

Title (en)

DEVICE AND METHOD FOR THERMAL EXHAUST GAS CLEANING

Title (de)

VORRICHTUNG UND VERFAHREN ZUR THERMISCHEN ABGASREINIGUNG

Title (fr)

DISPOSITIF ET PROCÉDÉ DE PURIFICATION THERMIQUE DES EFFLUENTS GAZEUX

Publication

EP 3237802 A1 20171101 (DE)

Application

EP 15813330 A 20151215

Priority

- DE 102014226882 A 20141222
- DE 102015205516 A 20150326
- EP 2015079685 W 20151215

Abstract (en)

[origin: WO2016102231A1] A thermal exhaust gas cleaning device has at least one thermal reactor (10) to which a raw gas that is to be cleaned is supplied, and in which the supplied raw gas is thermally cleaned, and an energy recovery apparatus to which a gas cleaned in the thermal reactor is supplied via at least one discharge line (28, 34). In order to improve the energy balance, it is proposed that the energy recovery apparatus has at least one condensing heat exchanger (38, 50, 60, 64) in which the cleaned gas is cooled such that condensable materials contained in the cleaned gas condense, and enthalpy thus released is given off to a heat-exchange medium and/or the raw gas upstream of the thermal reactor (10).

IPC 8 full level

F23G 7/06 (2006.01); **F23J 15/00** (2006.01)

CPC (source: CN EP US)

F01D 15/10 (2013.01 - CN); **F01K 11/02** (2013.01 - CN); **F01K 23/10** (2013.01 - CN); **F23G 7/061** (2013.01 - US); **F23G 7/066** (2013.01 - CN EP US); **F23G 7/068** (2013.01 - CN EP US); **F23J 15/006** (2013.01 - CN EP US); **F25J 2260/02** (2013.01 - US); **Y02E 20/12** (2013.01 - EP US)

Citation (search report)

See references of WO 2016102231A1

Citation (examination)

- WO 2012148294 A2 20121101 - INST INZYNIERII CHEMICZNEJ POLSKIEJ AKADEMII NAUK [PL], et al
- CN 102733872 A 20121017 - ZHEJIANG YIYANG ENERGY TECHNOLOGY CO LTD

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 102015205516 A1 20160623; AU 2015371529 A1 20170706; AU 2015371529 B2 20200813; CN 107407483 A 20171128; EP 3237802 A1 20171101; US 10429066 B2 20191001; US 2017276347 A1 20170928; WO 2016102231 A1 20160630

DOCDB simple family (application)

DE 102015205516 A 20150326; AU 2015371529 A 20151215; CN 201580070144 A 20151215; EP 15813330 A 20151215; EP 2015079685 W 20151215; US 201715622333 A 20170614