013.01 - EP US); **C11D 7/10** (2013.01 - EP US); **C11D 7/265** (2013.01 - EP US); **C23G 1/02** (2013.01 - EP US);
C23G 1/088 (2013.01 - EP US); **C11D 2111/16** (2024.01 - EP US)

Cited by
WO2023168467A1

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 2017029405 A1 20170223; CN 108474122 A 20180831; DK 3337916 T3 20190923; EP 3337916 A1 20180627; EP 3337916 B1 20190612;
JP 2018525535 A 20180906; SI 3337916 T1 20191129; US 2018371379 A1 20181227; US 2022056381 A1 20220224

DOCDB simple family (application)
EP 2016069742 W 20160819; CN 201680059246 A 20160819; DK 16769870 T 20160819; EP 16769870 A 20160819;
JP 2018528093 A 20160819; SI 201630387 T 20160819; US 201615753333 A 20160819; US 202117390977 A 20210801