

Title (en)
DIELECTRIC ANTENNA

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EP 0475294 A3 19920805 (DE)

Application
EP 91115092 A 19910906

Priority
DE 4028569 A 19900908

Abstract (en)
[origin: EP0475294A2] The invention relates to a dielectric antenna which is supplied from a waveguide operated in monomode. The dimensioning of the antenna results from the relationship $L/L_{ep} = ((D/L_{ep}-0.6) \text{ DEG } (D/L_{ep}-0.6)+(1.3..2.7)) \text{ DEG } 6/Q_{ep}$ Q_{ep} being the square of the relative dielectric constant, increased by one, L_{ep} being the wavelength in the space which is filled homogeneously with dielectric, D being the maximum lateral dimension (D) of the antenna and L being the maximum length (L) of the antenna. Fig. 1 shows a side view of the antenna according to the invention. <IMAGE>

IPC 1-7
H01Q 19/09

IPC 8 full level
H01Q 19/09 (2006.01)

CPC (source: EP)
H01Q 19/09 (2013.01)

Citation (search report)

- [A] DE 1803792 A1 19700527 - TELEFUNKEN PATENT
- [A] DE 2161895 A1 19730620 - LICENTIA GMBH
- [A] NTZ NACHRICHTENTECHNISCHE ZEITSCHRIFT. Bd. 26, Nr. 12, Dezember 1973, BERLIN DE Seiten 529 - 535; DOMBEK: 'Dielektrische Antennen nichtzylindrischer Form'
- [A] 1986 INTERNATIONAL SYMPOSIUM DIGEST ANTENNAS AND PROPAGATION Bd. II, Juni 1986, PHILADELPHIA/US Seiten 697 - 700; PENG ET AL.: 'Omni-Directional Periodic Rod Antenna'

Cited by
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