

[11] **Patent Number:** **5,561,705**

[45] **Date of Patent:** **Oct. 1, 1996**

[54] **APPARATUS FOR AUTO DIALING
TELEPHONE NUMBERS AND DTMF TONES
IN A PERSONAL COMMUNICATION
DEVICE**

4,837,800	6/1989	Freeburg et al. .	
4,964,156	10/1990	Blair	379/355
4,972,457	11/1990	O'Sullivan .	
4,980,910	12/1990	Oba et al.	379/354
5,127,041	6/1992	O'Sullivan .	
5,257,397	10/1993	Barzegar et al. .	
5,263,078	11/1993	Takahashi et al. .	
5,276,729	1/1994	Higuchi et al.	379/356
5,282,238	1/1994	Berland .	

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[21] Appl. No.: 279,652

[22] Filed: **Jul. 25, 1994**

[51] **Int. Cl.⁶** **H04Q 7/32**

[52] U.S. Cl. 379/58; 379/354; 379/355

[58] **Field of Search** 379/58, 59, 354–356

[56] **References Cited**

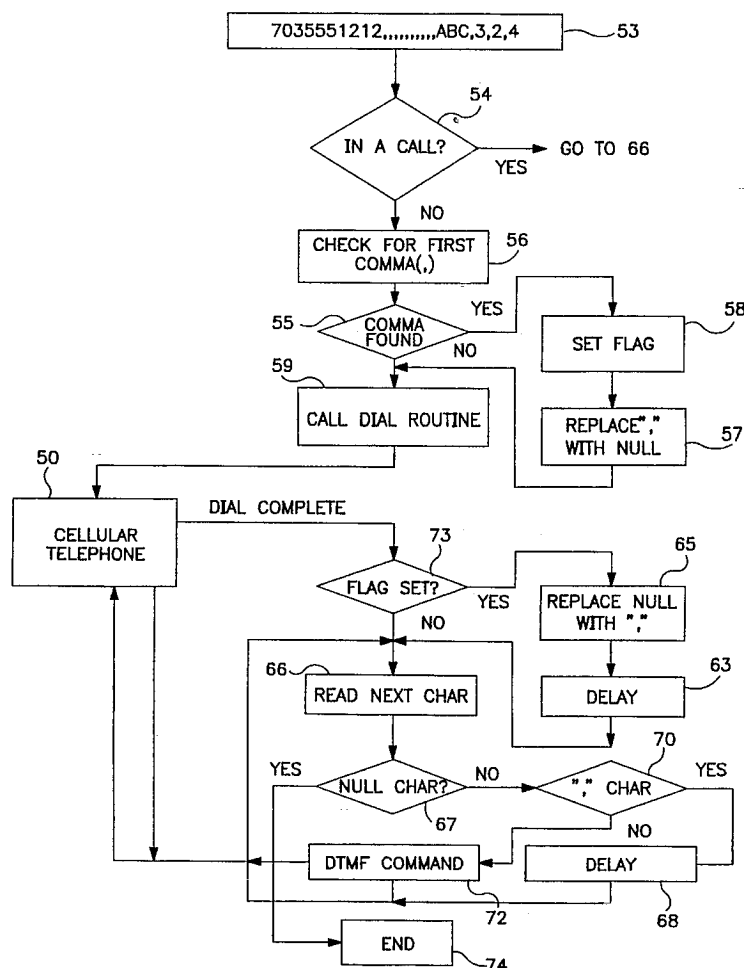
U.S. PATENT DOCUMENTS

Re. 34,034 8/1992 O'Sullivan .
4,697,281 9/1987 O'Sullivan .

[57] **ABSTRACT**

A radio telephone which communicates via cellular telephone networks and by direct connection to a PSTN. The radio telephone includes a random access memory for storing a character string comprising dialing digits defining a calling number and DTMF digits representing signalling tones for accessing information to called equipment. The character string includes a delimiting character for separating dialed digits and DTMF digits. In a dialing sequence, the cellular radio will dial numbers defined by the dial digits and send the remaining characters as DTMF tones to connected telephone.

8 Claims, 5 Drawing Sheets



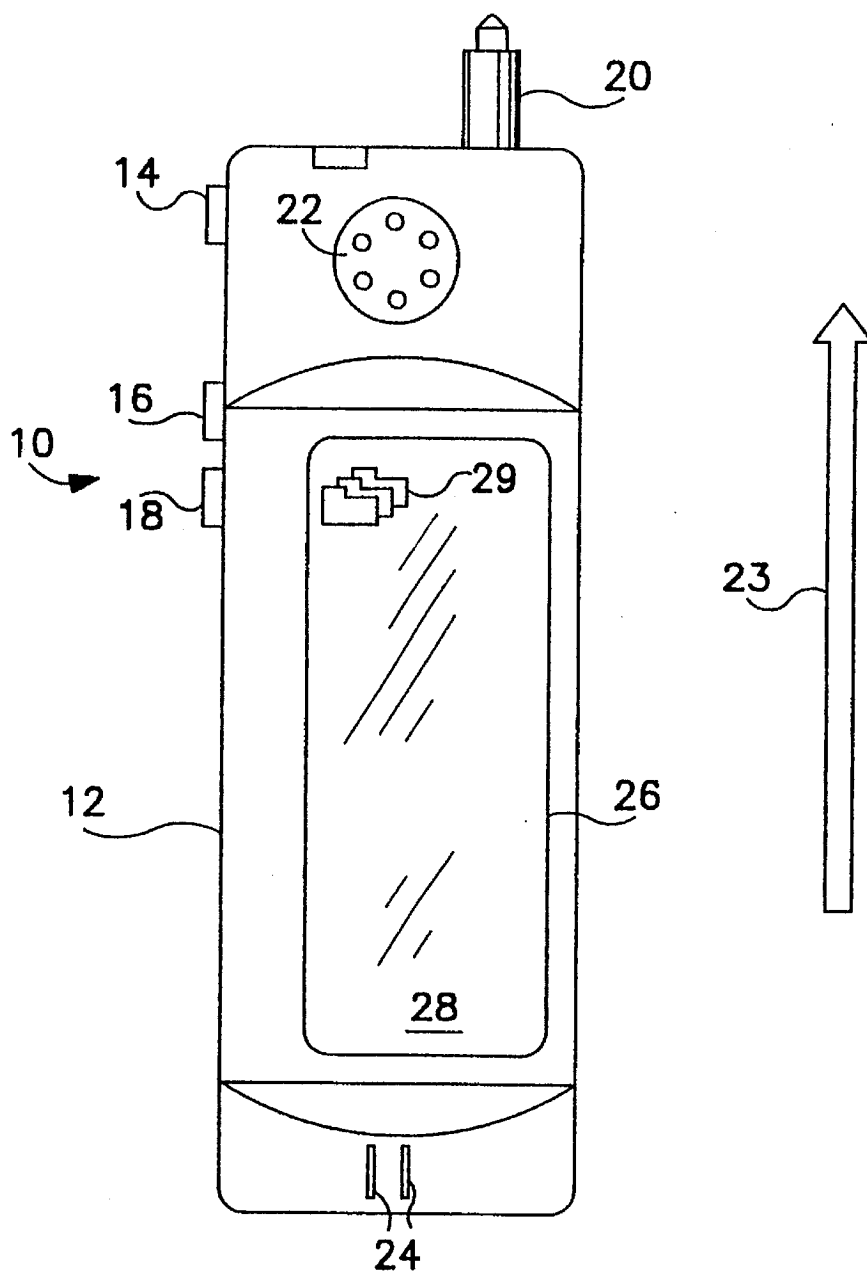


FIG. 1A

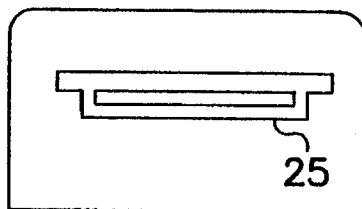


FIG. 1B





Address Book

Address Book 10/07/1993
Address 03:49:13

A	B	C
D	E	F
G	H	I
J	K	L
M	N	O
P	Q	R
S	T	U
V	W	X
Y	Z	

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FIG. 3A

Address Book 10/07/1993
Address 03:49:13

A Index

Aarons, Hebert

Adlar, Alice

Ahner, Lief

Allard, Rene

Ameno, Jules

Anderson, Timothy

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FIG. 3B

Address

Last Name> <

First Name> <

Middle Name> <

Company> <

Address> <

City,St.,Zip> <

Phone 1> <

Phone 2> <

Fax #> <

Menu	Caps	Bkls	Enter
ABC	? ,	123	↕
o	i	r	
w	h	e	
Space		Other	

? ☎ ✉ Done

FIG. 3C

Address Book		06/17/1993	
Address		11:23:	
A		Index	
<div>List A 18M 386291 Side Salt Lake City, UT 80684 7035551212,,,,ABC</div>			
<div>▼ ▲</div>			
Dial Home 555-9322		Dial	
Send Fax		Send Mail	
Change		Erase	
Search		New Entry	
<div>⓪ ☎ 📧 ⬅</div>			

FIG. 3D



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