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Publication number : **0 439 337 A3**

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## EUROPEAN PATENT APPLICATION

21 Application number : **91300505.4**

51 Int. Cl.<sup>5</sup> : **H01Q 17/00**

22 Date of filing : **23.01.91**

30 Priority : **25.01.90 JP 15798/90**  
**02.02.90 JP 23818/90**  
**08.06.90 JP 150690/90**  
**20.06.90 JP 162403/90**

43 Date of publication of application :  
**31.07.91 Bulletin 91/31**

84 Designated Contracting States :  
**DE FR GB SE**

88 Date of deferred publication of search report :  
**06.11.91 Bulletin 91/45**

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54 **Broad-band wave absorber.**

57 The present invention relates to a broad-band wave absorber wherein plates (3) formed of a ferrite magnetic material are placed at an optimal spacing and are aligned in a lattice form in longitudinal and lateral directions on a conductive plate (2). A magnetic substance of a specific thickness  $t_m$  is formed into cylindrical blocks of a height  $d$  (where  $d \geq t_m$ ) wherein an end surface thereof is polygonal, and the cylindrical blocks are provided with a radio-wave reflecting surface aligned in such a manner that this surface is perpendicular to the axial direction of the blocks, and the end surface of the blocks is approximately perpendicular to a direction from which radio waves are incident. The ferrite magnetic substance could also be formed into rectangular prisms of thickness  $2t_m$ , height  $d$ , and length in the longitudinal direction thereof  $L$ , with the prisms aligned at a spacing  $b$  on a radio-wave reflecting surface, the direction of the height dimension of the prisms being approximately parallel to a radio-wave incidence direction, and the surfaces thereof of the dimensions  $2t_m$  and  $L$  being perpendicular to the radio-wave incidence direction, forming a plane parallel to a magnetic field direction of incident radio waves and the dimension  $L$ , wherein the following relationships hold :

$L \geq d \geq 2t_m$   
 $20t_m \geq b \geq 2t_m$

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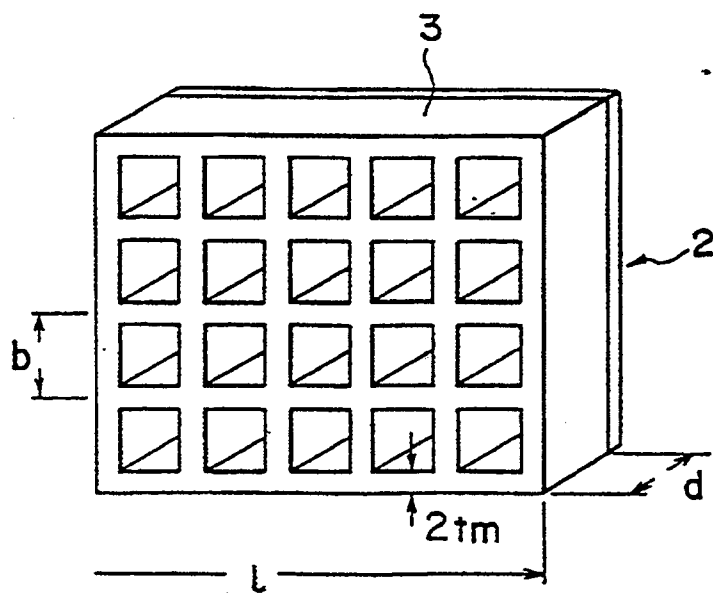


FIG. 1(a)

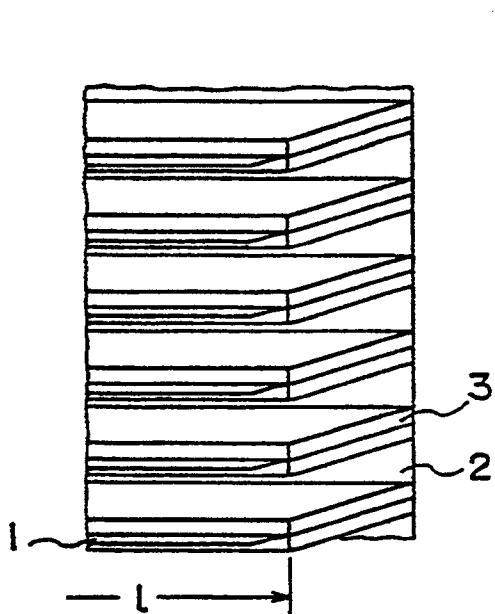


FIG. 1(b)

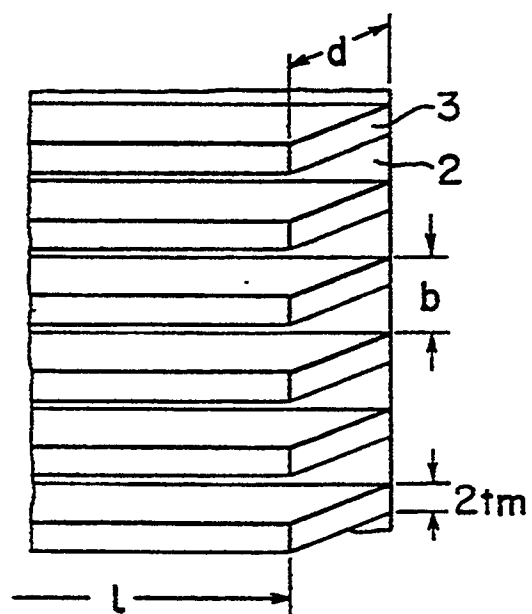


FIG. 1(c)



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# EUROPEAN SEARCH REPORT

Application Number

EP 91 30 0505

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	US-A-4 701 761 (AFFINITO) * column 2, line 34 - line 60; figures 1,2 *	1,2	H01Q17/00
A	* claims 1-9 *	6-18	
A	GB-A-776 158 (WERNER GENEST GESELLSCHAFT FUR ISOLIERUNGEN) * the whole document *	1-18	
A	GB-A-1 170 420 (ELTRO, GESELLSCHAFT FUR STRAHLUNGSTECHNIK) * the whole document *	1,6,11	
A	IEEE TRANSACTIONS ON BROADCASTING, vol. 25, no. 4, December 1979, NEW YORK US pages 143 - 146; TAKIZAWA: 'REDUCTION OF GHOST SIGNAL BY USE OF MAGNETIC ABSORBING MATERIAL ON WALLS ' * page 145; figure 6 *	1	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			H01Q H05K
Place of search THE HAGUE		Date of completion of the search 03 SEPTEMBER 1991	Examiner ANGRABEIT
<p><b>CATEGORY OF CITED DOCUMENTS</b></p> <p>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</p> <p>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 &amp; : member of the same patent family, corresponding document</p>			

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