

Title (en)
METHOD FOR THE PRECIPITATION OF ARSENIC AND HEAVY METALS FROM ACIDIC PROCESS WATER

Title (de)
VERFAHREN ZUR FÄLLUNG VON ARSEN UND SCHWERMETALL AUS SAUREM PROZESSWASSER

Title (fr)
PROCÉDÉ DE PRÉCIPITATION D'ARSENIC ET DE MÉTAUX LOURDS D'UNE EAU DE TRAITEMENT ACIDE

Publication
EP 3867200 A1 20210825 (DE)

Application
EP 19779830 A 20190926

Priority
• DE 102018125680 A 20181016
• EP 2019075993 W 20190926

Abstract (en)
[origin: WO2020078685A1] The invention relates to a method for the precipitation of arsenic and heavy metals from acidic, in particular sulphuric acid, process water (12), containing both arsenic and heavy metals, comprising a precipitation method phase (II) with a precipitation stage (D) in which arsenic and at least one primary heavy metal are precipitated together, wherein a sulphide precipitating agent (20) is added to the process water (12) such that arsenic is precipitated as arsenic sulphide and the at least one primary heavy metal is precipitated as metal sulphide. The precipitation method phase (II) comprises a conditioning stage (C) which is carried out before the precipitation stage (D) and in which a conditioning agent (16) is added to the acidic process water (12), which has an effect on the character, in particular the filtering properties, at least of the precipitated arsenic sulphide.

IPC 8 full level
C02F 1/52 (2006.01); **C02F 1/72** (2006.01); **C02F 1/78** (2006.01); **C02F 101/10** (2006.01); **C02F 101/20** (2006.01); **C02F 103/16** (2006.01); **C02F 103/34** (2006.01)

CPC (source: EP US)
C02F 1/5236 (2013.01 - EP US); **C02F 1/722** (2013.01 - EP); **C02F 1/78** (2013.01 - EP); **C02F 2101/103** (2013.01 - EP US); **C02F 2101/20** (2013.01 - EP US); **C02F 2103/16** (2013.01 - EP US); **C02F 2103/346** (2013.01 - EP US); **C02F 2209/003** (2013.01 - US)

Citation (search report)
See references of WO 2020078685A1

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)
DE 102018125680 A1 20200416; CL 2021000954 A1 20211029; CN 113165922 A 20210723; EP 3867200 A1 20210825; US 2022017390 A1 20220120; WO 2020078685 A1 20200423; WO 2020078685 A8 20200820

DOCDB simple family (application)
DE 102018125680 A 20181016; CL 2021000954 A 20210416; CN 201980075300 A 20190926; EP 19779830 A 20190926; EP 2019075993 W 20190926; US 201917286377 A 20190926