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(54) **Dual-band F-slot patch antenna**

(57) A dual-band antenna includes a planar conductive layer comprising a conductive region and a central non-conductive region. The conductive region and the

non-conductive region together define a pair of interconnected F-slot structures, and a loop strip structure coupled to and disposed around the F-slot patch slot antenna structures.

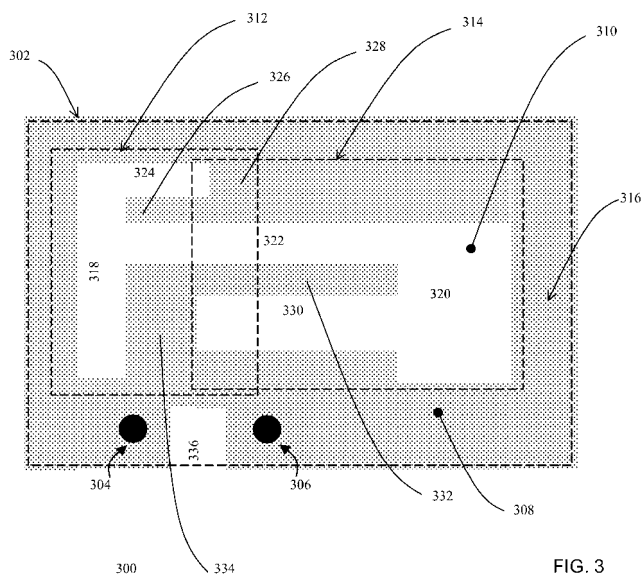


FIG. 3



## EUROPEAN SEARCH REPORT

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| DOCUMENTS CONSIDERED TO BE RELEVANT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                     |                                                      |                                                                   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|-------------------------------------------------------------------|
| Category                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Citation of document with indication, where appropriate, of relevant passages                                                       | Relevant to claim                                    | CLASSIFICATION OF THE APPLICATION (IPC)                           |
| A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | US 2006/145927 A1 (CHOI WON-KYU [KR] ET AL) 6 July 2006 (2006-07-06)<br>* paragraphs [0027], [0028] *<br>* figures 3,6 *            | 1-6                                                  | INV.<br>H01Q1/24<br>H01Q7/00<br>H01Q9/04<br>H01Q13/10<br>H01Q5/00 |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                     |                                                      | TECHNICAL FIELDS SEARCHED (IPC)                                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                     |                                                      | H01Q                                                              |
| The present search report has been drawn up for all claims                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                     |                                                      |                                                                   |
| Place of search<br>Munich                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                     | Date of completion of the search<br>27 February 2013 | Examiner<br>Kruck, Peter                                          |
| <p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone<br/>Y : particularly relevant if combined with another document of the same category<br/>A : technological background<br/>O : non-written disclosure<br/>P : intermediate document</p> <p>T : theory or principle underlying the invention<br/>E : earlier patent document, but published on, or after the filing date<br/>D : document cited in the application<br/>L : document cited for other reasons<br/>&amp; : member of the same patent family, corresponding document</p> |                                                                                                                                     |                                                      |                                                                   |

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**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 11 16 8570

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
The members are as contained in the European Patent Office EDP file on  
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27-02-2013

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