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- (71) Applicant (for all designated States except US): **ARCOM DIGITAL, LLC.** [US/US]; 185 Ainsley Drive, Syracuse, NY 13210 (US).

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- (72) Inventor; and
- (75) Inventor/Applicant (for US only): **ZINEVICH, Victor, M.** [US/RU]; 58-112 Chapaeva Street, Voronezh, 394035 (RU).
- (74) Agent: **TRAPANI, Lawrence, P.**; 4847 Enders Road, P.O. Box 555, Manlius, NY 13104 (US).
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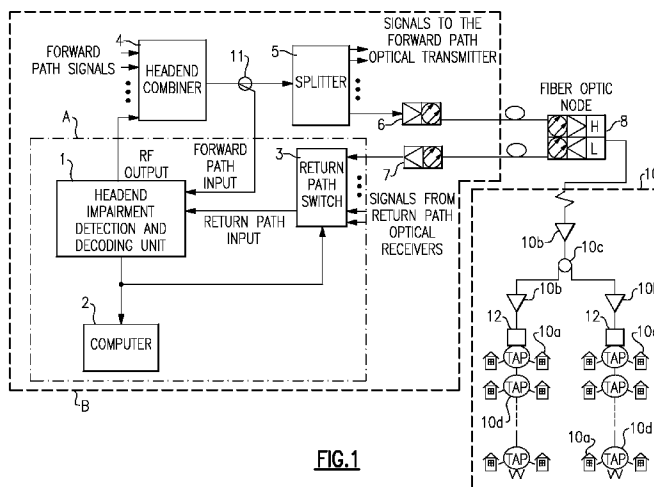


FIG.1

(57) Abstract: A system for locating an impairment in a coaxial cable network comprises an encoder, an impairment detector, and a decoder. The encoder couples to the network at a predetermined encoding point, upstream of the impairment. The encoder automatically encodes an identification code on a signal originating downstream of the encoding point and associated with the impairment. The impairment detector couples to the network at an access point, upstream from the encoding point, and receives signals from the network. The detector is adapted to detect from the received signals the signal associated with the impairment and generate a detected version of the signal. The decoder is adapted to decode the identification code from the detected version of the impairment signal. Once the identification code is determined, the encoder and encoding point are identified, and the location of the impairment is determine to be downstream of the encoding point.

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

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**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

| Category* | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No. |
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| A         | WO 2006/091708 A (ARCOM DIGITAL LLC [US];<br>ZINEVITCH VICTOR M [RU])<br>31 August 2006 (2006-08-31)<br>page 10, line 4 - page 30, line 14<br>figure 12 | 1-20                  |
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Name and mailing address of the ISA/  
European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040,  
Fax: (+31-70) 340-3016

Authorized officer  
  
Bertsch, Andreas

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# INTERNATIONAL SEARCH REPORT

Information on patent family members

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