

Title (en)

EXHAUST GAS TREATMENT APPARATUS, AND SHIP COMPRISING SAME

Title (de)

ABGASBEHANDLUNGSVORRICHTUNG UND SCHIFF DAMIT

Title (fr)

APPAREIL DE TRAITEMENT DES GAZ D'ÉCHAPPEMENT ET NAVIRE LE COMPRENANT

Publication

EP 3904648 A4 20220511 (EN)

Application

EP 19907764 A 20191231

Priority

- KR 20190000298 A 20190102
- KR 20190077075 A 20190627
- KR 20190077069 A 20190627
- KR 20190077071 A 20190627
- KR 20190077076 A 20190627
- KR 2019018820 W 20191231

Abstract (en)

[origin: EP3904648A1] Disclosed is an exhaust gas treatment apparatus, and a ship comprising same. An exhaust gas treatment apparatus according to one embodiment of the present invention comprises: a reactor into which exhaust gas is introduced; and a treatment unit which is provided inside the reactor and sprays the exhaust gas with a treatment liquid or with a cooling liquid and a treatment liquid to remove carbon dioxide from the exhaust gas, wherein the treatment liquid is an alkaline aqueous solution which chemically adsorbs the carbon dioxide contained in the exhaust gas, thereby removing the carbon dioxide from the exhaust gas, and waste water, which is the cooling liquid or treatment liquid sprayed onto the exhaust gas and used to remove the carbon dioxide from the exhaust gas, can be drained or recovered such that the treatment liquid can be separated from the waste water.

IPC 8 full level

F01N 3/04 (2006.01); **F01N 3/02** (2006.01); **F01N 3/08** (2006.01); **F01N 3/20** (2006.01); **F01N 3/28** (2006.01)

CPC (source: EP KR)

F01N 3/0205 (2013.01 - EP); **F01N 3/04** (2013.01 - EP KR); **F01N 3/0857** (2013.01 - EP); **F01N 3/206** (2013.01 - EP);
F01N 3/2889 (2013.01 - EP); **F01N 5/04** (2013.01 - EP); **F01N 2240/02** (2013.01 - EP); **F01N 2260/024** (2013.01 - EP);
F01N 2570/10 (2013.01 - EP KR); **F01N 2590/02** (2013.01 - EP KR); **F01N 2610/01** (2013.01 - EP); **F01N 2610/14** (2013.01 - EP);
F01N 2610/1406 (2013.01 - EP); **F01N 2610/1453** (2013.01 - EP KR)

Citation (search report)

- [X] KR 20130078308 A 20130710 - STX INST OF TECHNOLOGY CO LTD [KR]
- [X] KR 101379856 B1 20140401 - DAEWOO ENG & CONSTR CO LTD [KR], et al
- [X] GB 2547696 A 20170830 - ALLAN JOHN BROWN [GB]
- [X] KR 101740614 B1 20170526 - JEIPLEENERGY CO LTD [KR]
- See references of WO 2020141867A1

Cited by

CN116658274A

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)

EP 3904648 A1 20211103; EP 3904648 A4 20220511; JP 2022516630 A 20220301; JP 7394859 B2 20231208; WO 2020141867 A1 20200709

DOCDB simple family (application)

EP 19907764 A 20191231; JP 2021538736 A 20191231; KR 2019018820 W 20191231