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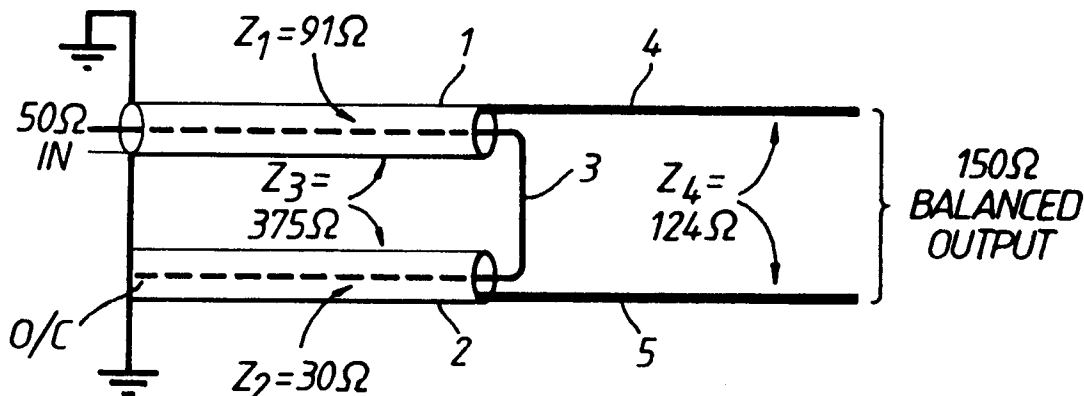
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**01.04.92 Bulletin 92/14**(71) Applicant: **THE MARCONI COMPANY LIMITED**  
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**8HN(GB)**(54) **Broadband balun.**

(57) A broadband balun, comprises first and second tubular conductors (1, 2) arranged substantially parallel, the first tubular conductor (1) being open at both ends and the second tubular conductor (2) being closed at one end. Each tubular conductor is grounded, the second (2) at its closed end and the first (1) at its end adjacent thereto. An input conductor (3) passes through the first tube (1) and back

through the second tube (2) to terminate close to but spaced from the closed end thereof. And parallel pair of output conductors (4, 5) each connect to a respective one of the tubular conductors (1, 2) at the end thereof remote from the grounded end. Impedances may be selected to permit the balun to operate over a broad range of frequencies, e.g. 6 to 24MHz, without the need for adjustment or tuning.

*Fig.1.*

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## EUROPEAN SEARCH REPORT

Application Number

EP 90 31 2412

### 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	PROCEEDINGS OF THE INSTITUTE OF RADIO ENGINEERS.vol. 45, no. 12, December 1957, NEW YORK US pages 1628 - 1631; W.K.ROBERTS: 'A new wide-band balun' * page 1629, left column, line 6 - line 21; figure 2 **	1	H 01 P 5/10
Y	— — —	2-4	
Y	GB-A-644 161 (OFFICE OF TECHNICAL SERVICES OF THE DEPARTMENT OF COMMERCE) * page 2, line 11 - line 42; figure ** — — —	2,3	
Y	TELECOMMUNICATIONS AND RADIO ENGINEERING. vol. 18, no. 9, September 1964, WASHINGTON US pages 79 - 82; V.D.KUZNETSOV ET AL.: 'Wide-band baluns' * page 79, line 13 - page 80, line 6; figures 3,4 ** — — —	4	
X	TELECOMMUNICATIONS AND RADIO ENGINEERING. vol. 26/27, no. 9, September 1972, WASHINGTON US pages 14 - 16; G.A.KLIGER ET AL.: 'Broadband balancing transformer' * page 14, line 11 - line 16; figure 1 **	1	
A	— — —	4	TECHNICAL FIELDS SEARCHED (Int. Cl.5)
X	US-A-4 719 699 (DASH ET AL.) * column 2, line 11 - line 43; figure 3 **	1	H 01 P H 03 H
A	— — —	4	
A	IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES. vol. 24, no. 3, March 1976, NEW YORK US pages 135 - 141; G.J.LAUGHLIN: 'A new impedance-matched wide-band balun and magic tee' * page 135, line 1 - page 136, right column, line 8; figures 1,2 ** — — — — / —	1-4	
The present search report has been drawn up for all claims			
Place of search		Date of completion of search	Examiner
The Hague		04 February 92	DEN OTTER A.M.
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Application Number

**EP 90 31 2412**

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)
A	US-A-3 129 393 (COLEMAN) * column 4, line 61 - column 5, line 38; figures 6,7 ** - - - - -	1	
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
The present search report has been drawn up for all claims			
Place of search		Date of completion of search	Examiner
The Hague		04 February 92	DEN OTTER A.M.
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