

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2022/0360115 A1

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

(54) METHOD AND APPARATUS FOR CONTROLLING WIRELESS POWER TRANSMISSION

(71) Applicant: LG INNOTEK CO., LTD., Seoul (KR)

Inventors: Yu Ri Park, Seoul (KR); Yong Il Kwon, Seoul (KR)

Assignee: LG INNOTEK CO., LTD., Seoul (KR)

Appl. No.: 17/733,503

(22) Filed: Apr. 29, 2022

Related U.S. Application Data

(63) Continuation of application No. 16/929,933, filed on Jul. 15, 2020, now Pat. No. 11,349,347, which is a continuation of application No. 16/440,746, filed on Jun. 13, 2019, now Pat. No. 10,742,074.

(30)Foreign Application Priority Data

Jun. 15, 2018 (KR) 10-2018-0068751

Publication Classification

(51) Int. Cl. H02J 50/60 (2006.01)H02J 50/80 (2006.01)

H02J 50/90	(2006.01)
H02J 50/12	(2006.01)
H02J 7/02	(2006.01)
H04L 5/00	(2006.01)
H02J 50/20	(2006.01)

(52) U.S. Cl.

CPC H02J 50/60 (2016.02); H02J 50/80 (2016.02); H02J 50/90 (2016.02); H02J 50/12 (2016.02); H02J 7/02 (2013.01); H04L 5/0055 (2013.01); H02J 50/20 (2016.02); H02J 50/402 (2020.01)

(57)ABSTRACT

A method of controlling a wireless power receiver can include transmitting, during a first determination phase, a foreign object detection status packet; before entering a first power transfer mode for receiving first power and before entering a second power transfer mode for receiving second power, receiving a determination result as to whether a foreign object is present determined based on the foreign object detection status packet; in response to determining that the foreign object is present based on the determination result, receiving the first power according to the first power transfer mode; and in response to determining that the foreign object is not present based on the determination result, receiving the second power according to the second power transfer mode.

