

(19)



Europäisches Patentamt  
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(11) Publication number:

**0 521 326 A3**

(12)

**EUROPEAN PATENT APPLICATION**(21) Application number: **92109983.4**(51) Int. Cl.<sup>5</sup>: **H01Q 21/29**(22) Date of filing: **13.06.92**(30) Priority: **14.06.91 IT RM910429**(43) Date of publication of application:  
**07.01.93 Bulletin 93/01**(84) Designated Contracting States:  
**DE ES FR GB NL SE**(88) Date of deferred publication of the search report:  
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**W-8300 Landshut (DE)**(54) **Device which improves the efficiency of a radiating system by means of parasite elements set on the ground plane.**

(57) The device consist of half-wavelength dipoles (active elements) (1) and four indirectly fed slots (6) (parasite elements), where these slots are excited by the active elements, which are connected to a supply line (4). The scope of the device is to control the radiating pattern of a dipole array through the slots (6).

The invention pertains to the field of antennae, and more precisely to that of microwave antennae. It may be adopted in stand-alone or in integrated applications on reflector antennae for air traffic control, where detection is performed in the S band, associated with an interrogation performed in L band, obtained by inserting the innovative device into an existing feed so as to achieve a control over the radiating pattern of the entire radiating system or antenna, according to the application.

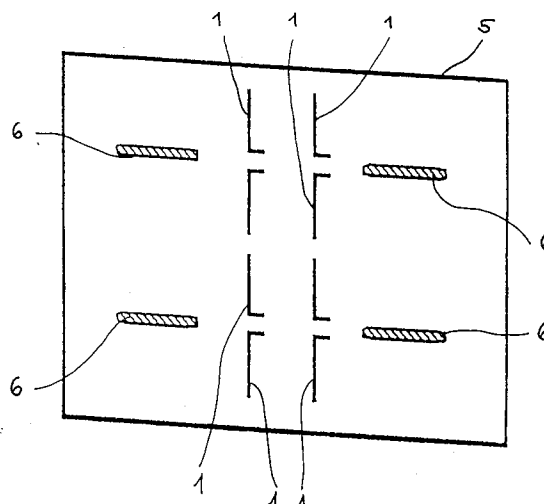


FIG.1

**EP 0 521 326 A3**



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## EUROPEAN SEARCH REPORT

Application Number

EP 92 10 9983

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
X	WO-A-9 010 959 (HILL) * page 5, line 28 - page 11, line 13; figure 1 *	1-6	H01Q21/29
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X	GB-A-2 225 170 (GEC-MARCONI) * page 3, line 6 - page 5, line 4; figure 1 *	1	
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A	US-A-4 587 524 (HALL) * abstract; figures 1-3 *	1-7	
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A	US-A-4 710 775 (COE) * abstract; figure 2B *	1-7	
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			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			H01Q
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 16 DECEMBER 1992	Examiner ANGRABEIT F.F.K.
<b>CATEGORY OF CITED DOCUMENTS</b>			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ..... & : member of the same patent family, corresponding document	