

Title (en)

An active antenna array.

Title (de)

Aktive Gruppenantenne.

Title (fr)

Réseau d'antennes du type actif.

Publication

EP 0621654 A3 19950322 (EN)

Application

EP 94302699 A 19940415

Priority

US 4793793 A 19930419

Abstract (en)

[origin: EP0621654A2] An active antenna array (58) for use in a radar seeker has a preselected number antenna elements (60) which are individually connected to an identical plurality of transmitting and receiving modules (64) backed up by a cold plate (66) for removing heat produced during use. In a preferred embodiment each module has a rectangular prism housing (84) within each of which there are individually modifiable phase and gain circuits (76,78). In a further embodiment, the transmitting and receiving modules are constructed of a number of wafers, each wafer having the same number of separate identical circuit function blocks as there are antenna elements. <IMAGE>

IPC 1-7

H01Q 21/00; H01Q 21/06

IPC 8 full level

G01S 7/02 (2006.01); **H01Q 3/36** (2006.01); **H01Q 21/00** (2006.01); **H01Q 23/00** (2006.01)

CPC (source: EP)

H01Q 21/0025 (2013.01); **H01Q 21/0087** (2013.01)

Citation (search report)

- [X] EP 0448318 A2 19910925 - RAYTHEON CO [US]
- [X] ARMITAGE: "Electronic Warfare Solid-State Phased Arrays", MICROWAVE JOURNAL., vol. 29, no. 2, February 1986 (1986-02-01), DEDHAM US, pages 109 - 122, XP001385299
- [A] KINZEL: "Recent Advances in Monolithic Millimeter-Wave Arrays", 1990 INTERNATIONAL SYMPOSIUM DIGEST ANTENNAS AND PROPAGATION, May 1990 (1990-05-01), DALLAS,TEXAS, pages 1402 - 1405
- [A] MAILLOUX: "Antenna Array Architecture", PROCEEDINGS OF THE IEEE, vol. 80, no. 1, January 1992 (1992-01-01), NEW YORK US, pages 163 - 173, XP000294639, DOI: doi:10.1109/5.119575
- [A] TANG ET AL.: "Array Technology", PROCEEDINGS OF THE IEEE, vol. 80, no. 1, January 1992 (1992-01-01), NEW YORK US, pages 173 - 182

Cited by

CN115070407A; US5886671A; US8570237B2; US6828932B1; WO2015068909A1; WO9723923A1

Designated contracting state (EPC)

DE ES FR GB IT

DOCDB simple family (publication)

EP 0621654 A2 19941026; EP 0621654 A3 19950322; CA 2121153 A1 19941020; JP H0779116 A 19950320; NO 941401 D0 19940418; NO 941401 L 19941020

DOCDB simple family (application)

EP 94302699 A 19940415; CA 2121153 A 19940413; JP 8043394 A 19940419; NO 941401 A 19940418