

Title (en)
ELECTROLYSIS DEVICE HAVING A CONVERTER AND METHOD FOR PROVIDING INSTANTANEOUS RESERVE POWER FOR AN AC VOLTAGE GRID

Title (de)
ELEKTROLYSEVORRICHTUNG MIT EINEM UMRICHTER UND VERFAHREN ZUR BEREITSTELLUNG VON MOMENTANRESERVELEISTUNG FÜR EIN WECHSELSPANNUNGSNETZ

Title (fr)
DISPOSITIF D'ÉLECTROLYSE AVEC UN CONVERTISSEUR STATIQUE ET PROCÉDÉ DE FOURNITURE D'UNE PUISSANCE DE RÉSERVE INSTANTANÉE POUR UN RÉSEAU DE TENSION ALTERNATIVE

Publication
EP 3903396 A1 20211103 (DE)

Application
EP 19816599 A 20191203

Priority
• DE 102018133641 A 20181227
• EP 2019083382 W 20191203

Abstract (en)
[origin: WO2020135975A1] What is described is a method for operating an electrolysis device (10) having a converter (12) that is connected, at its AC voltage side, to an AC voltage grid (15) via a decoupling inductor (13) and draws an AC active power from the AC voltage grid (15), and an electrolyzer (11) that is connected, at its DC voltage side, to the converter (12) and, at a grid frequency that corresponds to a nominal frequency of the AC voltage grid (15) and is constant over time, is operated at an electric power that is between 50% and 100% of a nominal power of the electrolyzer (11), wherein the converter (12) is operated with voltage impression such that the AC active power drawn from the AC voltage grid (15) is changed directly depending on a change and/or a rate of change of the grid frequency in the AC voltage grid (15). What are also described are an electrolysis device and a method for providing instantaneous reserve power for an AC voltage grid.

IPC 8 full level
H02J 3/14 (2006.01); **C25B 1/04** (2021.01); **C25B 15/02** (2021.01)

CPC (source: EP US)
C25B 1/04 (2013.01 - EP); **C25B 9/65** (2021.01 - US); **C25B 15/02** (2013.01 - EP US); **H02J 3/14** (2013.01 - EP); **H02M 3/04** (2013.01 - US); **Y02B 70/3225** (2013.01 - EP); **Y02E 10/56** (2013.01 - EP); **Y02E 60/36** (2013.01 - EP); **Y02P 20/10** (2015.11 - EP); **Y04S 20/222** (2013.01 - EP)

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