

Title (en)

Periscopic feed system for two-band antenna.

Title (de)

Periskopisches Speisesystem für in zwei Frequenzbereichen arbeitende Antenne.

Title (fr)

Système d'alimentation périscopique pour antenne bi-gamme.

Publication

EP 0006391 A1 19800109 (FR)

Application

EP 79400411 A 19790620

Priority

FR 7818408 A 19780620

Abstract (en)

[origin: US4260993A] A dual-band antenna for the transmission and reception of radiant energy has a Cassegrain-type reflector assembly, rotatable about an azimuth axis and pivotable about an elevational axis, to which two outgoing beams are directed in a transmitting mode by a periscopic supply system including a set of four mirrors, two of them flat and two of them concave. The lower-band beam originates at a first feed comprising a horizontally radiating horn and two confronting concave mirrors, one of these mirrors training the beam onto a slanting dichroic mirror reflecting same upward into the periscopic supply system. The higher-band beam originates at a second feed also comprising a horizontal horn which radiates onto a concave mirror reflecting the beam upward through the dichroic mirror into the periscopic supply system along a path coinciding with that of the other beam.

Abstract (fr)

Système d'alimentation périscopique permettant d'utiliser simultanément et séparément deux gammes de fréquence sur une antenne. Le système comporte un périscope (60) à quatre miroirs, mobiles autour de l'axe azimut, un dispositif séparateur (30) des deux gammes de fréquence, et deux dispositifs d'excitation des gammes de fréquence basse et haute (40-50), qui conservent chacun une position fixe quels que soient les mouvements du périscope autour de l'axe azimut.

IPC 1-7

H01Q 19/18

IPC 8 full level

H01Q 5/00 (2006.01); **H01Q 5/45** (2015.01); **H01Q 15/00** (2006.01); **H01Q 19/19** (2006.01)

CPC (source: EP US)

H01Q 5/45 (2015.01 - EP US); **H01Q 15/0033** (2013.01 - EP US); **H01Q 19/191** (2013.01 - EP US)

Citation (search report)

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- DE 2520498 A1 19761111 - SIEMENS AG
- THE SUMMARIES OF PAPERS OF INTERNATIONAL SYMPOSIUM ON ANTENNAS AND PROPAGATION, 1-3 Septembre 1971, a SENDAI, Japon, Tokyo, conference 1-III C3 M. KOYAMA et al.: A wide-band dielectric filter for the antenna and feed system for the 4-6 GHz, 17-30 GHz domestic satellite communication system", pages 147-148. * En entier *
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DE GB IT NL SE

DOCDB simple family (publication)

EP 0006391 A1 19800109; **EP 0006391 B1 19831116**; DE 2966404 D1 19831222; FR 2429505 A1 19800118; FR 2429505 B1 19811120; US 4260993 A 19810407

DOCDB simple family (application)

EP 79400411 A 19790620; DE 2966404 T 19790620; FR 7818408 A 19780620; US 4950579 A 19790618