

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2022/0352764 A1 KUROKAWA et al.

Nov. 3, 2022 (43) **Pub. Date:**

(54) WIRELESS POWER TRANSMISSION SYSTEM AND WIRELESS POWER TRANSMISSION METHOD

(71) Applicant: Panasonic Holdings Corporation, Osaka (JP)

(72) Inventors: Aya KUROKAWA, Osaka (JP); Hiroyuki TANI, Hyogo (JP); Yuki TANAKA, Tokyo (JP)

(21) Appl. No.: 17/660,043

(22)Filed: Apr. 21, 2022

(30)Foreign Application Priority Data

Apr. 30, 2021 (JP) 2021-077582

Publication Classification

(51) Int. Cl.

H02J 50/90 (2006.01)H02J 50/20 (2006.01) (52) U.S. Cl. CPC H02J 50/90 (2016.02); H02J 50/20 (2016.02)

(57)ABSTRACT

A wireless power transmission system and a wireless power transmission method are provided that, even if a power transmitter does not have a communication functionality, can improve a transmission efficiency of power waves transmitted from the power transmitter. The wireless power transmission system includes a power transmitter that transmits a power wave and one or more power receivers that receive the power wave, wherein the power transmitter includes a controller that measures a strength of a power wave transmitted from the power receivers by adjusting at least one of a position of the power transmitter and an orientation of an antenna receiving the power wave transmitted from the power receivers and transmits a power wave to the power receivers in accordance with at least one of the position of the power transmitter and the orientation of the antenna upon the measured strength of the power wave exceeding a predetermined value.

100

