



US 20220360092A1

(19) **United States**

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

(10) **Pub. No.: US 2022/0360092 A1**

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

(54) **RECHARGEABLE BATTERY KIOSK THAT DYNAMICALLY ALTERS A CHARGING RATE OF RECHARGEABLE BATTERIES BASED ON USAGE DATA**

(71) Applicant: **Neutron Holdings, Inc. DBA LIME**,  
San Francisco, CA (US)

(72) Inventors: **Ashley COOPER**, San Francisco, CA  
(US); **Paul DURKEE**, San Francisco,  
CA (US); **Celina MIKOLAJCZAK**,  
San Francisco, CA (US)

(21) Appl. No.: **17/750,677**

(22) Filed: **May 23, 2022**

**Related U.S. Application Data**

(63) Continuation of application No. 16/705,011, filed on  
Dec. 5, 2019, now Pat. No. 11,374,421.

(60) Provisional application No. 62/775,813, filed on Dec.  
5, 2018.

**Publication Classification**

(51) **Int. Cl.**  
**H02J 7/00** (2006.01)  
**B60L 53/62** (2006.01)  
**B60L 58/16** (2006.01)  
**B60L 53/80** (2006.01)  
(52) **U.S. Cl.**  
CPC ..... **H02J 7/007** (2013.01); **H02J 7/005**  
(2020.01); **B60L 53/62** (2019.02); **B60L 58/16**  
(2019.02); **B60L 53/80** (2019.02)

(57) **ABSTRACT**

A rechargeable battery kiosk can dynamically alter a charging rate of one or more rechargeable batteries housed within the rechargeable battery kiosk to increase a probability that the rechargeable battery kiosk has an ample supply of fully charged, or mostly fully charged, rechargeable batteries based on an anticipated usage data for the rechargeable battery kiosk.

