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(54) Flat-plate antenna for use in mobile communications.

(57) A flat-plate antenna for mobile communications used in automobiles, etc. including a table form antenna element (10) made up of a conductive flat-plate section (10A) and a plurality of leg sections which connect to the flat-plate section to a ground plate (20), a strip line resonator (30) provided beneath the table form antenna with a space in between, and a capacitor electrode (40) provided on the strip line resonator directly under the center of the table form antenna element. A feeding line (60, 61) is connected to the strip line resonator.

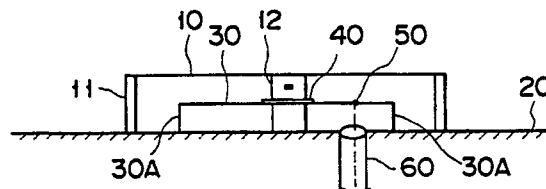


FIG. 1B

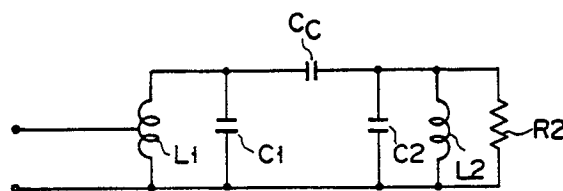


FIG. 1C

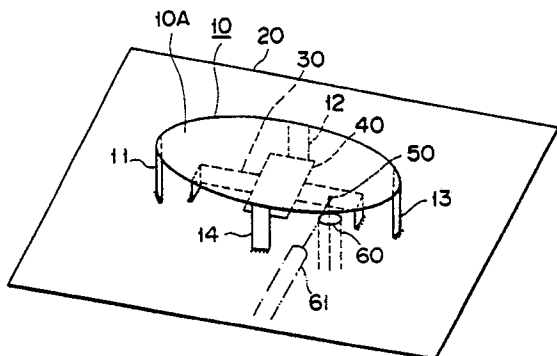


FIG. 1A

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EP 89 31 3506

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	IEEE International Antenna and Propagation Symposium 1976 October 1976, Piscataway, US pages 379 - 382; Tokumaru: "MULTIPLATES : LOW PROFILE ANTENNAS" * pages 379 - 380; figures 1, 5, 6 *	1, 6-8	H01Q9/40 H01Q1/32
A	US-A-4575725 (TRESSELT) * column 4, line 46 - column 5, line 23; figures 5, 6 *	1-5	
A	US-A-4724443 (NYSEN) * column 3, lines 38 - 61 * * column 4, line 52 - column 5, line 15; figures 4, 6 *	1-5	
A	US-A-4660047 (WOLFSON ET AL.) * column 2, line 38 - column 3, line 6 * * column 3, lines 35 - 56; claims 1-3; figures 3-6, 8, 9 *	1-5	
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			H01Q
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 21 SEPTEMBER 1990	Examiner ANGRABEIT F.F.K.
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 I : document cited for other reasons & : member of the same patent family, corresponding document			