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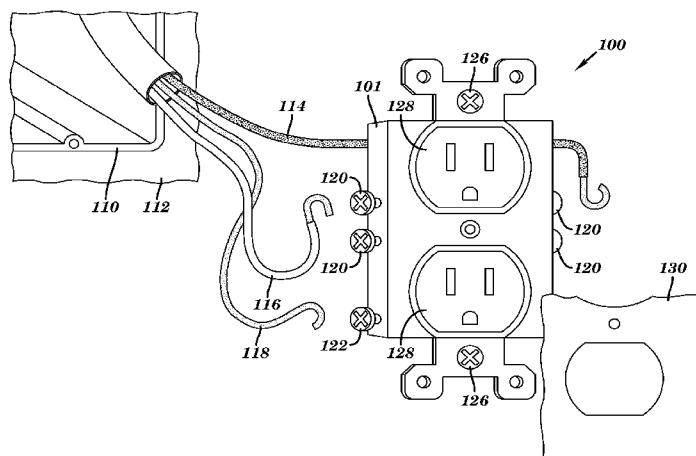
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(54) **Title:** ELECTRICAL POWER REGULATING AND MONITORING SYSTEMS AND OUTLET SYSTEMS THEREFOR

**FIG. 2**

(57) **Abstract:** A system includes a plurality of outlet systems (100) receivable in respective electrical boxes in a building and connected via electrical wires to an electric power supply. The plurality of outlet systems include at least one electrical receptacle (128) connectable to an electrical appliance, a computing unit (140) operable to monitor the electrical appliance, a switch (170) for interrupting electrical power to the electrical appliance in response to the computing unit. The at least one electrical receptacle, the computing unit, and the switch are configured to be receivable within and connectable to the electrical box and covered by a cover plate having at least one opening for accessing the at least one electrical receptacle. A network device (600) is operable for communicating with the plurality of outlet systems and for communicating with a global communications network.



A. CLASSIFICATION OF SUBJECT MATTER**G01R 22/06(2006.01)i, G01R 21/00(2006.01)i**

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)

G01R 22/06; G06F 1/28; G06F 15/16; H04L 27/00; G01D 4/00; H02J 3/12; G05B 11/01; G08C 19/16; G01R 11/56

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) & Keywords: powerline network, outlet, switch

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2010-0145542 A1 (STEVE CHAPEL et al.) 10 June 2010 See abstract, claims 1-17, 25-28, paragraphs 48,49,52 and figures 1,2	1-63
A	US 2007-0271398 A1 (SCOTT MANCHESTER et al.) 22 November 2007 See abstract, claims 1-20, paragraph 28 and figure 1	1-63
A	US 2010-0033346 A1 (JOHN A. HICKS, III) 11 February 2010 See abstract, claims 1-20, paragraph 16 and figure 1	1-63
A	EP 2221586 A1 (BRITISH TELECOMMUNICATIONS PUBLIC LIMITED COMPANY) 25 August 2010 See abstract, claims 1-9, paragraphs 16,17 and figure 3	1-63



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:

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"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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EP 2221586 A1	25.08.2010	None	