

Title (en)

STEERABLE-BEAM MULTIPLE-FEED DIELECTRIC RESONATOR ANTENNA OF VARIOUS CROSS-SECTIONS

Title (de)

DIELEKTRISCHE RESONATORANTENNE MIT VERSCHIEDENEN QUERSCHNITTSFORMEN, STEUERBARER STRAHLUNGSKEULE UND MEHRFACHER SPEISUNG

Title (fr)

ANTENNE A RESONATEUR DIELECTRIQUE AVEC ALIMENTATIONS MULTIPLES ET FAISCEAUX ORIENTABLES, AYANT DIVERSES SECTIONS TRANSVERSALES

Publication

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Application

EP 00971607 A 20001030

Priority

- GB 0004155 W 20001030
- GB 0017223 A 20000714
- US 43154899 A 19991029

Abstract (en)

[origin: WO0131746A1] A radiating antenna capable of generating or receiving radiation using a plurality of feeds and a dielectric resonator of various cross-sections is disclosed. The purpose of using multiple feeds with a single dielectric resonator antenna is to produce several beams each having a "boresight" in a different direction. Several such beams may be excited simultaneously to form a new beam in any arbitrary direction. The new beam may be incrementally or continuously steerable and may be steered through a complete 360 degree circle. The invention may be combined with an internal or external monopole antenna so as to cancel out the antenna backlobe or otherwise resolve the front/back ambiguity that arises with this type of dielectric resonance antenna.

IPC 8 full level

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CPC (source: EP)

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