Title (en)

MONOPULSE ANTENNA WITH IMPROVED SIDELOBE SUPPRESSION

Publication

EP 0289553 B1 19930728 (EN)

Application

EP 87907265 A 19871001

Priority

US 93157186 A 19861117

Abstract (en)

[origin: WO8804109A1] Radar system using sum and difference signals for tracking targets, wherein the system includes aperture means (10) having a cross sectional area for transmitting energy toward a target and receiving return energy; and circuit means for generating sum and difference signals, the circuit means being selectively coupled to said aperture means, with the sum signal being generated using energy from the entire aperture means and with the difference signals being generated using return energy from the aperture means exclusive of energy from a predetermined area (H, I, J, K). The invention permits simultaneous optimization of the sum and difference signals and also suppresses the near-in sidelobes in the difference signals.

IPC 1-7

H01Q 25/02

IPC 8 full level

H01Q 21/06 (2006.01); **G01S 7/02** (2006.01); **G01S 13/44** (2006.01); **H01Q 25/02** (2006.01)

CPC (source: EP)

H01Q 25/02 (2013.01)

Citation (examination)

- IEEE Transactions on Antennas and Propagation, volume AP-22, no. 3, May 1974, N.S. Wong et al."A multielement high power monopulse feed with low sidelobe and high aperture efficiency", pages 402-407 see figures 3,5; paragraph:"Description of 32-element monopulse feed",
- Patent Abstracts of Japan, volume 7, no. 258 (E-211)(1403), 17 November 1983, & JP, A, 58142607 (NIPPON DENSHIN DENWA KOSHA) 24 August 1983
- "Introduction to Radar Systems", 2nd Edition, M.I.Skolnik, 1984, Mc Graw-Hill, pp 162-163

Designated contracting state (EPC)

CH DE FR GB IT LI NL SE

DOCDB simple family (publication)

WO 8804109 A1 19880602; DE 3786787 D1 19930902; DE 3786787 T2 19931118; EP 0289553 A1 19881109; EP 0289553 B1 19930728; EP 0544081 A1 19930602; EP 0544081 B1 19951122; IL 84113 A 19910816; JP H01502151 A 19890727; JP H0682980 B2 19941019

DOCDB simple family (application)

US 8702488 W 19871001; DE 3786787 T 19871001; EP 87907265 A 19871001; EP 92116842 A 19871001; IL 8411387 A 19871006; JP 50686287 A 19871001