



US 20240213772A1

(19) **United States**

(12) **Patent Application Publication**
LEE

(10) **Pub. No.: US 2024/0213772 A1**

(43) **Pub. Date: Jun. 27, 2024**

(54) **ELECTRONIC DEVICE FOR MONITORING
ABNORMAL STATE OF ENERGY
CONSUMPTION AND METHOD OF
OPERATING THE SAME**

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

CPC **H02J 3/003** (2020.01); **G05B 19/048**
(2013.01); **G05B 2219/25387** (2013.01); **G05B**
2219/2639 (2013.01); **H02J 2203/20**
(2020.01); **H02J 2310/12** (2020.01); **H02J**
2310/60 (2020.01)

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(21) Appl. No.: **18/518,730**

(22) Filed: **Nov. 24, 2023**

(30) **Foreign Application Priority Data**

Dec. 26, 2022 (KR) 10-2022-0185012
Oct. 13, 2023 (KR) 10-2023-0136638

Publication Classification

(51) **Int. Cl.**
H02J 3/00 (2006.01)
G05B 19/048 (2006.01)

(57)

ABSTRACT

Disclosed are an electronic device for monitoring an abnormal state of energy consumption and a method of operating the same. The method includes receiving factory data related to product production of a factory and energy used in the factory, determining an energy stability indicator (ESI) indicating an amount of the energy used for the product production based on the factory data, generating a normalized energy stability indicator distribution (ESID) with respect to a preset time period based on the ESI, determining a distribution difference by comparing the generated ESID and a reference distribution predetermined for energy consumption of the factory, and outputting one or more observed variables for monitoring an abnormal state of consumption of the energy with respect to a period in which the distribution difference is large.

