

Title (en)

Circular-to-linear polarized wave transducer integrated with a horn.

Title (de)

In einem Horn integrierter Wandler für linear in zirkular polarisierte Wellen.

Title (fr)

Transducteur d'ondes polarisées linéaires en circulaires, intégré dans un cornet.

Publication

**EP 0632525 A1 19950104 (EN)**

Application

**EP 93121070 A 19931229**

Priority

JP 18326893 A 19930630

Abstract (en)

A passive element 33 for transducing a circularly-polarized wave into a linearly-polarized wave is disposed in a conical horn 11, and a short-circuit plate 2 is disposed by being spaced out by a prescribed distance from the passive element 33. The short-circuit plate 2 is disposed on the attachment wall surface 55 between the conical horn 11 and a rectangular waveguide 12, and it has the formation of a slit. The slit extracts only a linearly-polarized wave component, which is propagated to the rectangular waveguide 12. A probe 53 is inserted in the rectangular waveguide 12, and the BS signal received by the probe 53 is transduced into an intermediate frequency signal by a frequency transducer arranged on a RF circuit board 54. <IMAGE>

IPC 1-7

**H01Q 15/24**

IPC 8 full level

**H01P 1/17** (2006.01); **H01Q 13/02** (2006.01); **H01Q 15/24** (2006.01)

CPC (source: EP KR)

**H01P 1/165** (2013.01 - KR); **H01P 1/172** (2013.01 - KR); **H01Q 15/244** (2013.01 - EP KR)

Citation (search report)

- [A] EP 0518615 A2 19921216 - SONY CORP [JP]
- [A] J.B. RANKIN ET AL.: "Multifunction single-package antenna system for spin-stabilized near-synchronous satellite", IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION, vol. 17, no. 4, July 1969 (1969-07-01), NEW YORK US, pages 435 - 442
- [A] PATENT ABSTRACTS OF JAPAN vol. 17, no. 418 (E - 1408) 4 August 1993 (1993-08-04)

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DOCDB simple family (application)

**EP 93121070 A 19931229**; JP 18326893 A 19930630; KR 19940002126 A 19940204; TW 82108956 A 19931027