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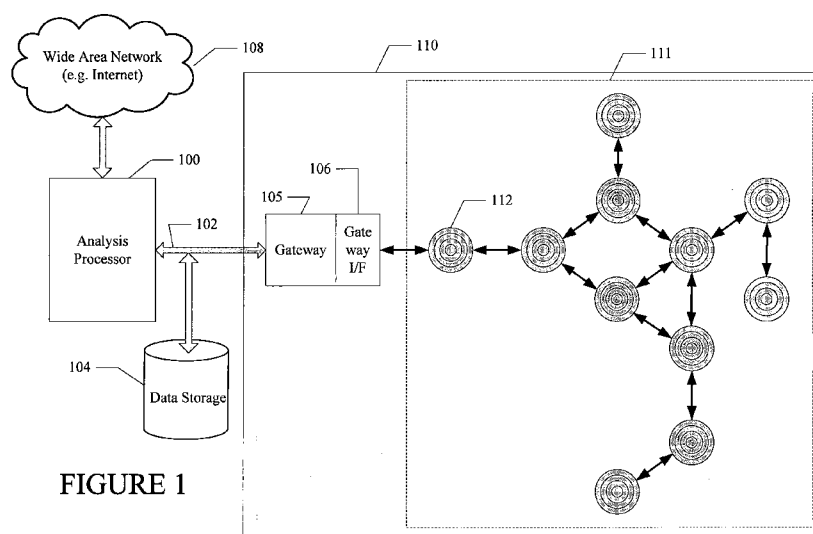


FIGURE 1

(57) Abstract: Various embodiments provide an apparatus and method for adapting to failures in gateway devices in mesh networks. An example embodiment is configured to provide a plurality of interconnected nodes in a mesh network, at least one node of the plurality of nodes being designated a primary node, the primary node providing timing synchronization for other nodes of the plurality of nodes; and the primary node to designate another one of the plurality of nodes as a secondary node, the secondary node only providing timing synchronization for other nodes of the plurality of nodes when the primary node fails to provide the timing synchronization.

A. CLASSIFICATION OF SUBJECT MATTER***H04W 56/00(2009.01)i, H04W 84/18(2009.01)i, H04W 88/16(2009.01)i, H04L 7/00(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)

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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 since 1975

Japanese Utility Models and applications for Utility Models since 1975

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

e-KIPASS(KIPO internal) & keyword: sensor, mesh, timing and synchronization

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2006-0215581 A1 (NEAL DANTE CASTAGNOLI) 28 September 2006 See the abstract, figure 1 and claim 1.	1-25
A	US 2006-0269028 A1 (BERT BLEY et al.) 30 November 2006 See the abstract and claim 12.	1-25
A	KR 10-2007-0105731 A (KT CORPORATION) 31 October 2007 See the abstract, figure 2 and claim 1.	1-25
A	KR 10-2007-0009390 A (SAMSUNG ELECTRONICS CO., LTD.) 18 January 2007 See the abstract, figure 1 and claim 1.	1-25



Further documents are listed in the continuation of Box C.



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US 2006-0269028 A1	30.11.2006	None	
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KR 10-2007-0009390 A	18.01.2007	WO 2007-011130 A1 JP 2009-501485 A	25.01.2007 15.01.2009