



Europäisches Patentamt
European Patent Office
Office européen des brevets



Publication number:

0 330 303 A3

(12)

EUROPEAN PATENT APPLICATION

(21) Application number: 89300460.6

(51) Int. Cl.⁵: **H01Q 13/24**, **H01Q 13/28**

(22) Date of filing: 18.01.89

(30) Priority: 24.02.88 GB 8804242

(43) Date of publication of application:
30.08.89 Bulletin 89/35

(54) Designated Contracting States:
AT BE CH DE ES FR GB GR IT LI LU NL SE

(68) Date of deferred publication of the search report:
08.05.91 Bulletin 91/19

(71) Applicant: **THORN EMI plc**
4 Tenterden Street
London W1A 2AY(GB)

(72) Inventor: **Burton, Richard William**
28, Mulberry Way
Ely Cambridgeshire, CB7 4TH(GB)

(74) Representative: **Marsh, Robin Geoffrey et al**
Thorn EMI Patents Limited The Quadrangle
Westmount Centre Uxbridge Road
Hayes Middlesex, UB4 0HB(GB)

(54) **End fire aerial.**

(57) An end-fire aerial (6) includes a broadside aerial array (7), for example a horn antenna. A block (9) of dielectric foam material extends outwards from the array (7), in a direction perpendicular to the array.

The block (9) is designed to be of such dimensions, and of a suitably low dielectric constant such that it produces an end-fire gain.

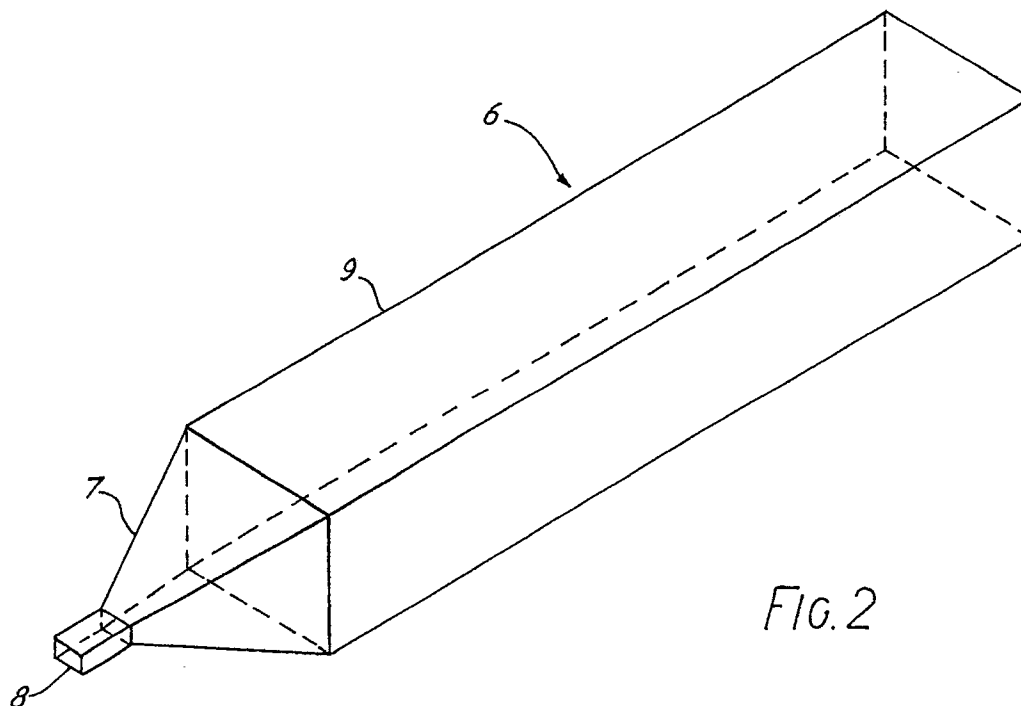


Fig.2

EP 0 330 303 A3



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.4)		
Y	US-A-3435458 (LEWIS) * abstract; figure 1 * * column 2, lines 62 - 65 * ----	1, 2	H01Q13/24 H01Q13/28		
Y	Proceedings of the IEE vol. 122, no. 12, December 1975, London, England pages 1353 - 1358; James et al.: "Gain enhancement of microwave antennas by dielectric-filled radomes" * figures 1a, 1b * ----	1, 2			
A	US-A-2425336 (MUELLER) * column 3, lines 70 - 75; figures 1a-1c * * column 8, lines 10 - 14 * ----	1, 4-7			
A	US-A-3128467 (LANCOTOT) * column 3, lines 35 - 37; figure 1 * ----	8			
A	CH-A-402973 (ETABLISSEMENT MEKOFOR) * page 2, lines 19 - 27; figure 1 * -----	1			
			TECHNICAL FIELDS SEARCHED (Int. Cl.4)		
			H01Q H01P		
The present search report has been drawn up for all claims					
Place of search BERLIN		Date of completion of the search 06 MARCH 1991	Examiner DANIELIDIS S.		
<table border="0"><tr><td>CATEGORY OF CITED DOCUMENTS 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</td><td>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 I : document cited for other reasons & : member of the same patent family, corresponding document</td></tr></table>				CATEGORY OF CITED DOCUMENTS 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 I : document cited for other reasons & : member of the same patent family, corresponding document
CATEGORY OF CITED DOCUMENTS 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 I : document cited for other reasons & : member of the same patent family, corresponding document				