Title (en)
ANTENNA FOR FREQUENCIES IN EXCESS OF 200 MHz

Title (de)
ANTENNE FÜR FREQUENZEN ÜBER 200 MHz

Title (fr)
ANTENNE POUR FREQUENCES SUPERIEURES A 200 MHZ

Publication
**EP 0876688 B1 20030604 (EN)**

Application
**EP 97900334 A 19970110**

Priority
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• GB 9601250 A 19960123
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Abstract (en)
[origin: WO9727642A1] A miniature antenna (10) for operation at frequencies in excess of 200 MHz has a ceramic core (12) in the form of a cylindrical rod having a relative dielectric constant greater than 5. Plated on the outer surfaces of the core is an antenna element structure comprising a single pair of oppositely disposed helical elements (10A, 10B) having a common central axis coincident with the central axis of the core. At a distal end of the antenna, they are connected to a coaxial feeder structure passing axially through the core, and at their proximal ends they are connected to the rim of a cylindrical trap conductor (20) which, at the proximal end of the core is coupled to the screen of the feeder structure. At the operating frequency, the antenna behaves as a loop, the radiation response having nulls directed generally perpendicularly on each side of a plane containing the central axis of the core and the connections of the helical elements with the feeder structure and with the conductive sleeve. The antenna is intended primarily for a handheld communication unit such as a cellular or cordless telephone handset, the present of the nulls in the radiation pattern reducing radiation into the user's head.

IPC 1-7
**H01Q 1/38**; H01Q 11/08

IPC 8 full level
**H01Q 1/36** (2006.01); **H01Q 1/24** (2006.01); **H01Q 7/00** (2006.01); **H01Q 11/08** (2006.01); **H04B 1/38** (2006.01); **H04B 7/26** (2006.01); **H04M 1/02** (2006.01); **H04M 1/03** (2006.01)

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