

Title (en)
SEPARATED CHAMBERS PYROLYSIS FURNACE

Title (de)
GETRENNTE KAMMERN PYROLYSIS-OFEN

Title (fr)
FOUR DE PYROLYSE À CHAMBRES SÉPARÉES

Publication
EP 3583193 B1 20221005 (EN)

Application
EP 18709930 A 20180208

Priority

- IT 201700018877 A 20170220
- EP 2018053228 W 20180208

Abstract (en)
[origin: WO2018149736A1] The present invention is directed to an apparatus for domestic hot water and electricity production by the use of a natural organic fuel, the apparatus comprising a separated chambers pyrolysis furnace comprising: a) a pyrolysis chamber wherein the fuel is heated, substantially in the absence of oxygen at a temperature capable of causing pyrolysis of fuel; b) a combustion chamber of the pyrolyzed fuel, wherein the pyrolyzed fuel is burned in the presence of an air flux. The invention is also directed to an apparatus for the production of domestic hot water and electricity, which apparatus comprises: the above defined furnace; b) a heat exchanger connected to the exit of the exhausted gas, wherein domestic water is heated; c) a power generator connected with the exit of syngas, wherein syngas produced in the pyrolysis chamber is used as a fuel.

IPC 8 full level
C10B 47/44 (2006.01); **C10B 53/02** (2006.01); **C10J 3/00** (2006.01); **C10J 3/30** (2006.01); **C10J 3/60** (2006.01); **F23B 40/04** (2006.01);
F23B 90/06 (2011.01); **F23G 5/027** (2006.01)

CPC (source: EP US)
C10B 47/44 (2013.01 - EP); **C10B 53/02** (2013.01 - EP US); **C10J 3/002** (2013.01 - EP); **C10J 3/007** (2013.01 - EP);
C10J 3/30 (2013.01 - EP US); **C10J 3/60** (2013.01 - EP US); **F23B 40/04** (2013.01 - EP US); **F23B 90/06** (2013.01 - EP US);
F23G 5/027 (2013.01 - EP US); **C10J 2200/158** (2013.01 - EP); **C10J 2300/1606** (2013.01 - EP US); **C10J 2300/1876** (2013.01 - EP US);
F23G 2201/301 (2013.01 - EP US); **F23G 2201/303** (2013.01 - EP US); **F23G 2201/304** (2013.01 - EP US); **F23G 2203/401** (2013.01 - EP US);
F23G 2206/203 (2013.01 - EP US)

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)
WO 2018149736 A1 20180823; CA 3053606 A1 20180823; EP 3583193 A1 20191225; EP 3583193 B1 20221005;
IT 201700018877 A1 20180820; RU 2019125586 A 20210322; RU 2019125586 A3 20210322; US 2020048559 A1 20200213

DOCDB simple family (application)
EP 2018053228 W 20180208; CA 3053606 A 20180208; EP 18709930 A 20180208; IT 201700018877 A 20170220; RU 2019125586 A 20180208;
US 201816486039 A 20180208