

Title (en)
DEVICE FOR PROCESSING IRON OXIDE-CONTAINING AND PHOSPHATE-CONTAINING PROCESS MATERIALS

Title (de)
VORRICHTUNG ZUM AUFARBEITEN VON EISENOXID-HALTIGEN UND PHOSPHAT-HALTIGEN EDUKTEN

Title (fr)
DISPOSITIF DE TRAITEMENT D'ÉDUITS CONTENANT DE L'OXYDE DE FER ET CONTENANT DU PHOSPHATE

Publication
EP 4348142 A1 20240410 (DE)

Application
EP 22731818 A 20220531

Priority
• AT 1082021 A 20210602
• IB 2022055069 W 20220531

Abstract (en)
[origin: WO2022254322A1] The invention relates to a device (1) for processing iron oxide-containing and phosphate-containing process materials, in particular waste materials such as sewage sludge, dry sewage sludge, sewage sludge ash, animal meal and/or bone meal, and phosphate-containing metallurgical slag, dust, and rolling mill cinders, comprising a combustion chamber (2) which is lined with a refractory material (46), a process-material feed device (3) which is connected to the combustion chamber (2), a slag sump (4) at a lower end (2a) of the combustion chamber (2), and an extraction device (5) for extracting product gases out of the combustion chamber (2), wherein the feed device (3) has a turbulence chamber (7) which is arranged along a vertical axis (6) and which comprises at least one gas inlet (15) that passes through the housing (8) of the turbulence chamber (7) and opens into the turbulence chamber (7), and a lance (26) for ejecting an oxygen-containing gas is arranged in the turbulence chamber (7) along the vertical axis (6). A screw conveyor (18) for the process materials, said screw conveyor being arranged in a sieve pipe (17) provided with holes (16), passes through the turbulence chamber (7) in a region axially above the at least one gas inlet (15).

IPC 8 full level
F27B 1/20 (2006.01); **F27B 3/18** (2006.01); **F27D 3/00** (2006.01); **F27D 3/08** (2006.01); **F27D 3/16** (2006.01); **F27D 99/00** (2010.01)

CPC (source: AT EP)
C01B 25/01 (2013.01 - AT); **C22B 7/001** (2013.01 - AT); **C22B 7/02** (2013.01 - AT); **C22B 7/04** (2013.01 - AT); **F23D 17/005** (2013.01 - AT); **F27B 1/20** (2013.01 - AT EP); **F27B 3/18** (2013.01 - EP); **F27D 3/0033** (2013.01 - EP); **F27D 3/08** (2013.01 - EP); **F27D 3/18** (2013.01 - AT); **F27D 99/0033** (2013.01 - EP); **F27D 3/08** (2013.01 - AT); **F27D 3/15** (2013.01 - AT); **F27D 2003/168** (2013.01 - EP)

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

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
WO 2022254322 A1 20221208; AT 524558 A4 20220715; AT 524558 B1 20220715; EP 4348142 A1 20240410

DOCDB simple family (application)
IB 2022055069 W 20220531; AT 1082021 A 20210602; EP 22731818 A 20220531