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(54) **Title: INTELLIGENT TRANSFORMER MONITORING SYSTEM**

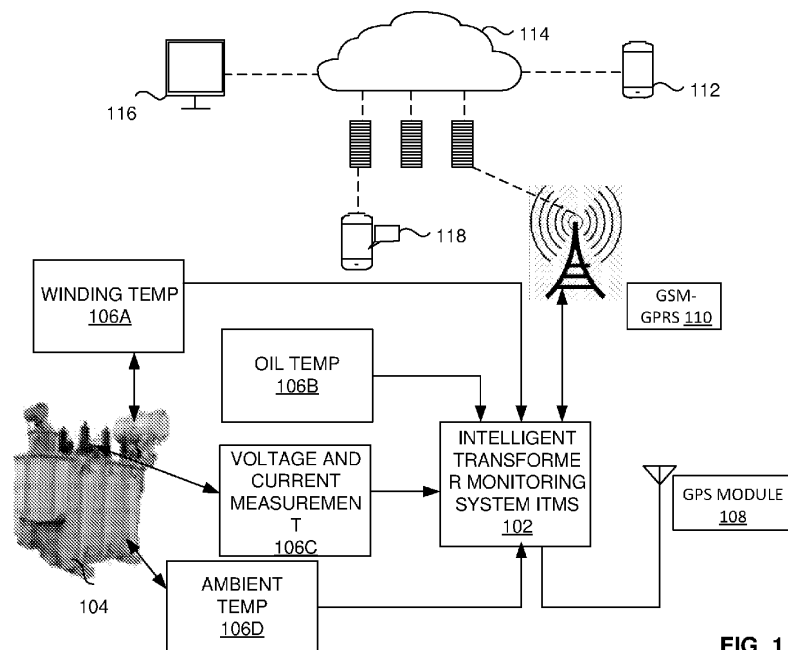


FIG. 1

(57) **Abstract:** An intelligent transformer monitoring system to detect and monitor random failures in distribution transformers due to improper usage and poor maintenance is provided. The intelligent transformer monitoring system includes a GSM-GPRS, a measurement and instrumentation module, a control relay module, a Trivector energy measurement, and a GPS module. The GSM-GPRS includes microcontroller along with GSM_GPRS modem in order to execute remote communication on GSM-GPRS. The Measurement and Instrumentation module includes eleven temperature measurement channels with 8-digital temperature sensors and 3-RTD. The control relay module includes 4 SPDT relays to execute output controls such as load trip and cooling motor etc. The GPS module acquires the latitude, longitude and time data from the satellite for location sharing. The Power supply module is an AC/DC SMPS power supply to convert 240V/415V AC to 12VDC for the intelligent transformer monitoring system.

[Continued on next page]

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- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

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