Title (en)

WET AIR OXIDATION PROCESS USING RECYCLED COPPER, VANADIUM OR IRON CATALYST

Title (de)

VERFAHREN ZUR OXIDIERUNG FEUCHTER LUFT UNTER VERWENDUNG EINES WIEDERAUFBEREITETEN KUPFER-, VANADIUM- ODER EISENKATALYSATORS

Title (fr)

PROCÉDÉ D'OXYDATION D'AIR HUMIDE À L'AIDE D'UN CATALYSEUR RECYCLÉ À BASE DE CUIVRE, DE VANADIUM OU DE FER

Publication

EP 2986570 A1 20160224 (EN)

Application

EP 14729758 A 20140324

Priority

• US 201313865664 A 20130418
• US 2014031536 W 20140324

Abstract (en)

[origin: WO2014172066A1] A system and method for the treatment of process streams. A catalyst mediates a wet oxidation process at elevated temperatures and pressures for treating at least one undesirable constituent in an aqueous mixture. The aqueous mixture may be contacted with a catalyst and an oxidizing agent at an elevated temperature and a superatmospheric pressure in a reactor (206). At least a portion of the catalyst may be precipitated by a pH adjustment by the addition of acid or alkali compound from a source of pH adjuster (234) and recycled back to contact the aqueous mixture via line (238) after clarification in clarifier (230). The pH of the recycled catalyst containing effluent may be adjusted by the addition of an acid or alkali compound from source of pH adjuster (226).

IPC 8 full level

C02F 11/08 (2006.01); **C02F 1/66** (2006.01); **C02F 1/72** (2006.01)

CPC (source: EP)

C02F 11/08 (2013.01); C02F 1/008 (2013.01); C02F 1/66 (2013.01); C02F 1/725 (2013.01); C02F 2001/007 (2013.01); C02F 2209/005 (2013.01); C02F 2209/02 (2013.01); C02F 2209/03 (2013.01); C02F 2209/06 (2013.01); C02F 2303/16 (2013.01)

Citation (search report)

See references of WO 2014172066A1

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

DOCDB simple family (publication)

WO 2014172066 A1 20141023; CN 105164063 A 20151216; EP 2986570 A1 20160224; JP 2016521203 A 20160721; KR 20150144337 A 20151224; RU 2015149129 A 20170522

DOCDB simple family (application)

US 2014031536 W 20140324; CN 201480021708 A 20140324; EP 14729758 A 20140324; JP 2016508946 A 20140324; KR 20157032954 A 20140324; RU 2015149129 A 20140324