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Drori et al.

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[54] **SYSTEM FOR INTEGRATING A CELLULAR TELEPHONE WITH A VEHICLE SECURITY SYSTEM**

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[73] Assignee: **Clifford Electronics, Inc., Chatsworth, Calif.**

[21] Appl. No.: **497,107**

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Related U.S. Application Data

[63] Continuation-in-part of Ser. No. 345,654, May 1, 1989, abandoned.

[51] Int. Cl.⁵ **H04M 11/00**

[52] U.S. Cl. **379/59; 379/44; 340/426; 340/539; 340/993; 290/38 C**

[58] Field of Search **290/38 C; 340/441, 425.5, 340/426, 531, 539, 825.31, 993; 379/57-60, 63, 39, 41, 44; 455/33, 54**

[56] References Cited

U.S. PATENT DOCUMENTS

Re. 32,856	2/1989	Millsap	340/539
2,698,391	12/1954	Braden et al.	
2,748,759	6/1956	Schiffer	
2,836,732	5/1958	Newlin	
2,975,296	4/1961	Dominguez	
3,078,834	2/1963	Wright	
3,357,417	12/1967	Baumann	
3,455,403	7/1969	Hawthorne	
3,530,846	9/1970	Bean et al.	
3,538,898	11/1970	Edgemir	
3,633,040	1/1972	Baxter	
3,657,720	4/1972	Audenko et al.	290/38 C
3,696,333	10/1972	Mott	
3,718,899	4/1971	Rollins	340/993
3,859,540	1/1975	Weiner	
4,177,466	12/1979	Reagan	340/63
4,200,080	5/1980	Cook et al.	
4,236,594	12/1980	Ramsperger	
4,345,554	8/1982	Hildreth et al.	
4,392,059	7/1983	Nespor	
4,606,307	8/1986	Cook	
4,674,454	6/1987	Phairr	
4,688,244	8/1987	Hannon et al.	379/44

4,718,080	1/1988	Serrano et al.	379/59
4,736,461	4/1988	Kawasaki et al.	455/38
4,750,197	6/1988	Dewekamp et al.	379/59
4,754,255	6/1988	Sanders et al.	340/64
4,794,649	12/1988	Fujiwara	455/38
4,809,316	2/1989	Namekawa	379/58
4,821,309	4/1989	Namekawa	379/58
4,860,336	8/1989	D'Avello et al.	379/63
4,887,064	12/1989	Drori et al.	340/426
4,893,240	1/1990	Karkouti	290/38 C
4,904,983	2/1990	Mitchell	379/41
4,905,271	2/1990	Namekawa	379/58
4,910,493	3/1990	Chambers et al.	340/426
4,928,778	5/1990	Tin	

FOREIGN PATENT DOCUMENTS

0128861 8/1986 Japan

OTHER PUBLICATIONS

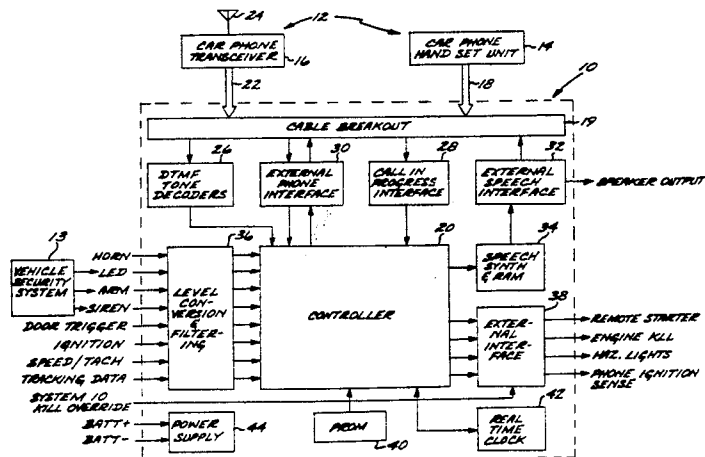
Motorola publication, "DYNAT-A-C 6000x Universal Mobile Telephone", 1984, pp. 1-6.
"AB3X Cellular Interface-Owner's Manual," Morrison & Dempsey Communications Inc, 1987.

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[57] ABSTRACT

An interfacing system for integrating a wide variety of cellular communication systems with most vehicle security systems. The system includes a controller and an interfacing arrangement for matching the cellular telephone to the controller. The interfacing arrangement includes a library, stored in memory, having a plurality of unique translation tables corresponding to the protocols of a plurality of unique cellular communication systems. The interfacing arrangement further includes an initializing capability for selecting an operating protocol for the interfacing system from the library which is compatible with the protocol of the cellular communication system. Hardware and software are included for interfacing the vehicle security to the controller and for interfacing the controller to the vehicle. In a specific embodiment, the selection of cellular telephone type or make is made from the keypad of the cellular telephone.

92 Claims, 46 Drawing Sheets



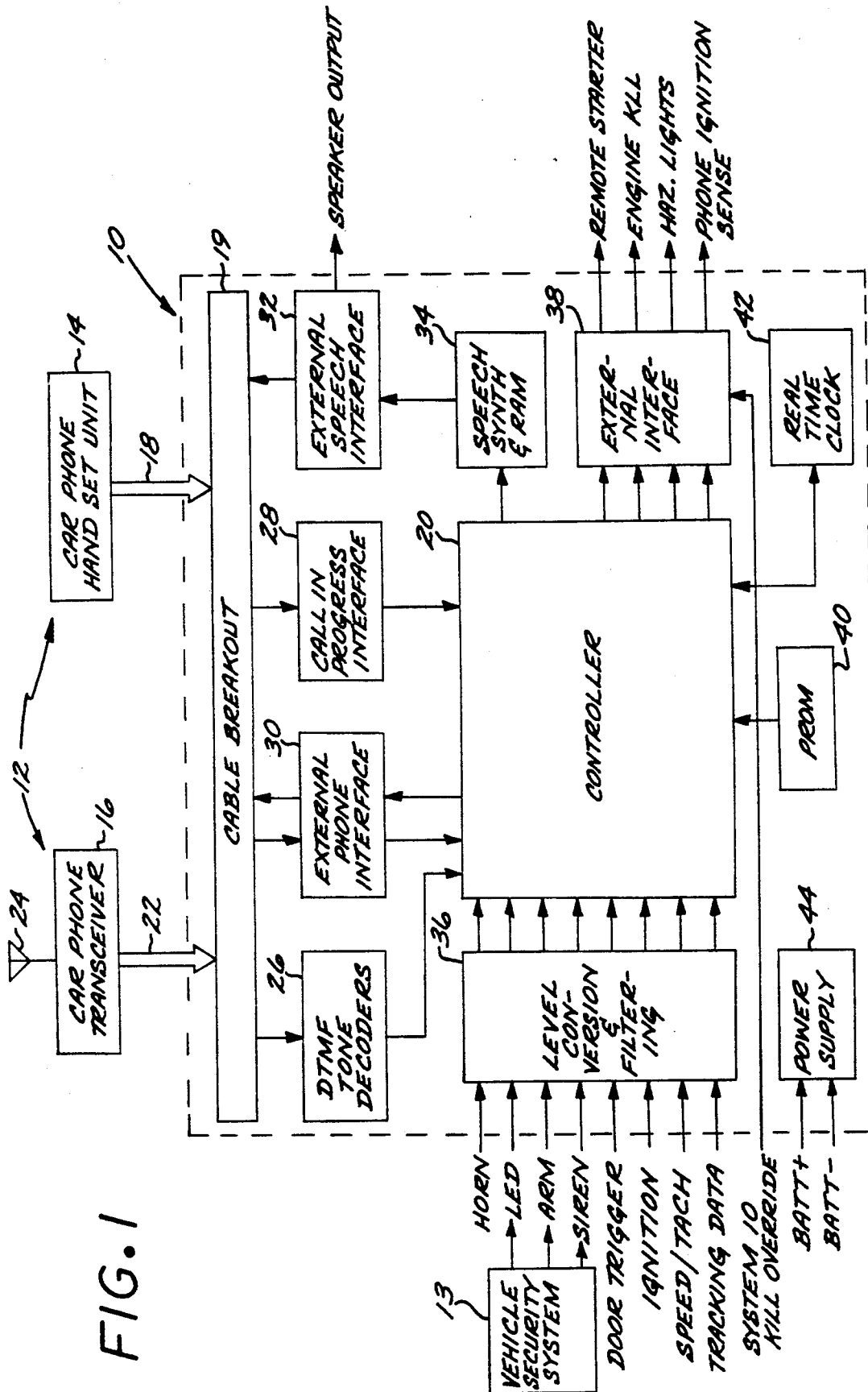


FIG. 1

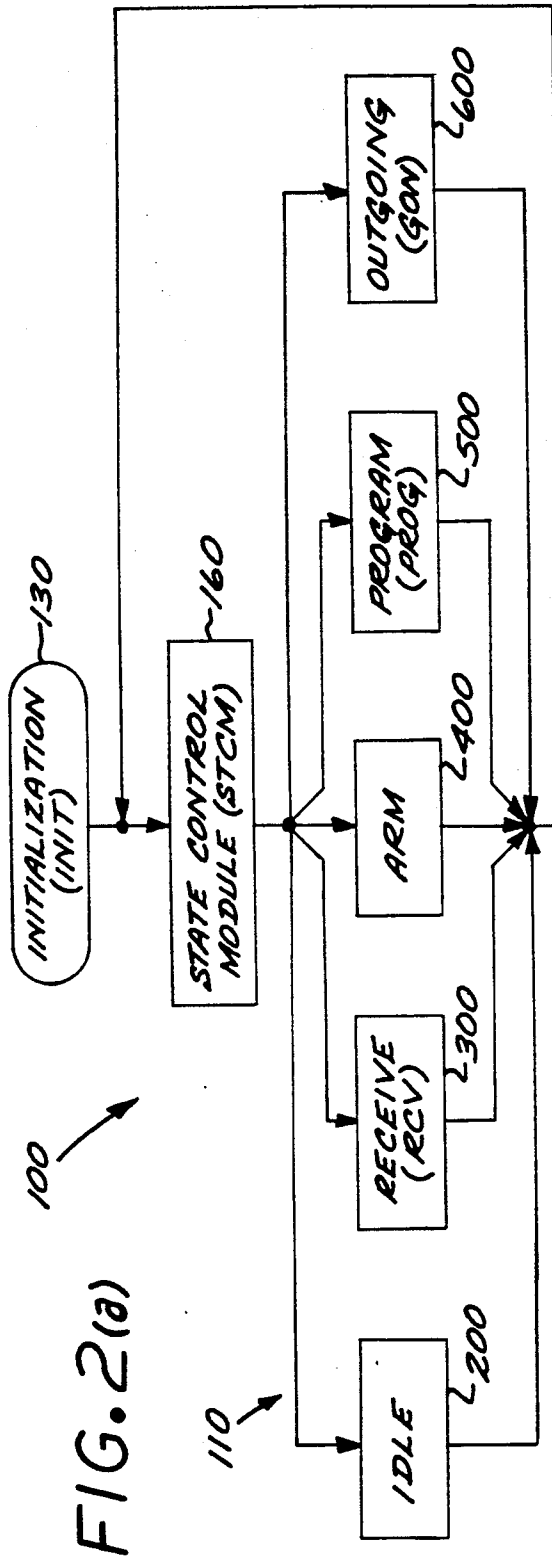


FIG. 2(a)

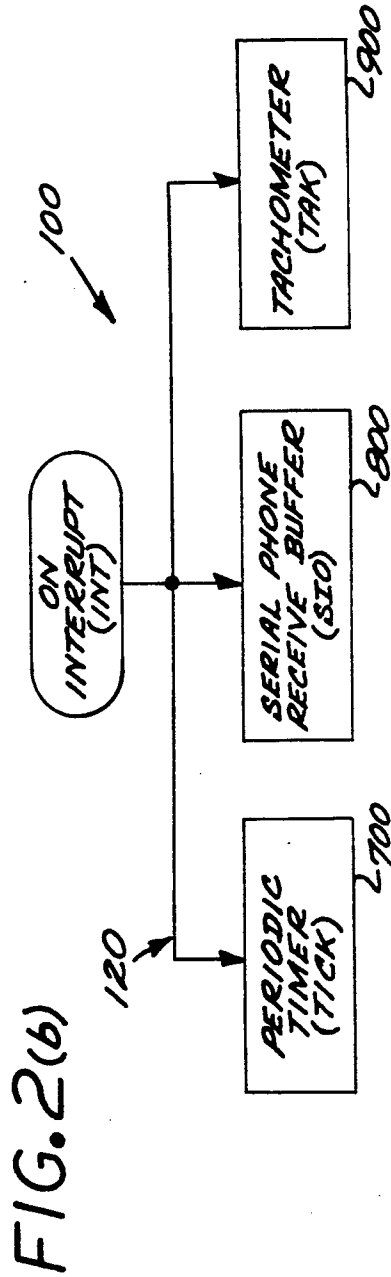


FIG. 2(b)

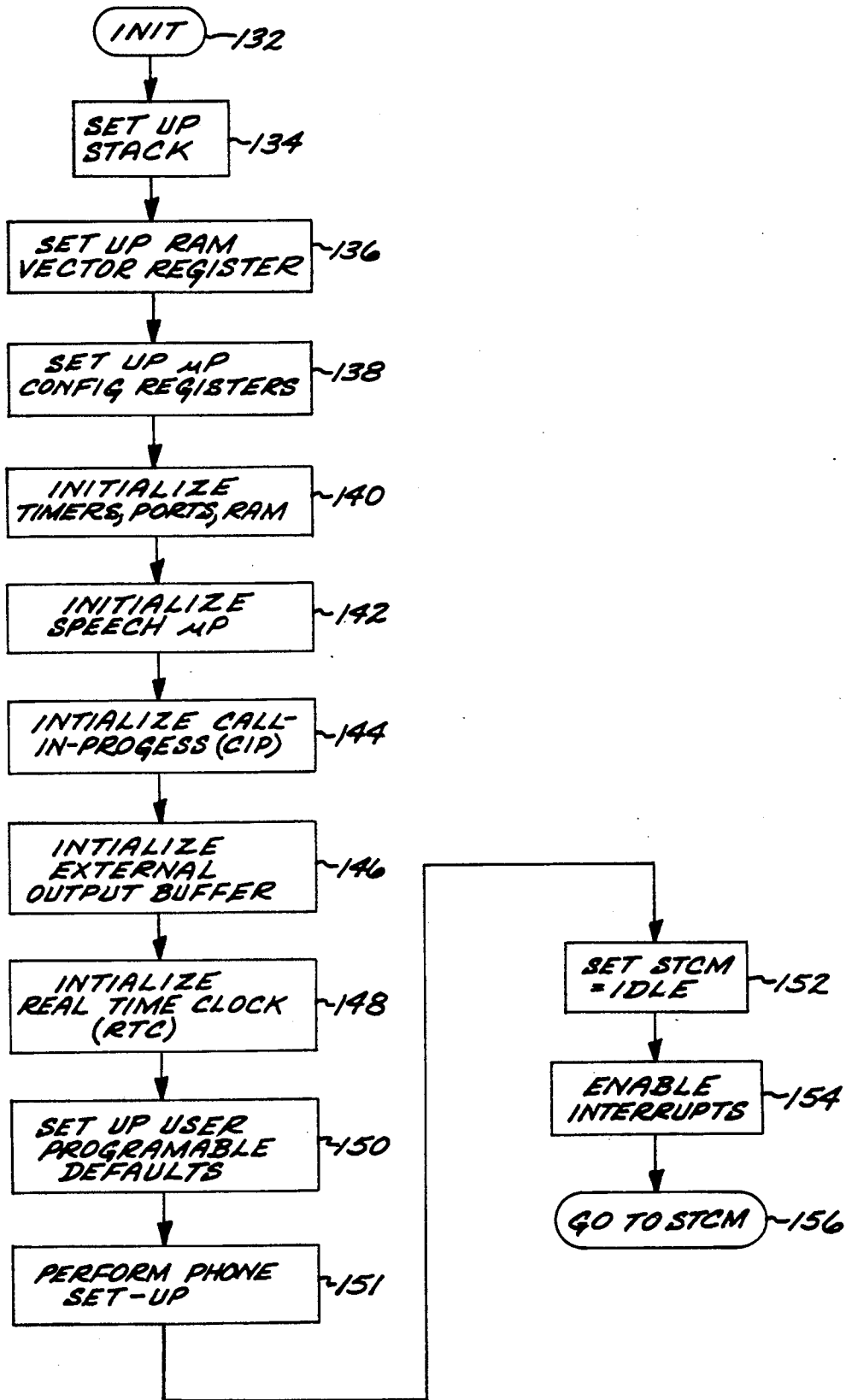


FIG. 3(a)

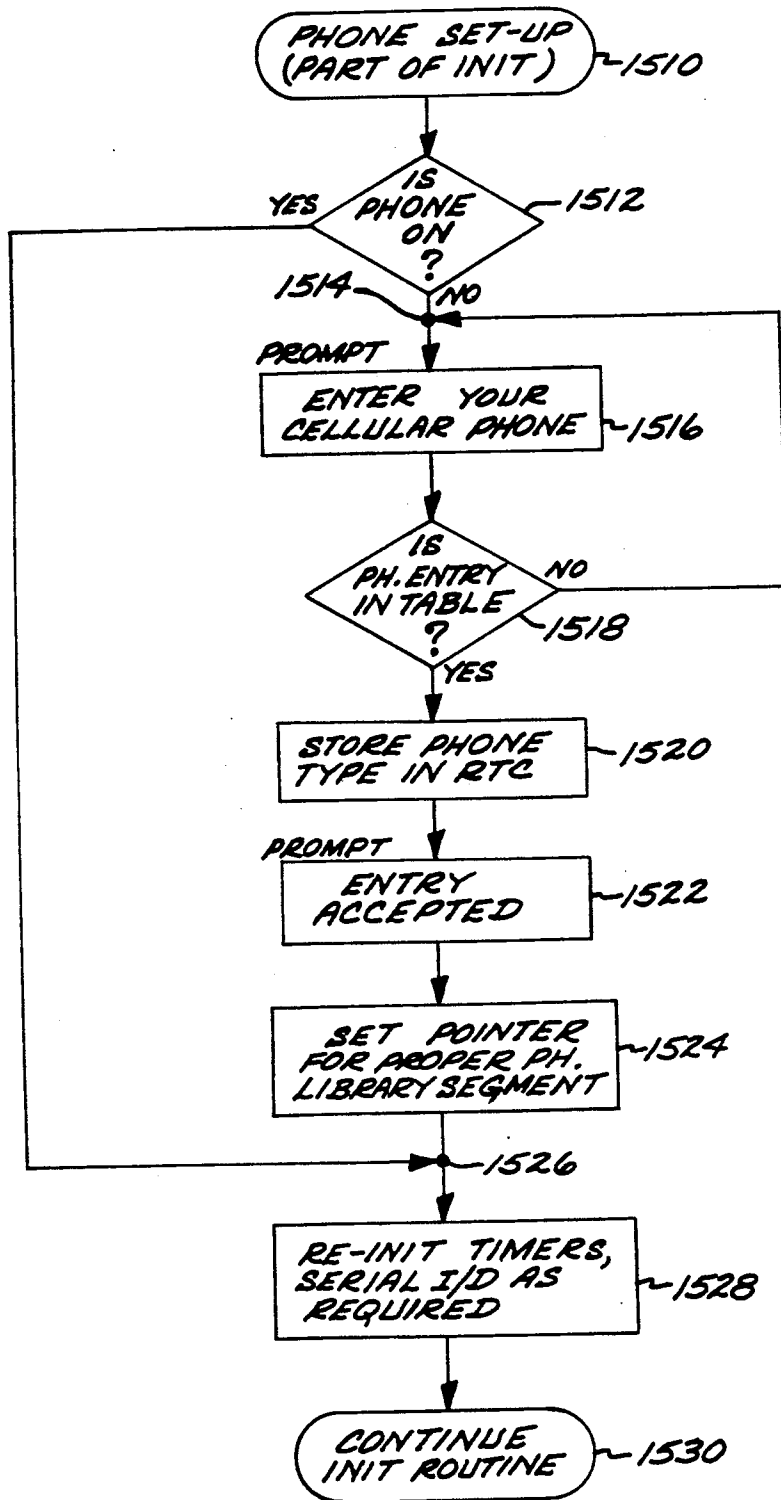


FIG. 3(b)

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