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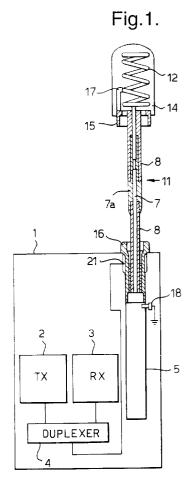
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(54) Retractable top load antenna

(57) An antenna assembly comprises an elongate antenna element (11) mounted in a support (5) and movable between a retracted position and an extended position. A helical antenna element (12) in electrical contact with the helical element is carried at one end of the elongate element. The coupling between the feed point and the antenna in the retracted and extended positions allow the same matching circuitry to be used in both conditions. The invention provides a compact and convenient dual antenna arrangement ideally suited for use in a portable cellular radio telephone.



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EUROPEAN SEARCH REPORT

Application Number EP 95 30 8453

Category	Citation of document with indication of relevant passages	on, where appropriate,	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)	
A	EP-A-0 516 490 (TECHNOP * column 3, line 40 - c figures 1-3 *	HONE) olumn 5, line 53;	1-15	H01Q1/24 H01Q9/30	
Α	EP-A-0 613 206 (NEC) * column 2, line 45 - c figures 1-9 *	olumn 6, line 41;	1-15		
A	GB-A-2 275 369 (MATSUSH INDUSTRIAL) * page 5, line 3 - page figures 1,2 *		1,13		
				TECHNICAL FIELDS SEARCHED (Int.CL6)	
	The present search report has been dra				
Place of search THE HAGUE		Date of completion of the search 12 June 1996	1	Examiner Angrabeit, F	
CATEGORY OF CITED DOCUMENTS X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category		T : theory or pr E : earlier pater after the fili D : document ci L : document ci	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		
A: technological background O: non-written disclosure P: intermediate document		&: member of	&: member of the same patent family, corresponding document		