

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2024/0213936 A1 KWON et al.

Jun. 27, 2024 (43) **Pub. Date:**

(54) AEROSOL GENERATING DEVICE FOR CONTROLLING HEATING THROUGH POWER AMPLIFICATION AND OPERATING METHOD THEREOF

(71) Applicant: KT & G CORPORATION, Daejeon

(KR)

(72) Inventors: Young Bum KWON, Gyeonggi-do (KR); Dong Sung KIM, Seoul (KR); Yong Hwan KIM, Gyeonggi-do (KR);

> Hun ll LIM, Seoul (KR); Seok Su JANG, Daejeon (KR)

(73) Assignee: KT & G CORPORATION, Daejeon

(KR)

(21) Appl. No.: 18/568,060

(22) PCT Filed: Dec. 1, 2022

(86) PCT No.: PCT/KR2022/019362

§ 371 (c)(1),

(2) Date: Dec. 7, 2023

(30)Foreign Application Priority Data

Dec. 8, 2021	(KR)	 10-2021-0175139
May 18, 2022	(KR)	 10-2022-0060942

Publication Classification

(51) Int. Cl. H03F 3/24 (2006.01)A24F 40/465 (2006.01)A24F 40/53 (2006.01)A24F 40/65 (2006.01)H03F 1/26 (2006.01)

(52) U.S. Cl.

CPC H03F 3/245 (2013.01); H03F 1/26 (2013.01); A24F 40/465 (2020.01); A24F 40/53 (2020.01); A24F 40/65 (2020.01); H03F 2200/237 (2013.01)

(57)**ABSTRACT**

According to an embodiment, an aerosol generating device includes: a battery configured to provide power; a heating body configured to heat at least a part of an aerosol generating article; and an amplifier circuit electrically connected to the battery and the heating body, wherein the amplifier circuit generates a first signal by amplifying a power signal provided by the battery through a switching element, generates a second signal through a filter by eliminating a harmonic component from the first signal, and delivers the second signal to the heating body.

