US 20220368152A1

(19) **United States**

(12) **Patent Application Publication** (10) **Pub. No.: US 2022/0368152 A1**

Hanson et al. (43) **Pub. Date: Nov. 17, 2022**

(54) **OFF GRID POWER SUPPLY SYSTEM**

(71) Applicants: **Al Hanson**, Phoenix, AZ (US); **Jeffery Brownmiller**, Casa Grande, AZ (US)

(72) Inventors: **Al Hanson**, Phoenix, AZ (US); **Jeffery Brownmiller**, Casa Grande, AZ (US)

(21) Appl. No.: **17/735,739**

(22) Filed: **May 3, 2022**

Related U.S. Application Data

(60) Provisional application No. 63/189,325, filed on May 17, 2021, provisional application No. 63/291,974, filed on Dec. 21, 2021.

Publication Classification

(51) **Int. Cl.**

H02J 9/06	(2006.01)
H02J 7/35	(2006.01)
H02J 7/00	(2006.01)
H02J 7/14	(2006.01)

(52) **U.S. Cl.**

CPC ***H02J 9/06*** (2013.01); ***H02J 7/35*** (2013.01); ***H02J 7/0048*** (2020.01); ***H02J 7/0029*** (2013.01); ***H02J 7/14*** (2013.01); ***H02J 7/0068*** (2013.01); *H02J 2300/24* (2020.01); *H02J 2300/28* (2020.01); *B60L 53/52* (2019.02)

(57) **ABSTRACT**

An off grid electric vehicle charging system that includes an off grid power supply system and an electric vehicle charging plug adapted to connect with any electric vehicle and provide electric power thereto. The off grid power supply system incorporates rechargeable battery members adapted to provide uninterruptible off grid electrical power and are charged and recharged by solar panels and/or wind turbines and/or a water wheel. Furthermore, when the solar panels and/or wind turbines and/or a water wheel are insufficient to recharge the battery members a motorized engine is automatically started to recharge the battery members until the solar panels and/or wind turbines and/or a water wheel are sufficiently operable to recharge the battery members once again. The electric vehicle charging plug is adapted to connect with any electric vehicle and provide DC electric power thereto. The system further includes an alternator for converting the electricity from the battery members into DC electrical current, automatic on/off switches, and a control panel.