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Applicant: **RAYTHEON COMPANY**
141 Spring Street
Lexington Massachusetts 02173(US)

Inventor: **Wada, Steven T.**
748 Litchfield Lane
Santa Barbara, California(US)
Inventor: **Jobsky, Robert**
407A Shasta Lane
Santa Barbara, California(US)
Inventor: **Maybell, Michael J.**
1926 E1 Camino Delaluz
Santa Barbara, California(US)

Representative: **Jackson, David Spence et al**
REDDIE & GROSE 16, Theobalds Road
London, WC1X 8PL(GB)

Flush mount antenna.

An antenna (10) capable of being mounted flush with variously shaped surfaces comprises a dielectric filled radiating cavity (26) with two opposing tapered walls. The radiating cavity is excited by a microstrip horn (16) mounted on a dielectric board (14) below a second cavity (54) containing an absorber (52). The radiating cavity (26) is defined between a taper wall (50) of a metal top member (20)

and an opposing taper wall (32) of a metal base member (12). A dielectric slab (18) fills the radiating cavity, and the top taper wall (50) acts as an extension of the microstrip horn (16). The upper surfaces of the base member (12), top member (20), and dielectric slab (18) conform to the surface in which the antenna (10) is mounted.

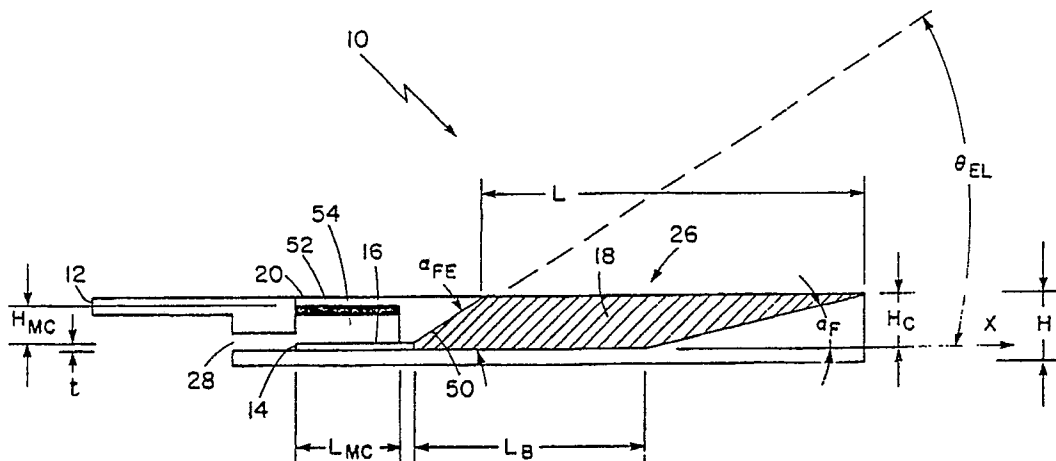


Fig. 3

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EUROPEAN SEARCH REPORT

Application Number

EP 90 30 5620

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	GB-A-1 598 545 (MARCONI) * Column 1, lines 20-39; column 2, lines 71-88; claims 1-5; figure 2 * -- --	1,10	H 01 Q 9/04 H 01 Q 1/28
A		12	
A	US-A-4 415 900 (C.M. KALOI) * Column 1, lines 31-40; column 2, lines 35-62; figures 1,2 * -- --	1,12	
A	US-A-2 822 542 (F.E. BUTTERFIELD) * Column 1, line 55 - column 2, line 14; column 2, lines 23-29; column 2, line 60 - column 3, line 9; column 3, lines 29-31; column 3, lines 45-47; column 4, lines 31-51; figures 1,3,6,8-10 * -- --	1,12	
A	FR-A-2 445 042 (O.N.E.R.A.) * Page 3, lines 18-33; figures 1-3 * -- -- --	1,12	
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			H 01 Q
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of search 21 February 91	Examiner BUTLER N.A.
<div>CATEGORY OF CITED DOCUMENTS</div> <div>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</div> <div>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</div>			