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[Continued on next page]

(54) **Title**: POWER METER WITH CURRENT AND PHASE SENSOR

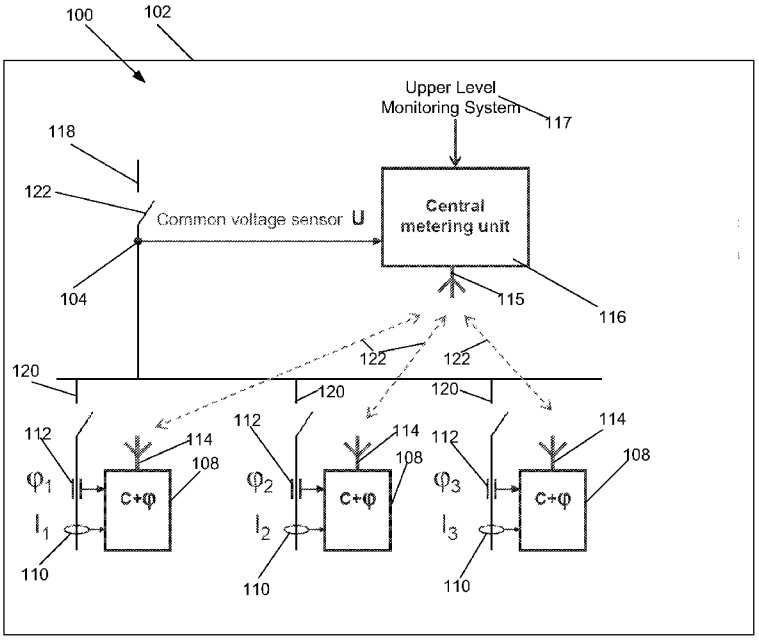


FIG. 1

(57) **Abstract**: According to one aspect, embodiments of the invention provide a power meter comprising a voltage sensor, at least one current and phase sensor circuit, and a central metering unit, wherein the voltage sensor is further configured to measure a voltage on an input line and transmit a signal related to the voltage to the central metering unit, wherein the at least one current and phase sensor circuit is further configured to measure a current and a voltage phase shift of a feeder line, and to transmit a signal related to at least one of the current of the feeder line and the voltage phase shift of the feeder line to the central metering unit, and wherein the central metering unit is configured to calculate power provided to a load via the feeder line based on the signal transmitted from the at least one current and phase sensor circuit.

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USPC - 324/142
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC(8) - G01R 7/00, 11/32, 21/06 (2013.01)
USPC - 324/107, 142, 706

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
CPC: G01R 21/100, 21/127, 21/133

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
MicroPatent, Orbit.com, Google Patents, and ACM

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2012/0271570 A1 (PAIK et al) 25 October 2012 (25.10.2012) entire document	1-20
Y	US 2012/0062249 A1 (SHAMIR) 15 March 2012 (15.03.2012) entire document	1-20
Y	US 4,158,808 A (MASSA et al) 19 June 1979 (19.06.1979) entire document	4-11, and 15-18
Y	US 7,265,533 B2 (LIGHTBODY et al) 04 September 2007 (04.09.2007) entire document	5-6 and 11
Y	US 2012/0200285 A1 (CARPENTER et al) 09 August 2012 (09.08.2012) entire document	9
A	US 2011/0148393 A1(DE BUDA) 23 June 2011 (23.06.2011) entire document	1-20

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"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
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