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(71) **Applicants:** SINGAPORE UNIVERSITY OF TECHNOLOGY AND DESIGN [SG/SG]; 8 Somapah Road, Singapore 487372 (SG). ILLINOIS AT SINGAPORE PTE. LTD. [SG/SG]; 1 Create Way, #14-02 Create Tower, Singapore 138602 (SG).

(72) **Inventors:** YAU, David; 24 Nanyang Avenue, 48-2-911, Singapore 639811 (SG). YAN, Weili; c/o Illinois at Singapore Pte. Ltd., 1 Create Way, #14-02, Create Tower, Singapore 138602 (SG). LOU, Xin; c/o Illinois at Singapore Pte. Ltd., 1 Create Way, #14-02, Create Tower, Singapore 138602 (SG). YANG, Ying; c/o Illinois at Singapore

Pte. Ltd., 1 Create Way, #14-02, Create Tower, Singapore 138602 (SG).

(74) **Agent:** DAVIES COLLISON CAVE ASIA PTE. LTD.; 10 Collyer Quay #07-01, Ocean Financial Centre, Singapore 049315 (SG).

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(54) **Title:** SYSTEM AND METHOD OF DETECTING ATTACKS AGAINST AUTOMATIC GENERATION CONTROL (AGC) OF A GRID

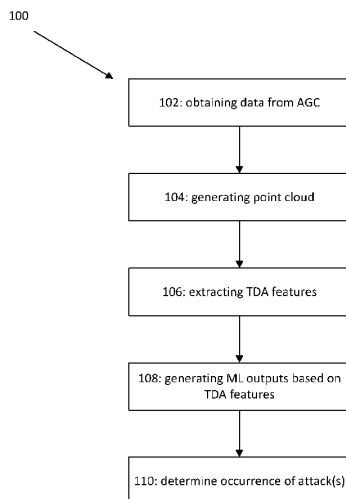


Figure 1

(57) **Abstract:** Disclosed is a method of detecting attacks against automatic generation control (AGC) of a grid. The method includes obtaining data from the AGC, pre-processing the data to generate a point cloud, extracting topological data analysis (TDA) features from the point cloud and inputting the TDA features to a machine learning (ML) model to generate a plurality of outputs. The outputs are then interpreted to determine whether the data includes an attack.

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