

Title (en)
WASHING METHOD FOR ROLLING AND DRESSING OILS

Title (de)
WASCHVERFAHREN FÜR WALZ- UND DRESSIERÖLE

Title (fr)
PROCÉDÉ DE LAVAGE POUR DES HUILES DE ROULEAU ET DE DRESSAGE

Publication
EP 3404084 A1 20181121 (DE)

Application
EP 18171973 A 20180514

Priority
EP 17171441 A 20170517

Abstract (en)
[origin: JP2019022906A] SOLUTION: There is provided a method for reproducing oil contaminated with aluminum from a rolling process/surface finishing process which intensively mixes contaminated oil with alkali hydroxide metal aqueous solution to wash away aluminum, subsequently causes phase separation between an aqueous phase and a purified oil phase, then separates the aqueous phase from the oil phase, and finally removes residual water and a suspenoid present in some cases by a drying agent from the oil phase so as to be used as pure oil in the rolling process or surface finishing process so that a mass ratio of the contaminated oil to the alkali hydroxide metal aqueous solution is at least 1:2.EFFECT: A method for cleaning surface finishing oil purifies contaminated oil through a non-continuous process without a thermal separation method so as to be able to use the purified oil as pure oil again.SELECTED DRAWING: Figure 1

Abstract (de)
Zur Wiederaufbereitung von mit Aluminium verunreinigtem Öl aus Walz-/DressierProzessen wird das verunreinigte Öl mit wässriger Alkalimetallhydroxidlösung intensiv zum Auswaschen von Aluminium vermischt, anschließend eine Trennung zwischen wässriger Phase und gereinigter Ölphase herbeiführt, dann die wässrige Phase von der Ölphase getrennt und die Ölphase schließlich mit einem Trocknungsmittel von Restwasser und gegebenenfalls vorhandenen Schwebstoffen befreit, um dann wieder als Reinöl in Walz-oder Dressierprozessen eingesetzt zu werden, wobei das Massenverhältnis von verunreinigtem Öl zu wässriger Alkalimetallhydroxidlösung mindestens 1 : 2 beträgt.

IPC 8 full level
C10M 175/00 (2006.01); **C10M 175/02** (2006.01)

CPC (source: EP)
C10M 175/005 (2013.01); **C10M 175/02** (2013.01); **C10M 2209/104** (2013.01); **C10M 2209/105** (2013.01); **C10N 2010/02** (2013.01); **C10N 2040/245** (2020.05)

Citation (applicant)
• DE 2613878 A1 19761021 - ALUSUISSE
• DE 1545299 A1 19690626 - FOCSANEANU DR ING OTTO A, et al
• US 2902439 A 19590901 - MILZ WENDELL C, et al
• EP 0030805 A1 19810624 - AMSTED IND INC [US]

Citation (search report)
• [XYI] US 2902439 A 19590901 - MILZ WENDELL C, et al
• [X] EP 0030805 A1 19810624 - AMSTED IND INC [US]
• [T] WO 2016166499 A1 20161020 - 3D ECO OIL LTD [GB]
• [Y] RONALDO GONALVES DOS SANTOS ET AL: "Physico-chemical properties of heavy crude oil-in-water emulsions stabilized by mixtures of ionic and non-ionic ethoxylated nonylphenol surfactants and medium chain alcohols", CHEMICAL ENGINEERING RESEARCH AND DESIGN, ELSEVIER, AMSTERDAM, NL, vol. 89, no. 7, 29 November 2010 (2010-11-29), pages 957 - 967, XP028220468, ISSN: 0263-8762, [retrieved on 20101209], DOI: 10.1016/J.CHERD.2010.11.020

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Designated extension state (EPC)
BA ME

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EP 3404083 A1 20181121; EP 3404084 A1 20181121; EP 3404084 B1 20230809; EP 3404084 C0 20230809; JP 2019022906 A 20190214; JP 6762988 B2 20200930

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