

Title (en)

RADIATING ELEMENT FOR AN ACTIVE ARRAY ANTENNA CONSISTING OF ELEMENTARY TILES

Title (de)

STRAHLERELEMENT FÜR EINE AKTIVE GRUPPENANTENNE AUS ELEMENTARFLIESEN

Title (fr)

ELEMENT RAYONNANT POUR ANTENNE RESEAU ACTIVE CONSTITUEE DE TUILES ELEMENTAIRES

Publication

**EP 2710676 B1 20150114 (FR)**

Application

**EP 12726368 A 20120515**

Priority

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- EP 2012059071 W 20120515

Abstract (en)

[origin: WO2012156424A1] The present invention relates to an antenna comprising a plurality of tiles forming an antenna plane, wherein each of said tiles comprises a plurality of radiating elements. Each radiating element comprises an upper metal pad arranged above a lower metal pad, the two pads being separated by a layer that electrically insulates said pads. An electrical current is supplied to the lower pad. Each radiating element comprises a conducting frame that is arranged parallel to the antenna plane and frames the two pads of said element, said two pads being electromagnetically coupled through the opening of said frame, the body of which comprises a rear face having a small cross section, which is arranged on the lower pad side, and a front surface having a greater cross section, which is arranged on the upper pad side, in such a manner as to broaden the angular sweep range of a beam in a plane orthogonal to the antenna plane.

IPC 8 full level

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CPC (source: EP US)

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