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(54) **Dual polarisation antennas**

(57) An antenna for transmission/reception of dual polarised radio signals comprises four patch assemblies (1, 2, 3, 4) and an elongated panel (5). The panel (5) and the patch assemblies (1, 2, 3, 4) are mounted on an elongated supporting base panel (6) of aluminium. Each patch assembly is formed by a stack of two circular panels, the lower of which (11) has on its lower surface a parasitic radiating element (12) formed by a copper

track. The upper surface of the lower panel (11) is coated with copper in a circular shape except for two arc-shaped slots (13, 14) which separate two copper areas (15, 16) from the radiating patch (17). The element (12) is disposed wholly within the volume defined between the patch (17) and the panel (6), and the element (12) acts to reduce unwanted cross-couplings created by radiation from within the corresponding patch assembly.

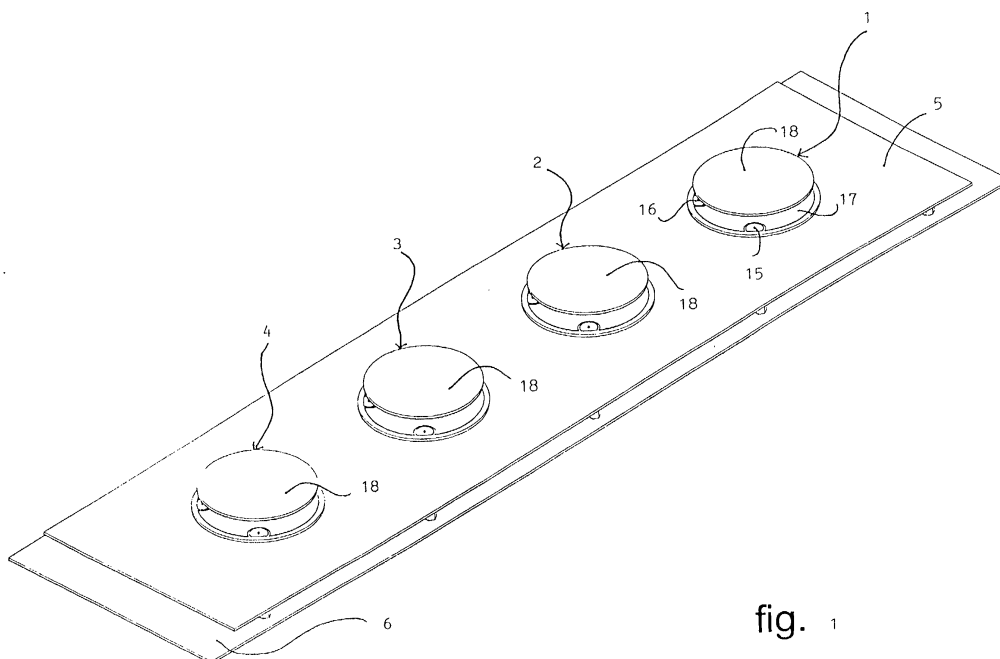


fig. 1

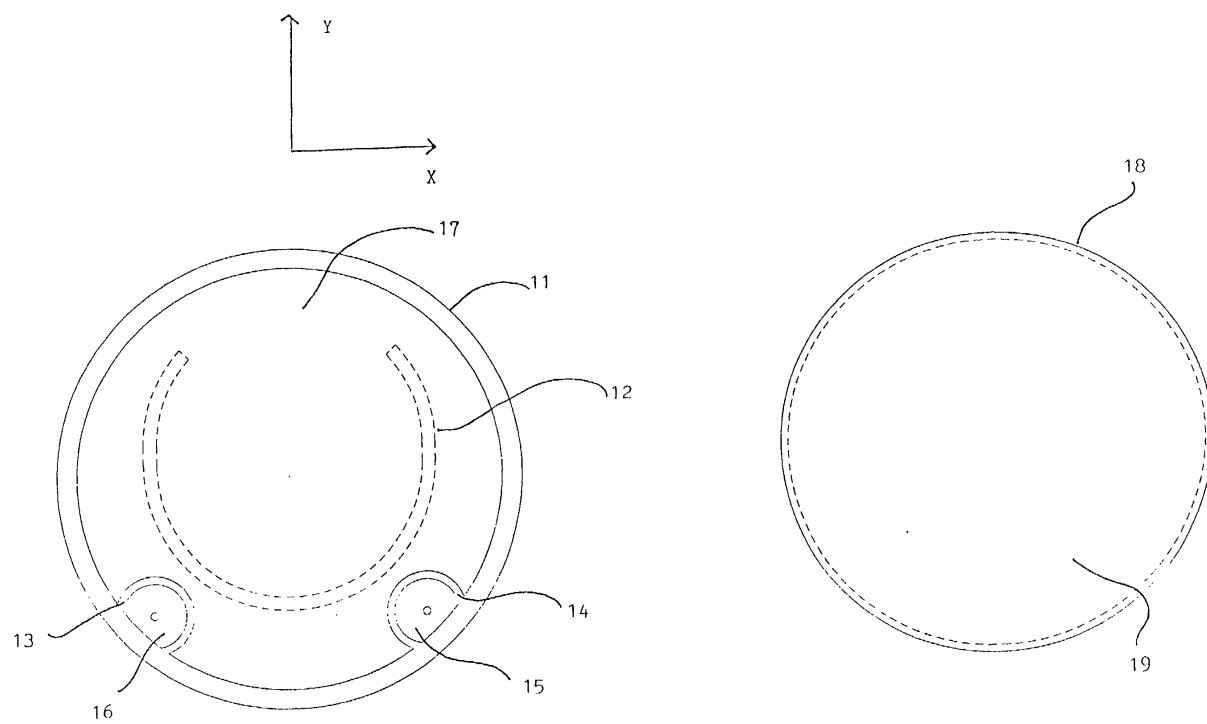


fig. 3



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 01 30 5415

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A	US 5 896 107 A (HUYNH TAN D) 20 April 1999 (1999-04-20) * column 4, line 28-32; figure 4 *	1	
A	EP 0 871 238 A (NOKIA MOBILE PHONES LTD) 14 October 1998 (1998-10-14) * figure 1C *	1	
A	SANAD M: "A COMPACT DUAL-BROADBAND MICROSTRIP ANTENNA HAVING BOTH STACKED AND PLANAR PARASITIC ELEMENTS" IEEE ANTENNAS AND PROPAGATION SOCIETY INTERNATIONAL SYMPOSIUM 1996 DIGEST. BALTIMORE, JULY 21 - 26, 1996. HELD IN CONJUNCTION WITH THE USNC/URSI NATIONAL RADIO SCIENCE MEETING, NEW YORK, IEEE, US, vol. 1, 21 July 1996 (1996-07-21), pages 6-9, XP000782135 ISBN: 0-7803-3217-2 * figure 3 *	1	TECHNICAL FIELDS SEARCHED (Int.Cl.7) H01Q
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 4 December 2003	Examiner Van Dooren, G
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			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82