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(54) Title: ON-LINE MONITORING SYSTEM OF INSULATION LOSSES FOR UNDERGROUND POWER CABLES

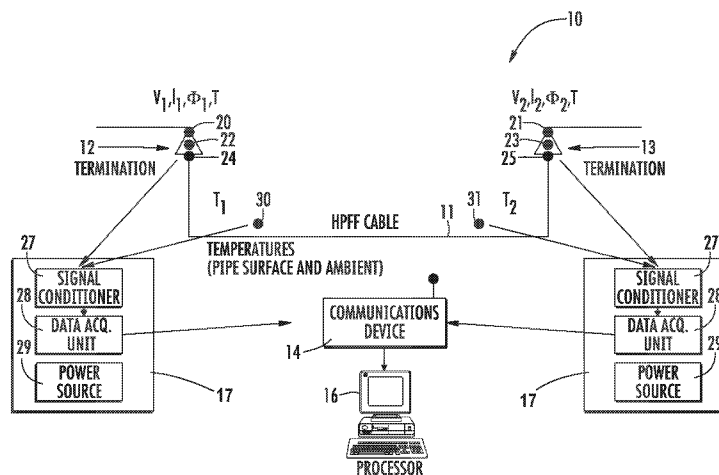


FIG. 1

(57) Abstract: A monitoring system adapted to assess insulation losses of an underground power cable includes a cable circuit having first and second, spaced-apart terminals. The cable circuit is disposed along a section of the underground power cable. The system further includes a communications device adapted to transmit data gathered at the first and second terminals, and a processor adapted to receive and process the data measured at the same time with the synchronization device and transmitted from the communications device.

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2012/039321**A. CLASSIFICATION OF SUBJECT MATTER****G01R 31/08(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 31/08; G01R 31/00; H01H 31/02

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: "insulation, dielectric, loss, degrade, fault, dissipate, monitor, assess, determine, detect, measure, evaluate, test, dissipate, factor, underground, groundwater, powercable, electric"

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	US 6617859 B1 (HARRY E.ORTON) 09 September 2003 See abstract, column 2, line 23 - column 3, line 25, claim 1 and figure 1.	1,3,9-14 2,4-8,15
X A	WO 2004-088338 A1 (LG CABLE LTD. et al.) 14 October 2004 See abstract, pages 8-11, claims 1-8 and figures 1,2.	1,3,9-14 2,4-8,15
A	EP 0165803 A2 (SUMITOMO ELECTRIC INDUSTRIES LIMITED) 27 December 1985 See abstract, pages 3-5, claims 1-4 and figures 1A-1E.	1-15

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

* Special categories of cited documents:

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"P" document published prior to the international filing date but later than the priority date claimed

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"&" document member of the same patent family

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