

Title (en)  
Three-dimensional antenna structure

Title (de)  
Dreidimensionale Antennenstruktur

Title (fr)  
Structure tridimensionnelle d'antenne

Publication  
**EP 2339693 A1 20110629 (EN)**

Application  
**EP 10015737 A 20101216**

Priority  
• US 64236009 A 20091218  
• US 29330310 P 20100108

Abstract (en)  
A three-dimensional antenna structure includes first (142) and second (144) antenna components and a via (146). The first antenna component is on a first layer of a substrate and the second antenna component is on a second layer of a substrate. The via couples the first antenna component to the second antenna component, wherein the first antenna overlaps, from a radial perspective, the second antenna component by an angle of overlap.

IPC 8 full level  
**H01Q 1/38** (2006.01); **H01Q 1/22** (2006.01); **H01Q 5/00** (2006.01); **H01Q 9/16** (2006.01)

CPC (source: EP)  
**H01Q 1/2283** (2013.01); **H01Q 1/36** (2013.01); **H01Q 1/38** (2013.01); **H01Q 1/48** (2013.01); **H01Q 9/285** (2013.01)

Citation (applicant)  
"Compact 2D Hilbert Microstrip Resonators", MICROWAVE AND OPTICAL TECHNOLOGY LETTERS, vol. 48, no. 2, February 2006 (2006-02-01)

Citation (search report)  
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Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 2339693 A1 20110629**; CN 102136635 A 20110727; CN 102136635 B 20141029; HK 1159861 A1 20120803; TW 201140934 A 20111116; TW I487188 B 20150601

DOCDB simple family (application)  
**EP 10015737 A 20101216**; CN 201010596716 A 20101220; HK 11113881 A 20111222; TW 99144725 A 20101220