



Europäisches Patentamt
European Patent Office
Office européen des brevets

⑪ Publication number:

0 231 422
A3

⑫

EUROPEAN PATENT APPLICATION

⑬ Application number: 86104638.1

⑮ Int. Cl.4: H01Q 1/12, H01Q 1/24,
H01Q 19/13

⑭ Date of filing: 04.04.86

⑬ Priority: 31.01.86 JP 20681/86

⑰ Applicant: NEC CORPORATION
33-1, Shiba 5-chome, Minato-ku
Tokyo 108(JP)

⑭ Date of publication of application:
12.08.87 Bulletin 87/33

⑰ Inventor: Momose, Masao c/o NEC

⑯ Designated Contracting States:
DE FR GB IT

Corporation
33-1, Shiba 5-chome Minato-ku
Tokyo(JP)
Inventor: Kosukegawa, Kazuo c/o NEC
Corporation
33-1, Shiba 5-chome Minato-ku
Tokyo(JP)
Inventor: Asari, Noriyuki c/o NEC Corporation
33-1, Shiba 5-chome Minato-ku
Tokyo(JP)
Inventor: Ozawa, Hirohisa c/o NEC
Corporation
33-1, Shiba 5-chome Minato-ku
Tokyo(JP)
Inventor: Kosugi, Yuhei c/o NEC Corporation
33-1, Shiba 5-chome Minato-ku
Tokyo(JP)
Inventor: Yamamoto, Osamu c/o NEC
Corporation
33-1, Shiba 5-chome Minato-ku
Tokyo(JP)

⑬ Date of deferred publication of the search report:
25.11.87 Bulletin 87/48

⑰ Representative: Vossius & Partner
Siebertstrasse 4 P.O. Box 86 07 67
D-8000 München 86(DE)

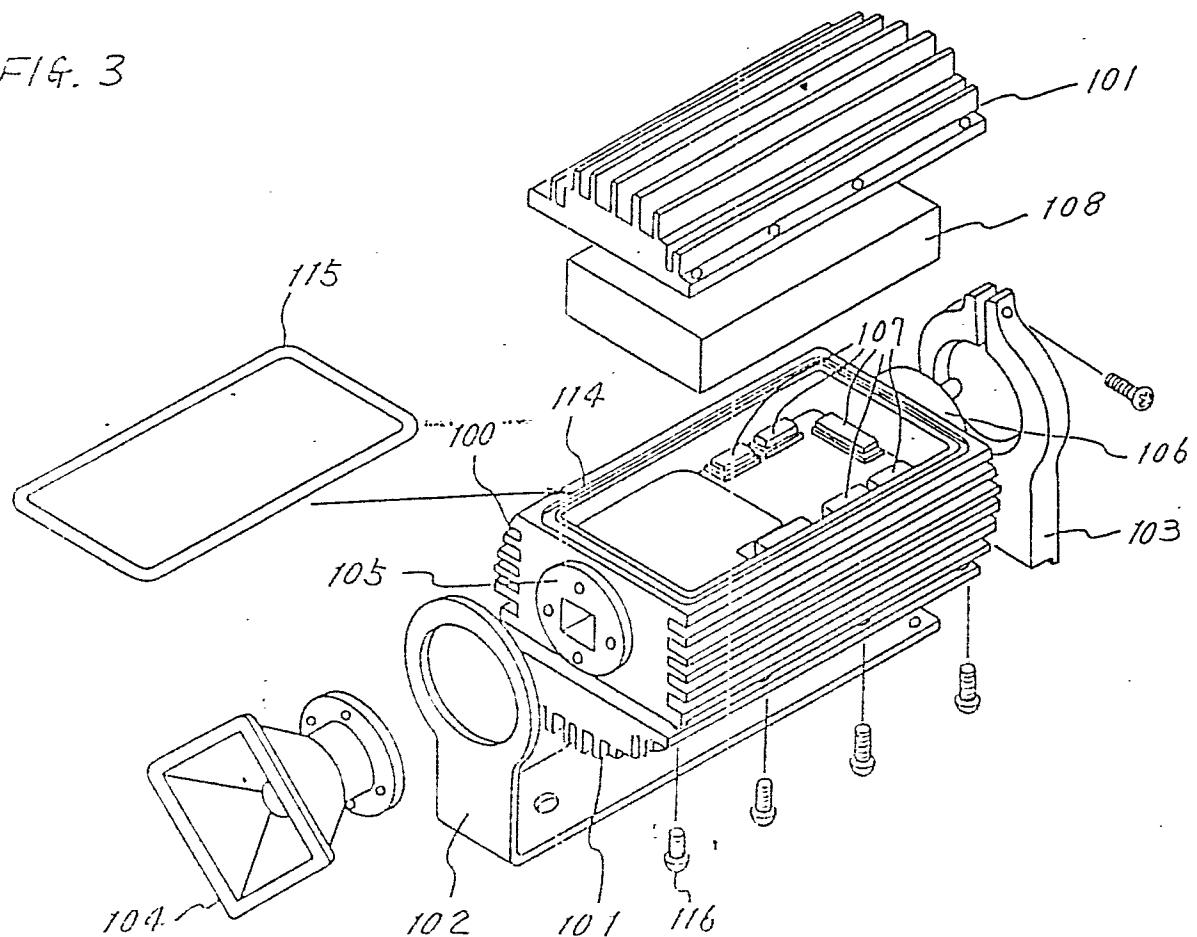
EP 0 231 422 A3

⑯ **Microwave transmitter/receiver apparatus.**

⑰ The invention relates to a miniaturized microwave transmitter/receiver apparatus which allows the polarization angle of a primary reflector to be readily matched to the polarization plane of a polarized wave. The apparatus comprises a housing (100), a primary radiator (104), a transmit/receive multiplexer for multiplexing a transmit signal and a receive signal, a transmit filter and a receive filter, transmit means connected to the transmit filter for outputting the transmit signal by receiving a predetermined

transmit intermediate frequency signal, and receive means connected to the receive filter for outputting a predetermined intermediate frequency signal, the multiplexer, the transmit and the receive filters, the transmit means and the receive means being accommodated in the housing (100).

FIG. 3





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	DE-U-8 520 603 (ANT NACHRICHTENTECHNIK & STANDARD ELEKTRIK LORENZ) * Page 3, last paragraph - page 5; figures 1,2 *	1-3,5, 10	H 01 Q 1/12 H 01 Q 1/24 H 01 Q 19/13
Y	DE-U-8 520 604 (ANT NACHRICHTENTECHNIK & STANDARD ELEKTRIK LORENZ) * Page 2, last paragraph - page 3; figure *	8-13	
Y	DE-A-2 459 045 (MARCONI) * Page 1 - page 4, paragraph 1; figure 3 *	1-3,5, 8-13	
A	EP-A-0 060 762 (PORTENSEIGNE) * Abstract; figure 1b *	1-3,10 -13	TECHNICAL FIELDS SEARCHED (Int. Cl.4)
A	SYMPOSIUM RECORD JOINT SESSIONS, 14th INTERNATIONAL TV SYMPOSIUM, Montreux, 6th - 12th June 1985, pages 164-171; W.R. LANGE: "Design of outdoor units for satellite TVRO stations" * Whole document; figure 3 *	1,2,8	H 01 Q H 04 B H 01 P
The present search report has been drawn up for all claims			
Place of search	Date of completion of the search	Examiner	
THE HAGUE	26-08-1987	ANGRABEIT F.F.K.	
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone	T : theory or principle underlying the invention		
Y : particularly relevant if combined with another document of the same category	E : earlier patent document, but published on, or after the filing date		
A : technological background	D : document cited in the application		
O : non-written disclosure	L : document cited for other reasons		
P : intermediate document	& : member of the same patent family, corresponding document		



EUROPEAN SEARCH REPORT

EP 86 10 4638

DOCUMENTS CONSIDERED TO BE RELEVANT			Page 2
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
A	PATENT ABSTRACTS OF JAPAN, vol. 9, No. 95 (E-310)[1818], 24th April 1985; & JP-A-59 221 005 (MITSUBISHI DENKI K.K.) 12-12-1984 * Whole document *	1,8	
A	---		
A	PATENT ABSTRACTS OF JAPAN, vol. 5, No. 141 (E-73)[813], 5th September 1981; & JP-A-56 76 642 (FUJITSU K.K.) 24-06-1981 * Whole document *	1,2,7	
A	---		
A	US-A-4 565 346 (EDWARDS) * Abstract; figures 2-5 *	8,9	

			TECHNICAL FIELDS SEARCHED (Int. Cl.4)
The present search report has been drawn up for all claims			
Place of search	Date of completion of the search	Examiner	
THE HAGUE	26-08-1987	ANGRAEBIT F.F.K.	
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone		T : theory or principle underlying the invention	
Y : particularly relevant if combined with another document of the same category		E : earlier patent document, but published on, or after the filing date	
A : technological background		D : document cited in the application	
O : non-written disclosure		L : document cited for other reasons	
P : intermediate document		& : member of the same patent family, corresponding document	