

# (19) United States

## (12) Patent Application Publication (10) Pub. No.: US 2024/0213810 A1 ZEINE

(43) Pub. Date:

Jun. 27, 2024

### (54) METHOD AND APPARATUS FOR PROVIDING HIGH POWER IN A WIRELESS POWER SYSTEM

(71) Applicant: Ossia Inc., Redmond, WA (US)

Inventor: Hatem ZEINE, Redmond, WA (US)

(73) Assignee: Ossia Inc., Redmond, WA (US)

(21) Appl. No.: 18/545,061

Dec. 19, 2023 (22) Filed:

### Related U.S. Application Data

(60) Provisional application No. 63/435,046, filed on Dec. 23, 2022.

#### **Publication Classification**

(51) Int. Cl.

H02J 50/23 (2006.01)H02J 50/00 (2006.01) H02J 50/27 (2006.01)H02J 50/90 (2006.01)

(52) U.S. Cl.

CPC ...... H02J 50/23 (2016.02); H02J 50/005 (2020.01); **H02J 50/27** (2016.02); **H02J 50/90** (2016.02)

#### (57)ABSTRACT

A method is implemented by a wireless power system. The wireless power system includes a wireless power transmitter and a wireless power receiver. The method includes receiving, by the wireless power transmitter of the wireless power system, beacon signals transmitted from the wireless power receiver of the wireless power system. The method includes adding, by the wireless power transmitter, phases for each port of the wireless power receiver based upon the beacon signals. The method includes generating, by the wireless power transmitter, a high power signal based on adding of the phases. The method includes transmitting, by the wireless power transmitter, the high power signal to the wireless power receiver.

