

Title (en)

OPTICALLY TRANSPARENT ANTENNA SYSTEM HAVING AN INTERCHANGEABLE RADIATING STRUCTURE

Title (de)

OPTISCH TRANSPARENTES ANTENNENSYSTEM MIT AUSTAUSCHBARER STRAHLUNGSSTRUKTUR

Title (fr)

SYSTEME ANTENNAIRE OPTIQUEMENT TRANSPARENT AVEC UNE STRUCTURE RAYONNANTE INTERCHANGEABLE

Publication

**EP 2870656 A1 20150513 (FR)**

Application

**EP 13734096 A 20130705**

Priority

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- EP 2013064234 W 20130705

Abstract (en)

[origin: WO2014006177A1] The invention relates to an antenna system including: an optically transparent back substrate supporting a floorplan consisting of an optically transparent conductive deposit, an optically transparent front substrate, and a plurality of radiating structures aligned between the back substrate and the front substrate; and a metal frame in which the back substrate is to be accommodated together with the front substrate, the metal frame ensuring the mechanical strength and interchangeability of the radiating structure of the antenna system, wherein each radiating structure includes: an optically transparent intermediate substrate supporting an optically transparent conductive deposit, which is printed over the entire surface of the intermediate substrate that is located on the front substrate side, wherein two slots are formed in said conductive deposit by removing material; an optically transparent supporting substrate that supports a first radiating patch consisting of an optically transparent conductive deposit, the supporting substrate being mounted on contacts that are rigidly connected to the intermediate substrate; a second radiating patch consisting of an optically transparent conductive deposit and printed on the inner surface of the front substrate that is located inside the antenna system, the second radiating patch being arranged opposite the first radiating patch; two transmission lines consisting of an optically transparent conductive deposit on the surface of the intermediate substrate opposite the back substrate, the transmission lines being suitable for causing the radiating structure to radiate via the two slots etched on the intermediate substrate.

IPC 8 full level

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Citation (search report)

See references of WO 2014006177A1

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