

Title (en)
ELECTRONICALLY SCANNED PHASED-ARRAY ANTENNA

Publication
EP 0207511 A3 19871104 (DE)

Application
EP 86109023 A 19860702

Priority
DE 3524148 A 19850705

Abstract (en)
[origin: US4734700A] An omni-directional scanning group antenna with electronically phase-control beam for precise target locating or target tracking comprising a plurality of line fed individual radiators (1) distributed within the volume of an imaginary three-dimensional body (2) such as a sphere which is divided into eight separate sub-volumes V1 through V8 forming octants wherein the signals SV1 through SV8 of the octants are combined with a circuit (4) comprising eleven sum-difference elements so as to form one sum signal, one elevation difference signal and two azimuth difference signals. The invention is suitable for application in three-dimensional phase-array antennas for all-around scanning with precise target locating and target tracking.

IPC 1-7
H01Q 3/26; **H01Q 25/02**

IPC 8 full level
H01Q 3/26 (2006.01); **H01Q 25/02** (2006.01)

CPC (source: EP US)
H01Q 3/26 (2013.01 - EP US); **H01Q 25/02** (2013.01 - EP US)

Citation (search report)
• [AD] DE 2822845 C2 19831201
• [A] DE 2055981 A1 19720525 - SIEMENS AG
• [A] EP 0028969 A1 19810520 - BENDIX CORP [US]
• [A] EP 0108670 A1 19840516 - THOMSON CSF [FR]
• [A] ALTA FREQUENZA, Band 35, Nr. 9, September 1966, Seiten 669,670,675; P. BRUSCAGLIONI: "Un'antenna sferica per i satelliti San Marco"

Cited by
DE4002522A1; US6175330B1; US5625160A; EP0374008A1; FR2640821A1; US5038149A

Designated contracting state (EPC)
BE DE FR GB IT NL SE

DOCDB simple family (publication)
EP 0207511 A2 19870107; **EP 0207511 A3 19871104**; **EP 0207511 B1 19910724**; DE 3680396 D1 19910829; US 4734700 A 19880329

DOCDB simple family (application)
EP 86109023 A 19860702; DE 3680396 T 19860702; US 88160586 A 19860703