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(54) **MEASUREMENT DEVICES AND MEASUREMENT METHODS FOR POWER CONSUMPTION**

(71) Applicant: **Accton Technology Corporation**, Hsinchu (TW)

(72) Inventors: **Min-Chun Tseng**, Hsinchu (TW); **Shih-An Yu**, Hsinchu (TW)

(73) Assignee: **ACCTON TECHNOLOGY CORPORATION**, Hsinchu (TW)

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(58) **Field of Classification Search**

CPC combination set(s) only.

See application file for complete search history.

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Primary Examiner — Huan Tran

(74) *Attorney, Agent, or Firm* — Birch, Stewart, Kolasch & Birch, LLP

(57) **ABSTRACT**

A measurement device is provided. The measurement device comprises a power controller, a detector, a temperature sensor, and a processor. The power controller receives alternating-current (AC) power and transforms the AC power to direct-current (DC) power. The detector detects the DC power to generate a voltage value and a current value. The temperature sensor senses an environment temperature of the measurement device. The processor reads the voltage value, the current value, and the environment temperature and obtains an efficiency coefficient of the power controller according to the voltage value, the current value, and the environment temperature. The processor further obtains a real power consumption value corresponding to the AC power according to the efficiency coefficient.

11 Claims, 6 Drawing Sheets