

# (19) United States

## (12) Patent Application Publication (10) Pub. No.: US 2022/0369422 A1 YOON et al.

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

## (54) ELECTRIC KETTLE HAVING WARMING FUNCTION AND METHOD FOR OPERATING SAME

(71) Applicant: LG ELECTRONICS INC., Seoul

(72) Inventors: Sehwa YOON, Seoul (KR); Jea Shik HEO, Seoul (KR)

Appl. No.: 17/770,913 (21)

(22) PCT Filed: Sep. 24, 2020

(86) PCT No.: PCT/KR2020/013011

§ 371 (c)(1),

(2) Date: Apr. 21, 2022

#### (30)Foreign Application Priority Data

Oct. 23, 2019 (KR) ...... 10-2019-0132242

### **Publication Classification**

(51) Int. Cl. H05B 1/02 (2006.01)A47J 27/21 (2006.01)

U.S. Cl. H05B 1/0269 (2013.01); A47J 27/2105 CPC ...... (2013.01); A47J 27/21058 (2013.01)

#### (57)ABSTRACT

An electric kettle includes a container in which water is received, and a base on which the container is seated, wherein the container includes a handle, a body defining space in which water is received, a lid configured to open and close an open upper surface of the body, a heating module mounted on the lower surface of the body and configured to heat water contained in the body, a capacitor; a memory; and a controller configured to detect a voltage of the capacitor according to a preset period and to perform a keep-warm operation based on voltage difference between a currently detected first voltage of the capacitor and a previously detected second voltage of the capacitor, and when the body is seated on the base, commercial power is supplied to the base, and the capacitor is charged by the power transmitted through the base.

