

Title (en)

LOW COST HIGH PERFORMANCE PORTABLE PHASED ARRAY ANTENNA SYSTEM FOR SATELLITE COMMUNICATION

Title (de)

PREISGÜNSTIGES LEISTUNGSSTARKESTRAGBARES PHASENGESTEUERTESGRUPPENANTENNENSYSYSTEM FÜR SATELITTENKOMMUNIKATION

Title (fr)

SYSTEME D'ANTENNE RESEAU PORTATIVE A COMMANDE DE PHASE A FAIBLE COUT ET A PERFORMANCES ELEVEES, DESTINE AUX SATELLITES

Publication

EP 1064696 A1 20010103 (EN)

Application

EP 97955031 A 19971229

Priority

US 9723747 W 19971229

Abstract (en)

[origin: WO9934477A1] An antenna system (10) with aperture layer (14), formed as a single layer printed circuit board on which is formed an array of antenna elements and a plurality of stripline feed network circuits, a bottom ground plane layer (16) and a single level waveguide combining network (18) for combining in-phase outputs from stripline feed network circuits electromagnetically coupled to respective nodes of the waveguide combining network. Each antenna element is preferably a dual polarized octagonal patch antenna element disposed on a common surface of the antenna aperture layer. Each feed network circuit is preferably in the form of an air stripline feed network separated by a layer (15) of air dielectric from the ground plane (16) and is preferably on the same surface of the antenna aperture layer as the antenna elements.

IPC 1-7

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