

Title (en)  
Flat antenna.

Title (de)  
Ebene Antenne.

Title (fr)  
Antenne plane.

Publication  
**EP 0426972 B1 19940413 (FR)**

Application  
**EP 90117356 A 19900910**

Priority  
FR 8911829 A 19890911

Abstract (en)  
[origin: JPH03107203A] PURPOSE: To obtain a planar antenna capable of improving band width by a passive resonator, connected to a feeder through a hoop-like slot and maintaining symmetry in the case of circular polarization or double linear polarization. CONSTITUTION: A circular (or square) passive resonator 1 is connected to a feeder 4, through a loop-like slot 3 on a printed circuit of operational frequency. The slot 3 is connected between a conductor plate 2 and a disc-like conductor material area. Spacers 5 to 7, having low dielectric constants, are sealed between the feeder 4 and ground plates 8, 9 are especially the spacer 5 consists of a low dielectric constant material and is coated with a non-conductive protective material 13. The feeder 4 feeds a current to the slot 3 by an electromagnetic coupling, based on the quarter-wavelength stub of which terminal is opened, and the slot 3 is coupled with the resonator 1. Through this combination, a 20% wide pass band having a standing wave ratio <1.2 is obtained on a substrate in air, maximum radiation is in parallel with an arrow I, the ground plate 8 and the conductor 2 shield the radiation from the feeder 4, and radiation has good symmetry and a low intersecting polarization level.

IPC 1-7  
**H01Q 9/04**

IPC 8 full level  
**H01Q 21/06** (2006.01); **H01P 5/08** (2006.01); **H01P 5/10** (2006.01); **H01Q 9/04** (2006.01); **H01Q 13/08** (2006.01); **H01Q 13/16** (2006.01); **H01Q 21/24** (2006.01)

CPC (source: EP US)  
**H01Q 9/0414** (2013.01 - EP US); **H01Q 9/0457** (2013.01 - EP US)

Cited by  
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