

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 DIESES 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

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Application
EP 19783138 A 20190826

Priority
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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.

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