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Title: WIDEBAND ANTENNA WITH REDUCED DIELECTRIC LOSS

(57) Abstract: A wideband antenna (10) includes a plurality of conductive strands (12) randomly interconnected and further coupled to a feedpoint (19) and a sheath (52) structurally retaining the plurality of conductive strands. The sheath can be a thin dielectric coating and the plurality of conductive strands can each be taller than one-quarter wavelength. The wideband antenna can have low dielectric losses while maintaining a multi-octave bandwidth. Air can be used as a dielectric between the plurality of conductive strands.
before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments.

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

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13 July 2006
INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER

PC(8) - H01Q 1/36
USPC - 343/702

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.  343/700 MS, 343/702, 343/878, 343/846, 343/848, 343/895

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

NONE

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
PUBWEST—PGPB, USPT, EUPA, and JAPAB—searched Wideband, wideband antenna, Conductive strands, dielectric, multi bandwidth, transmitter, transceiver

C. DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
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<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
</tr>
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<tr>
<td>A</td>
<td>US 2004/0061656 A1 (McGRATH) 01 April 2004 (01.04.2004) see entire document</td>
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<td>A</td>
<td>US 6,693,594 B2 (PANKINAHO et al.) 17 February 2004 (17.02.2004) see entire document</td>
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☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

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Date of the actual completion of the international search
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Date of mailing of the international search report
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