

Title (en)  
SUPPLY UNIT FOR A HIGH-POWER LOAD AND ARRANGEMENT COMPRISING THE SUPPLY UNIT

Title (de)  
VERSORGUNGSEINRICHTUNG FÜR EINE HOCHSTROMLAST UND ANORDNUNG MIT DER VERSORGUNGSEINRICHTUNG

Title (fr)  
UNITÉ D'ALIMENTATION POUR CHARGE DE PUISSANCE ÉLEVÉE ET AGENCEMENT COMPRENANT L'UNITÉ D'ALIMENTATION

Publication  
**EP 4094352 A1 20221130 (DE)**

Application  
**EP 20718176 A 20200324**

Priority  
EP 2020058189 W 20200324

Abstract (en)  
[origin: WO2021190732A1] The invention relates to a supply unit (30) for a high-power load (31). The supply unit comprises a DC/DC voltage converter (32), which is arranged between a high-voltage side and a low-voltage side (secondary side). The invention is distinguished in that the DC/DC voltage converter comprises a first sub-converter (33) and a second sub-converter (34), wherein: the sub-converters are connected to one another in a converter series circuit between a first and a second primary-side DC voltage pole; the second sub-converter is connected between a first and a second secondary-side DC voltage pole; the sub-converters each have at least one AC voltage terminal, which terminals are connected to one another by means of a coupling device (54) such that an exchange of electrical power between the first and the second sub-converter is made possible; and the secondary-side DC voltage poles are designed for connection to the high-power load. The invention further relates to an arrangement (200) for converting electrical energy into chemical energy with gas generation, said device comprising the supply unit.

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**H02J 3/381** (2013.01 - US); **H02M 1/0074** (2021.05 - US); **H02M 1/0095** (2021.05 - EP); **H02M 3/33569** (2013.01 - EP); **H02M 7/06** (2013.01 - EP); **H02M 7/1626** (2013.01 - EP US); **H05B 7/144** (2013.01 - US); **C25B 9/65** (2021.01 - US); **F27B 3/085** (2013.01 - US); **H02J 2300/28** (2020.01 - US); **H02M 1/0074** (2021.05 - EP); **H02M 7/4835** (2021.05 - EP); **Y02E 10/70** (2013.01 - EP); **Y02E 60/30** (2013.01 - EP); **Y02E 60/32** (2013.01 - EP); **Y02E 60/36** (2013.01 - EP); **Y02E 60/50** (2013.01 - EP); **Y02E 60/60** (2013.01 - EP)

Citation (search report)  
See references of WO 2021190732A1

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