

US005199062A

United States Patent [19]

Von Meister et al.

Patent Number: [11]

5,199,062

[45] Date of Patent: Mar. 30, 1993

[54]	INCLUDIA SWITCH, STORED I CONTROL	NE COMMUNICATIONS SYSTEM NG A DIGITAL TELEPHONE A VOICE RESPONSE UNIT AND A PROGRAM SEQUENCE FOR LING BOTH THE SWITCH AND TE RESPONSE UNIT
[75]	Inventors:	William F. Von Meister, Great Falls;
1.01		Mark Foster, Falls Church, both of
		Va.
[ee]		· · · ·
[73]	Assignee:	Phone Base Systems Inc., Vienna,
		Va.
[21]	Appl. No.:	789,398
[22]	Filed:	Nov. 8, 1991
	Rela	ted U.S. Application Data
[63]	Continuatio	n of Ser. No. 639,739, Jan. 11, 1991, aban-
[]	doned, whi	ch is a continuation of Ser. No. 147,102,
		8, abandoned.
[51]		
[21]	III. CI,	
[63]	TIC CI	H04M 3/56; H04Q 11/04

[51]	Int. Cl. ³ HU4M 3/50; HU4M 3/5	4;
	H04M 3/56; H04Q 11/0)4
[52]	U.S. Cl 379/67; 379/8	
	379/196; 379/205; 379/207; 379/211; 379/21	

379/216; 370/62 [58] Field of Search 379/88, 89, 67, 84, 379/201, 211, 213, 214, 233, 212, 202, 204, 205, 216, 196, 197, 198, 199, 355; 370/61, 62; 359/135-137, 165, 167

[56] References Cited

U.S. PATENT DOCUMENTS

3,302,182	1/1967	Lynch et al		380/49
4,054,756	10/1977	Comella et al		379/89
4,371,752	2/1983	Matthews et al		379/89
4,375,083	2/1983	Maxemchuk		
4,440,986	3/1984	Thorson	•••••	379/290
4,528,658	7/1985	Israel		
4,556,761	12/1985	Hashimoto	************	379/73
4,577,062	3/1986	Hilleary et al	***********	379/88
4,580,012	4/1986	Matthews et al		
4,580,016	4/1986	Williamson		379/31
4,581,486	3/1986	Matthews et al		379/88
4,585,906	4/1986	Matthews et al		379/88
4,589,107	5/1986	Middleton et al	***********	370/62
4,602,129	6/1986	Matthews et al		379/88
4,625,081	11/1986	Lotito et al		379/88
4,64 0,991	2/1987	Matthews et al		379/88
4,646,346	2/1987	Emerson et al		379/214
4,652,700	3/1987	Matthews et al		379/89
4,747,124	5/1988	Ladd		379/67
4,757,267	7/1988	Riskin	••••••	379/113
		TELEPHONE	800	£.D

4,757,525	7/1988	Matthews et al	379/89
4,763,350	8/1988.	Immendorfer et al	379/67
4,785,408	11/1988	Britton et al	364/513.5
4,797,910	1/1989	Daudelin	379/67
4,797,913	1/1989	Kaplan et al	379/91
4,809,321	2/1989	Morganstein et al	
4,823,374	4/1989	Verlohr	379/67
4,827,500	5/1989	Binkerd et al	379/88
4,847,890	7/1989	Solomon et al	379/67
4,893,328	1/1990	Peacock	379/67
4,899,373	2/1990	Lee et al	379/207
4,979,206	12/1990	Padden et al	379/67

FOREIGN PATENT DOCUMENTS

0086357	5/1984	Japan	379/89
WO89/00793	1/1989	World Int. Prop. O.	381/42

OTHER PUBLICATIONS

"A Pabx That Listens and Talks", H. Mulla, Speech Technology, No. 2, Jan.-Feb. 1984, pp. 74-79. "Application of Speech Recognition and Synthesis to Pabx Service", Mulla and Vaughan, Electrical Communication, vol. 59, No. 3, pp. 273-280, publ'd. May 6,

"The AT&T Multi-Mode Voice Systems-Full Spectrum Solutions For Speech Processing Applications", S. D. Hester et al., Proceedings of the 1985 Avios Conference, Sep. 1985, 12 pages.

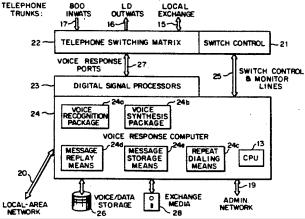
Primary Examiner-Thomas W. Brown Attorney, Agent, or Firm-Browdy and Neimark

ABSTRACT

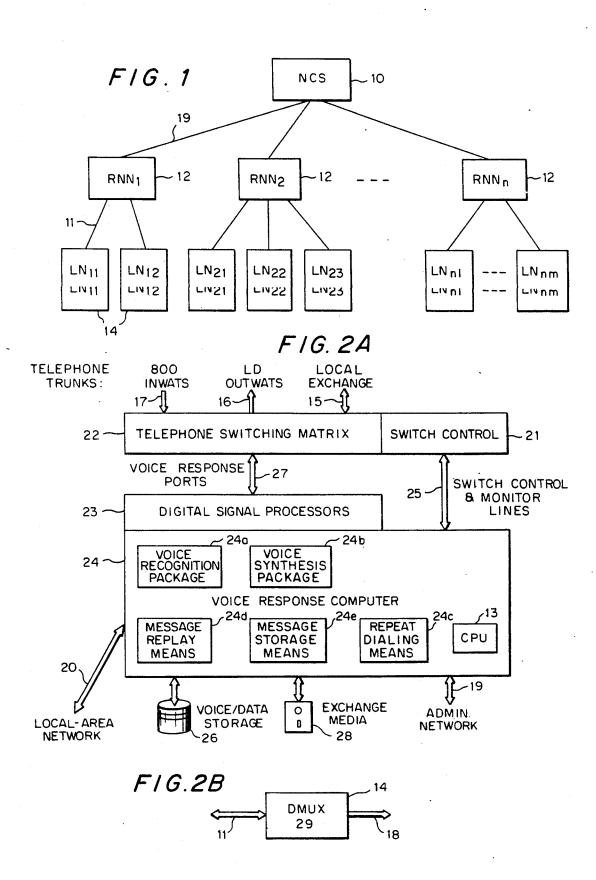
The present invention relates to a telephone communication system which includes a telephone switch having a plurality of incoming and outgoing lines for switching calls therebetween, an audio response unit for receiving audio communications from a user and for generating and transmitting voice communications, and a central processing unit for executing a stored program sequence based upon the audio communications received by the voice response unit to control both the voice response unit and the telephone switch. The central processing unit may be connected within the voice response unit or externally thereto.

43 Claims, 26 Drawing Sheets

Microfiche Appendix Included (1 Microfiche, 79 Pages)



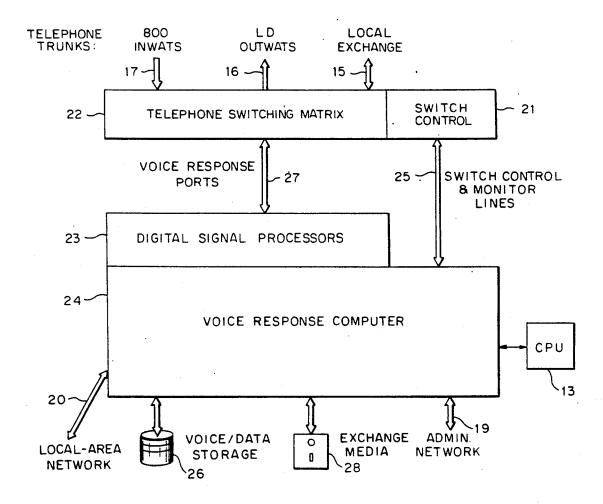




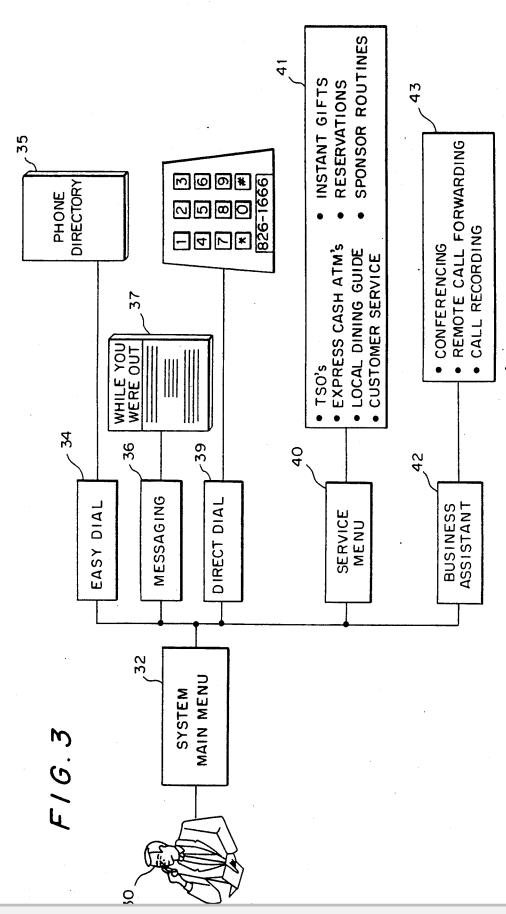


F1G.2C

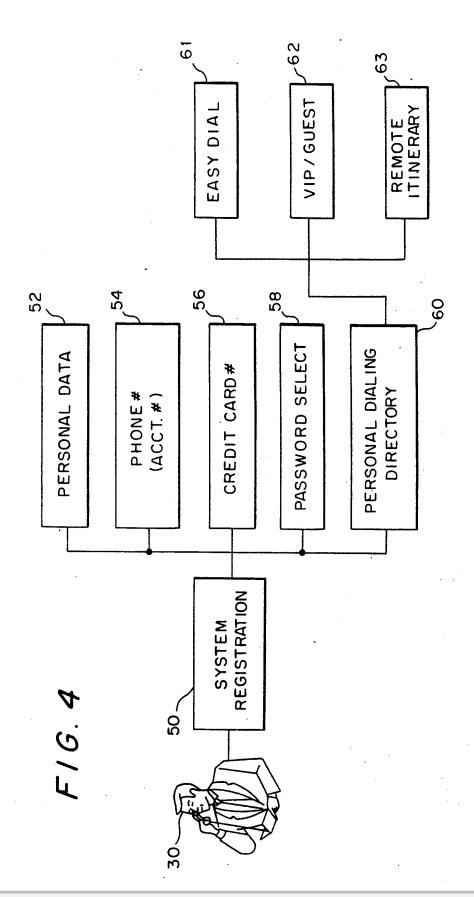
Mar. 30, 1993



Mar. 30, 1993









DOCKET A L A R M

Explore Litigation Insights



Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time** alerts and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.

