

## (19) United States

# (12) Patent Application Publication (10) Pub. No.: US 2022/0360101 A1 PSAROLOGOS et al.

### Nov. 10, 2022 (43) **Pub. Date:**

## (54) ENERGY MANAGEMENT SYSTEM AND METHOD FOR A KITCHEN APPLIANCE

(71) Applicant: Breville Pty Limited, Alexandria, New

South Wales (AU)

(72) Inventors: Con PSAROLOGOS, Alexandria

(AU); Daniel Philip MACHEN, Alexandria (AU); Xiang REN, Alexandria (AU); Ali TOFAILI, Alexandria (AU); Scott FRYER,

Alexandria (AU)

(21) Appl. No.: 17/621,406

(22) PCT Filed: Jun. 26, 2020

(86) PCT No.: PCT/AU2020/050648

§ 371 (c)(1),

(2) Date: Dec. 21, 2021

#### (30)Foreign Application Priority Data

Jun. 28, 2019 (AU) ...... 2019902276

### **Publication Classification**

(51) Int. Cl.

H02J 7/00 (2006.01)A47J 27/21 (2006.01)

(52) U.S. Cl.

CPC ... H02J 7/007182 (2020.01); A47J 27/21091 (2013.01); A47J 27/2105 (2013.01); H02J 7/005 (2020.01); H02J 7/0048 (2020.01); H02J 7/0063 (2013.01); H02J 7/007194 (2020.01); H02J 7/00714 (2020.01); H02J 2310/14 (2020.01)

#### (57)**ABSTRACT**

An energy management system (401) for a kitchen appliance (201), the energy management system (401) comprising: a mains power system, a backup energy storage system (405), and a con-troller (411), wherein the controller (411) is arranged to: determine a state of health of the energy storage system; determine a state of charge of the energy storage system; determine how energy from the energy storage system is to be used based on the determined state of health, the determined state of charge and at least one measured variable obtained from a kitchen appliance (201), and apply the energy to operate at least one function of the kitchen appliance (201).

