

Title (en)

Device and method for transmission of information for systems with radiating waveguides

Title (de)

Vorrichtung und Verfahren zur Übertragung von Informationen für Systeme mit strahlenden Wellenleitern

Title (fr)

Dispositif et procédé de transmission d'informations pour système à guide d'ondes rayonnant

Publication

EP 0789419 A1 19970813 (FR)

Application

EP 97400236 A 19970203

Priority

FR 9601620 A 19960209

Abstract (en)

The device includes a cavity resonator (1) which lies on one side of the waveguide (2) and is short-circuited at its ends. The resonator resonates in a fundamental TE011 mode. The coupler comprises holes in the guide and the cavity and the resonant slot, lying at right angles to the slots in the waveguide, is directed from the large surface of the cavity towards the mobile unit. A Schottky diode, acting as a modulator (7), is positioned between the edges of the resonant slot and a point of high impedance at the required frequency. A device within the cavity generates the information signal to the diode which may short-circuit the slot depending on the signal polarity.

Abstract (fr)

La présente invention porte sur un dispositif et un procédé de transmission d'informations pour système à guide d'ondes rayonnant (2), guide d'ondes le long duquel se déplace un mobile. Le dispositif de transmission est caractérisé en ce qu'il comporte: des moyens pour injecter une onde porteuse non modulée dans ledit guide d'ondes rayonnant, des moyens de prélèvement ponctuel (3,4), le long dudit guide d'ondes rayonnant (2), d'une partie de l'énergie de ladite onde porteuse non modulée, des moyens de modulation (7,8) pour appliquer à ladite onde porteuse non modulée un signal de modulation local représentant l'information destinée audit mobile, et des moyens (5) pour rayonner, à destination dudit mobile, ladite onde porteuse modulée. <IMAGE>

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Citation (search report)

- [A] EP 0529581 A1 19930303 - ALSTHOM GEC [FR]
- [A] US 3546633 A 19701208 - PEPIATT HARRY J
- [A] US 3845415 A 19741029 - ANDO M
- [A] DUHOT ET AL.: "IAGO: TRANSMISSION ON RADIATING WAVEGUIDES IN THE TRANSPORT FIELD", GEC ALSTHOM TECHNICAL REVIEW, no. 6, July 1991 (1991-07-01), PARIS FR, pages 59 - 66, XP000263158

Cited by

CN113063994A; WO2021210003A1

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