Title (en)
SEPARATING DEVICE UND METHOD FOR SEPARATING PARTICLES FROM A GAS FLOW

Title (de)
VORRICHTUNG UND VERFAHREN ZUM ABSCHEIDEN VON FREMDPARTIKELN AUS EINEM GASSTROM

Title (fr)
DISPOSITIF METHODE DE SÉPARATION DE PARTICULES D'UN FLUX GAZEUX

Publication
EP 2994236 B1 20170712 (DE)

Application
EP 14725035 A 20140506

Priority
• DE 102013104645 A 20130506
• EP 2014059262 W 20140506

Abstract (en)
[origin: WO2014180861A1] The invention relates to a device and method for separating foreign particles out of a gas stream. To this end the apparatus comprises the following features: a pipeline (1) having an inlet opening (2) for introduction of the gas stream to be treated; a Venturi constriction (3) in the pipeline (1); at least one injection nozzle (4) disposed before or in the Venturi constriction (3) for injection of liquid into the pipeline; a displacement body (5) which is disposed in the pipeline (1), which forms an annular gap together with the internal shell surface of the pipeline (1) and which extends in the axial direction at least over the outlet region of the Venturi constriction (3); guide vanes (6) are provided which are disposed on the displacement member (5) or in the region of the displacement member (5) on the lining of the pipeline (1); downstream of the displacement body (5) the pipeline (1) has an arrangement for discharging foreign particles out of the circumferential region of the cross-section and purified gas out of the central region of the cross-section.

IPC 8 full level
B04C 3/06 (2006.01)

CPC (source: EP)
B04C 3/06 (2013.01); B04C 2003/003 (2013.01); B04C 2003/006 (2013.01); B04C 2009/008 (2013.01)

Cited by
DE102021004821A1; WO2023046973A1

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

DOCDB simple family (publication)
DE 102013104645 A1 20141106; CN 105188948 A 20151223; CN 105188948 B 20211123; EP 2994236 A1 20160316; EP 2994236 B1 20170712; ES 2642269 T3 20171116; HR P20171482 T1 20171117; PL 2994236 T3 20180131; PT 2994236 T 20171020; WO 2014180861 A1 20141113

DOCDB simple family (application)
DE 102013104645 A 20130506; CN 201480025837 A 20140506; EP 14725035 A 20140506; EP 2014059262 W 20140506; ES 14725035 T 20140506; HR P20171482 T 20171005; PL 14725035 T 20140506; PT 14725035 T 20140506