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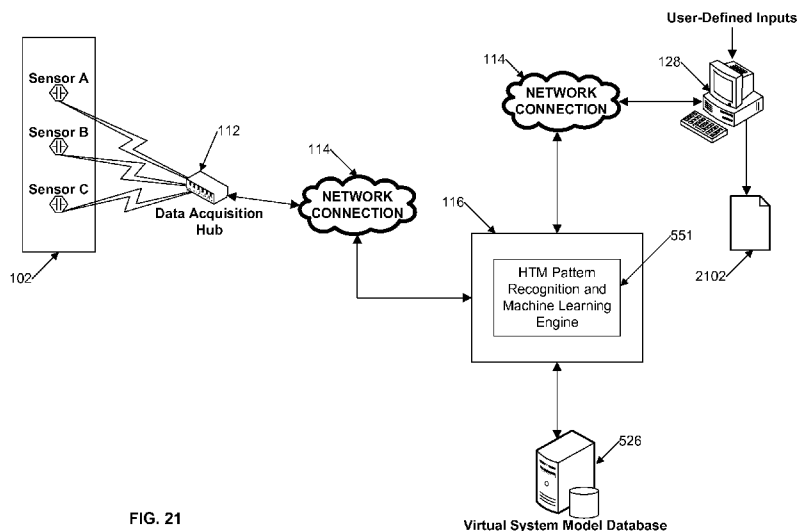


FIG. 21

(57) Abstract: [00235] Systems and methods for performing power analytics on a microgrid. In an embodiment, predicted data is generated for the microgrid utilizing a virtual system model of the microgrid, which comprises a virtual representation of a topology of the microgrid. Real-time data is received via a portal from at least one external data source. If the difference between the real-time data and the predicted data exceeds a threshold, a calibration and synchronization operation is initiated to update the virtual system model in real-time. Power analytics may be performed on the virtual system model to generate analytical data, which can be returned via the portal.



A. CLASSIFICATION OF SUBJECT MATTER**G06F 19/00(2011.01)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)

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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

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

eKOMPASS(KIPO internal) & Keywords: real-time, analysis, microgrid, virtual system, power system

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2010-0262411 A1 (NASLE ADIB et al.) 14 October 2010 See Paragraphs [33-51] and [76-87]; Claims 1, 3, 5 and 14; Figures 1, 3 and 6-8	1,7,2-6,8-12
X	US 2009-0113049 A1 (NASLE ADIB et al.) 30 April 2009 See Paragraphs [49-62] and [93-104]; Claims 1, 5 and 18; Figures 1-10, 16, 20 and 26	1,7,2-6,8-12
A	US 2005-0033481 A1 (BUDHRAJA VIKRAM S. et al.) 10 February 2005 See Paragraphs [56-69] and [96-100]; Claims 1, 2, 16, 19 and 20; Figures 2A, 2B, 3 and 8	1-12

 Further documents are listed in the continuation of Box C. See patent family annex.

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