

Title (en)

Resonant waveguide aperture manifold.

Title (de)

Resonanzhohlleiterschalter für strahlende Öffnung.

Title (fr)

Coupleur d'ouverture rayonnant à guide d'ondes résonnant.

Publication

EP 0126626 A2 19841128 (EN)

Application

EP 84303356 A 19840517

Priority

- US 49734983 A 19830523
- US 49735083 A 19830523

Abstract (en)

A waveguide manifold (200) for monitoring the operation of an array antenna (1). The waveguide is centerfed (203) and has reflecting terminations (201, 202) at either end. The waveguide output is matched to the waveguide as if non-reflecting terminations were at either end of the waveguide. The waveguide input is a plurality of groups of slots (206-214) wherein adjacent slots in each group (A, B, C, D) have alternating polarity and adjacent groups may have alternating phase. A standing wave created in the waveguide has a plurality of cells of alternating phase. Each slot is located within one of the resonating standing wave cells. The resulting manifold beam forming characteristic will be temperature and frequency independent over a practical range.

IPC 1-7

H01Q 3/26

IPC 8 full level

H01Q 3/26 (2006.01)

CPC (source: EP)

H01Q 3/267 (2013.01)

Cited by

EP0584635A1; EP0547274A1; US4788552A; US5638079A; NL9500580A; CN111740198A; WO9630963A1; WO02075840A3; US7123204B2; US7372418B2; US7414589B2; US7755556B2

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