

Title (en)

Phased array antenna with couplers in spatial filter arrangement.

Title (de)

Phasengesteuerte Antenne mit Kopplern, die zu einem örtlich koppelndem Filter angeordnet sind.

Title (fr)

Réseau d'antennes à commande par déphaseurs à coupleurs dans un arrangement à filtre spatial.

Publication

EP 0325012 A1 19890726 (EN)

Application

EP 88300427 A 19880120

Priority

EP 88300427 A 19880120

Abstract (en)

A lossless spatial filter (17) having N input ports and N output ports and printed on a single substrate. The filter is used in combination with the antenna of a microwave Landing system which radiates wave energy signals into a selected angular region of space and into a desired radiation pattern. The aperture of the system includes a plurality of N antenna elements. The antenna elements (1-8) are arranged along a predetermined path and each element is connected to only one output port (64-71) of the spatial filter. A beam steering unit (54) controls the direction of radiation. A signal generator (44) supplies a power divider (43) having N output signal ports each connected to a phase shifter (26-33) controlled by the beam steering unit.

IPC 1-7

H01Q 3/40

IPC 8 full level

H01Q 3/40 (2006.01)

CPC (source: EP)

H01Q 3/40 (2013.01)

Citation (search report)

- [YD] US 4321605 A 19820323 - LOPEZ ALFRED R
- [YD] US 4041501 A 19770809 - FRAZITA RICHARD F, et al
- [A] EP 0215971 A1 19870401 - ALLIED CORP [US]
- [A] US 4143379 A 19790306 - WHEELER HAROLD A

Cited by

CN113315550A; EP3419104A1; CN109119765A; US10879605B2; US10840607B2; US11342668B2; US11417944B2; WO2024118325A1

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

EP 0325012 A1 19890726; EP 0325012 B1 19931020; DE 3885082 D1 19931125; DE 3885082 T2 19940511

DOCDB simple family (application)

EP 88300427 A 19880120; DE 3885082 T 19880120