

Title (en)  
SYSTEM FOR GENERATING ENERGY IN A WORKING FLUID FROM HYDROGEN AND OXYGEN AND METHOD OF OPERATING THIS SYSTEM

Title (de)  
SYSTEM ZUR ERZEUGUNG VON ENERGIE IN EINEM ARBEITSFLUID AUS WASSERSTOFF UND SAUERSTOFF UND VERFAHREN ZUM BETRIEB DIESER SYSTEMS

Title (fr)  
SYSTÈME DE GÉNÉRATION D'ÉNERGIE DANS UN FLUIDE DE TRAVAIL À PARTIR D'HYDROGÈNE ET D'OXYGÈNE ET PROCÉDÉ DE FONCTIONNEMENT DE CE SYSTÈME

Publication  
**EP 3844371 C0 20240228 (EN)**

Application  
**EP 19783138 A 20190826**

Priority  
• NL 2021512 A 20180829  
• NL 2019050545 W 20190826

Abstract (en)  
[origin: WO2020046118A1] A system for generating energy in a working fluid from hydrogen and oxygen, comprises a burner (12) for combustion of hydrogen and oxygen into steam provided with a feed (14) for oxygen and a feed (16) for hydrogen, a boiler (22) operably connected to the burner for heating the working fluid having a feed (24) for introducing the working fluid and a discharge (26) for discharging heated working fluid and a heat exchanging surface (25) for heat exchange between the steam and the working fluid, a condenser (30) for condensing steam operably connected to the boiler downstream thereof, wherein a recirculation loop (32; 55; 57) is provided for recirculation of reaction products of the combustion of hydrogen and oxygen downstream of the condenser to the burner, and a recovery loop (38) for recycling oxygen separated in the separator from the separator to the feed of oxygen of the burner.

IPC 8 full level  
**F01K 17/02** (2006.01); **F22B 1/00** (2006.01); **F22B 1/08** (2006.01)

CPC (source: EP)  
**F01K 17/02** (2013.01); **F22B 1/003** (2013.01); **F22B 1/08** (2013.01)

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

Participating member state (EPC – UP)  
AT BE BG DE DK EE FI FR IT LT LU LV MT NL PT SE SI

DOCDB simple family (publication)  
**WO 2020046118 A1 20200305**; EP 3844371 A1 20210707; EP 3844371 B1 20240228; EP 3844371 C0 20240228; NL 2021512 B1 20200424

DOCDB simple family (application)  
**NL 2019050545 W 20190826**; EP 19783138 A 20190826; NL 2021512 A 20180829