

Title (en)

CONVEYOR UNIT FOR A FUEL CELL SYSTEM FOR CONVEYING AND/OR CONTROLLING A GASEOUS MEDIUM

Title (de)

FÖRDERAGGREGAT FÜR EIN BRENNSTOFFZELLEN-SYSTEM ZUR FÖRDERUNG UND/ODER STEUERUNG EINES GASFÖRMIGEN MEDIUMS

Title (fr)

UNITÉ DE REFOULEMENT POUR SYSTÈME DE PILE À COMBUSTIBLE DESTINÉE AU REFOULEMENT ET/OU À LA COMMANDE D'UN MILIEU GAZEUX

Publication

EP 3947978 A1 20220209 (DE)

Application

EP 20712243 A 20200311

Priority

- DE 102019204723 A 20190403
- EP 2020056422 W 20200311

Abstract (en)

[origin: WO2020200670A1] The invention relates to a conveyor unit (1) for a fuel cell system (31) for conveying and/or controlling a gaseous medium, in particular hydrogen, comprising a jet pump (4), which is driven by a propulsion jet of a pressurized gaseous medium, and a metering valve (6), an outlet of the conveyor unit (1) being fluidically connected to an anode inlet (15) of a fuel cell (29). The jet pump (4) has a suction region (7), a mixing tube (18), and a diffuser (20), wherein the diffuser (20) is at least indirectly fluidically connected to the anode inlet (15) of the fuel cell (29), and the gaseous medium flows through the jet pump (4) at least partly in the direction of a first flow direction (V) which runs parallel to a first longitudinal axis (39) of the mixing tube (18). According to the invention, a second longitudinal axis (40) of the diffuser (20) is curved or inclined relative to the first longitudinal axis (39) of the mixing tube (18).

IPC 8 full level

F04F 5/16 (2006.01); **F04F 5/20** (2006.01); **F04F 5/54** (2006.01); **H01M 8/04089** (2016.01)

CPC (source: EP KR US)

F04F 5/16 (2013.01 - EP KR); **F04F 5/20** (2013.01 - EP); **F04F 5/54** (2013.01 - EP KR); **H01M 8/04097** (2013.01 - EP KR US); **H01M 8/04753** (2013.01 - US); **H01M 2250/20** (2013.01 - US); **Y02E 60/50** (2013.01 - EP KR); **Y02T 90/40** (2013.01 - KR)

Citation (search report)

See references of WO 2020200670A1

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 2020200670 A1 20201008; CN 113646544 A 20211112; DE 102019204723 A1 20201008; EP 3947978 A1 20220209; JP 2022526164 A 20220523; JP 7253638 B2 20230406; KR 20210142191 A 20211124; US 2022181654 A1 20220609

DOCDB simple family (application)

EP 2020056422 W 20200311; CN 202080026726 A 20200311; DE 102019204723 A 20190403; EP 20712243 A 20200311; JP 2021557473 A 20200311; KR 20217035132 A 20200311; US 202017601161 A 20200311