



US 20220360112A1

(19) **United States**

(12) **Patent Application Publication**  
**Zeine et al.**

(10) **Pub. No.: US 2022/0360112 A1**

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

(54) **TECHNIQUES FOR DELIVERING PULSED WIRELESS POWER**

**Publication Classification**

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

(72) Inventors: **Hatem Zeine**, Woodinville, WA (US);  
**Thomas H. Wilson**, Kirkland, WA (US); **K. Kenneth Clark**, Kirkland, WA (US)

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

(21) Appl. No.: **17/873,316**

(22) Filed: **Jul. 26, 2022**

(51) **Int. Cl.**

**H02J 50/20** (2006.01)

**H02J 50/27** (2006.01)

**H02J 50/40** (2006.01)

**H02J 50/80** (2006.01)

**H02J 50/10** (2006.01)

(52) **U.S. Cl.**

CPC ..... **H02J 50/20** (2016.02); **H02J 50/27**

(2016.02); **H02J 50/40** (2016.02); **H02J 50/80**

(2016.02); **H02J 50/10** (2016.02); **H02J**

**7/0013** (2013.01)

**Related U.S. Application Data**

(63) Continuation of application No. 16/429,825, filed on Jun. 3, 2019, now Pat. No. 11,411,440, which is a continuation of application No. 15/367,900, filed on Dec. 2, 2016, now Pat. No. 10,312,744, which is a continuation of application No. 14/171,750, filed on Feb. 3, 2014, now Pat. No. 9,553,473.

(60) Provisional application No. 61/760,648, filed on Feb. 4, 2013.

(57)

**ABSTRACT**

A transmitter assembly is useful in optimizing the delivery of wireless power to a plurality of receivers. Each receiver measures its own battery need for power and transmits that measurement as a request to the transmitter. The transmitter is configured to normalize and compare battery need requests. The transmitter then allocates pulses of wireless power among the requesting receivers according to their battery need.

