Title: UNIVERSAL DIPOLE ANTENNA FOR TRANSMITTING AND/OR RECEIVING A DIFFERENT FREQUENCY

Abstract: Described is a universal dipole antenna which may include a feed line coupled to a first fitting; a balun coupled to a second fitting; a first variable length antenna element coupled to the first fitting; a second variable length antenna element coupled to the second fitting; a support plate holding the feed line and the balun at a fixed spacing, the support plate including a short circuit path between the feed line and the balun; and a sliding short assembly attachable between the feed line and the balun to create a short circuit at variable distances along the feed line and the balun.
INTERNATIONAL SEARCH REPORT

A.  CLASSIFICATION OF SUBJECT MATTER
IPC:   H01Q 9/16(2006.01)

USPC:   343/820
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)
U.S.:   343/820343/821,747,797,861,862,884,809,752,725

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

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

C.  DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>US 3,618,105 A (Bruene) 02 November 1971, see (Fig. 1; col. 3, line 40; col. 5, line 50; col. 5, line 6) Abstract.</td>
<td>1-20</td>
</tr>
<tr>
<td>A</td>
<td>US 4,369,449 A (MacDougall) 18 January 1983.</td>
<td>1-20</td>
</tr>
<tr>
<td>A</td>
<td>US 4,611,214 A (Campbell et al.) 09 September 1986.</td>
<td>1-20</td>
</tr>
</tbody>
</table>

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

* Special categories of cited documents:
  "A" document defining the general state of the art which is not considered to be of particular relevance
  "E" earlier application or patent published on or after the international filing date
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  "O" document referring to an oral disclosure, use, exhibition or other means
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"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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"S" document member of the same patent family

Date of the actual completion of the international search
15 February 2006 (15.02.2006)

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Date of mailing of the international search report
27 FEB 2006

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Form PCT/ISA/210 (second sheet) (April 2005)
NEW TITLE

UNIVERSAL DIPole ANtenna FOR TRANSMITTING AND/OR RECEIVING A DIFFERENT FREQUENCY

Continuation of B. FIELDS SEARCHED Item 3:
USPAT;US-PGPUB;USOCR;EPO;JPO;DERWENT;IBM_TDB
antenna,transmit$3,receiver$3,different,frequency$3,feedpoint,dipole,balun,wavelength,universal,signal