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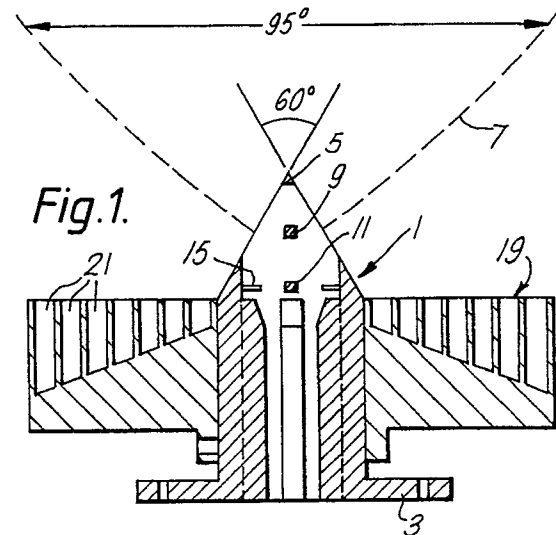
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(54) **Microwave antenna.**

(57) A microwave horn antenna providing wide beam-width of approximately 95 degrees over a band width of 8 to 18GHZ. The antenna consists of a radiating cylinder (1) the front end of which is shaped to provide a central apex or ridge (6) with two faces sloping back from it. A conductor wire (5) extends to provide this ridge across the cylinder (1). Further matching wires (9, 11) extend across behind the ridge conductor (5). A choke ring (19) surrounds the radiating aperture, consisting of a plurality of concentric channels (21) of graded depth, this being one quarter wavelength at frequencies throughout the band. A wide beam, broad band antenna of high performance is thus provided.



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EUROPEAN SEARCH REPORT

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EP 90 31 0821

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	PATENT ABSTRACTS OF JAPAN, vol. 3, no. 47 (E-105), 20th April 1979; & JP-A-54 24 561 (OKI DENKI KOGYO K.K.) 23-02-1979 * Whole document *	1	H 01 Q 13/02
A	----- IDEM	2	
A	----- ELECTRONICS LETTERS, vol. 9, no. 25, 13th December 1973, pages 596-597; J. COWAN: "Dual-band reflector-feed element for frequency-reuse applications" * Page 596, column 2, lines 37-50; figure 1 *	1,5	
A	----- US-A-3 434 146 (L. PETRICH) * Column 1, line 66 - column 2, line 4; figure 1 *	1,5,6	
A	----- US-A-3 553 707 (R. YANG) * Column 4, line 66 - column 5, line 20; figures 6,8 *	1,5	
A	----- ELECTRONICS LETTERS, vol. 17, no. 21, October 1981, pages 777-779; W. DAVIES et al.: "Bird-proof feed-horn windows for microwave radio systems antennas" * Figure 1 *	1,4	
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			H 01 Q
The present search report has been drawn up for all claims			
Place of search		Date of completion of search	Examiner
The Hague		17 September 91	BUTLER N.A.
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 L: document cited for other reasons &: member of the same patent family, corresponding document			