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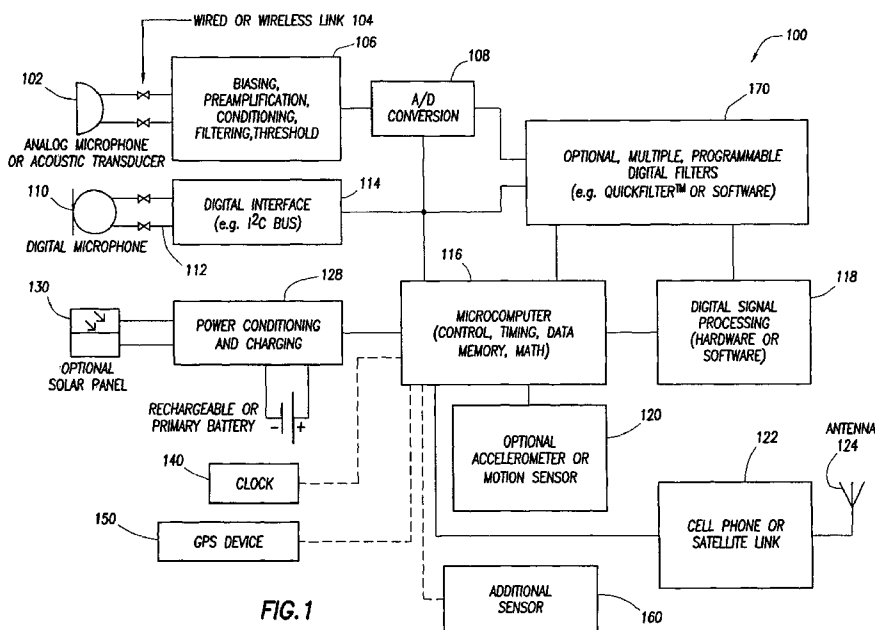


FIG. 1

(57) Abstract: Methods and devices are provided for monitoring the condition of the running gear of a railcar utilizing acoustic/motion/vibration sensors mounted on the railcar while the railcar is underway. For some embodiments, utilizing this sensor data, defects in the running gear may be detected, and this information may be used to alert an operator to the defective condition. Operated in conjunction with a GPS or similar location detection device, a plurality of sensors mounted on a plurality of railcars may also be used to identify damaged or worn sections of track.

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INTERNATIONAL SEARCH REPORT

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PCT/US2008/007991**A. CLASSIFICATION OF SUBJECT MATTER****B61K 9/08(2006.01)i, B61K 9/00(2006.01)i, G01N 29/04(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)

IPC 8 B61K 9/00; 9/18, B61L 1/00; 25/04

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)

eKIPASS(KIPO internal) & keywords : "noise" "vibration"

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	KR 10-2001-0111905 A(KT ELECTRIC CO., LTD.) 20 DECEMBER 2001 See claims 1-4 and figures 1-4.	1-5,17-20, 24-36,38-46 6-16, 21-23,37,47-52
Y	US 5987979 A(MICHAEL A. BRYAN) 23 NOVEMBER 1999 See column 3, line 49-column 10, line 18 and figures 1-3, 5.	6,8,9-13,15,16, 21-23,37,47-52
Y	US 5429329 A(CHARLES C. WALLACE) 04 JUNE 1995 See claims 1-5 and figures 1 and 5.	7,8,14

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

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
KR 10-2001-0111905 A	20. 12. 2001	None	
US 5987979 A	23. 11. 1999	None	
US 5429329 A	04. 07. 1995	None	
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