

- [54] **ELECTRONIC AUDIO COMMUNICATION
SYSTEM WITH USER CONTROLLED
MESSAGE ADDRESS**
- [75] Inventors: **Gordon H. Matthews, Plano; Thomas
B. Tansil; Michael L. Fannin**, both of
Dallas, all of Tex.
- [73] Assignee: **VMX, Inc.**, Richardson, Tex.
- [21] Appl. No.: **427,687**
- [22] Filed: **Sep. 29, 1982**

Related U.S. Application Data

- [63] Continuation-in-part of Ser. No. 97,240, Nov. 26, 1979,
Pat. No. 4,371,752.
- [51] Int. Cl.⁴ H04M 3/50
- [52] U.S. Cl. 179/18 B; 179/6.17
- [58] Field of Search 179/18 B, 18 D, 18 DA,
179/5 P, 6.02, 6.17, 6.18, 6.09, 6.03, 6.01;
360/32, 12; 364/513.5, 513; 381/36, 51; 370/60,
61, 62

[56] References Cited

U.S. PATENT DOCUMENTS

2,385,968	10/1945	Deakin	179/6.07
2,868,880	1/1959	Celentano	179/6.07
2,998,480	8/1961	Riesz	179/6.02
3,141,931	7/1964	Zarouni	179/6.11
3,175,039	3/1965	Wilbourn, Jr.	179/7.1 TP
3,190,961	6/1965	Fitzpatrick et al.	179/6.02
3,226,478	12/1965	Martin et al.	179/6.11
3,286,033	11/1966	Lemelson	179/6.11
3,301,958	1/1967	Blakeslee et al.	179/6.02
3,400,378	9/1968	Smith et al.	340/870.11
3,403,383	9/1968	Kienzle et al.	370/61 X
3,445,601	5/1969	Whiteley et al.	179/6.02

FOREIGN PATENT DOCUMENTS

2412382	9/1975	Fed. Rep. of Germany	381/51
507854	4/1970	U.S.S.R.	179/6.07

OTHER PUBLICATIONS

Store & Forward Voice Switching, Report #145, International Resource Development Inc., Jan. 1980, pp. 45-56.

"New Custom Calling Services", Bergland et al., International Switching Symposium, Paris, May 11, 1979, pp. 1-7.

"New Custom Calling Services," Nacon and Worral, International Conference on Communications, Boston, Mass., Jun. 1979, pp. 1-5.

"Unified Communications Systems Serves Five Hospitals at Detroit Medical Center," Carl O. Haven, *Communications News*, Jan. 1976, pp. 49-51.

(List continued on next page.)

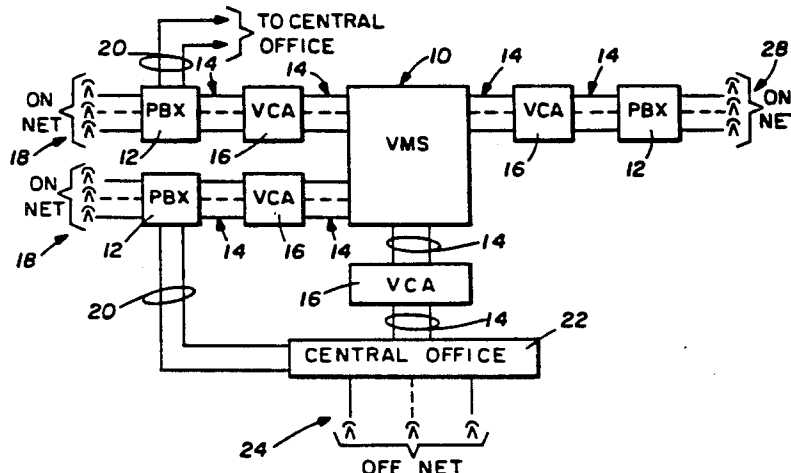
Primary Examiner—Thomas W. Brown

Attorney, Agent, or Firm—Jerry W. Mills; Gregory M. Howison

[57] **ABSTRACT**

An advanced electronic telecommunications system is provided for the deposit, storage and delivery of audio messages to both user and non-users with limited access provided to the non-user under the control of the user. A Voice Message System (10) interconnects multiple private exchanges (12) of a subscriber with a central telephone office (22). Individual subscriber users may access the Voice Message System (10) through ON NET telephones (18) or OFF NET telephones (24). Selected non-users may be allowed access through the OFF NET telephones (24), the scope of the access of the selected non-users being determined by a subscriber user. The Voice Message System (10) includes an administrative subsystem (60), call processor subsystem (62) and a data storage subsystem (64). The Voice Message System (10) enables the user to deposit a message in data storage subsystem (64) for automatic delivery to other addresses connected to the system. The user is also able to deposit a message in a receive-only portion of the data subsystem (60) for access by a selected non-user. The Voice Message System (10) also enables a user to access the system to determine if any messages have been in data storage subsystem (64) for him. Pre-recorded instructional messages are deposited in the data storage subsystem (64) for instructing a user or a selected non-user on their progress in using the system.

37 Claims, 71 Drawing Figures



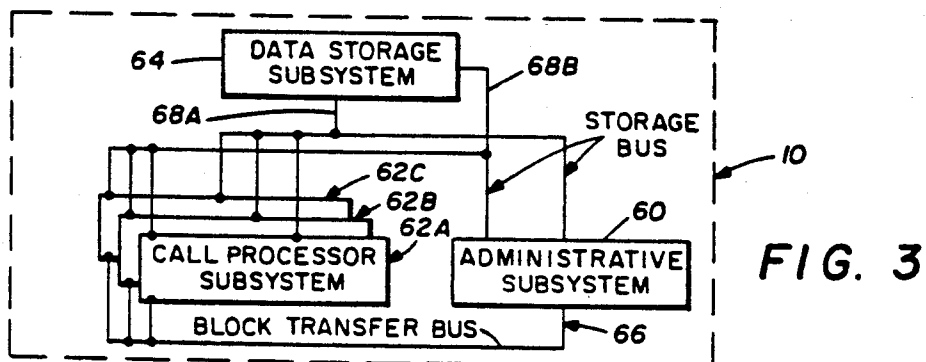
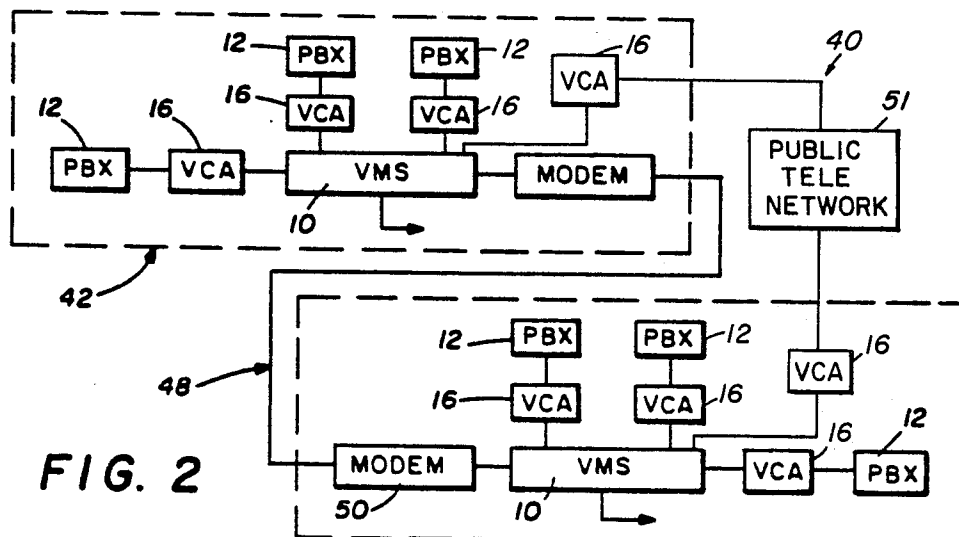
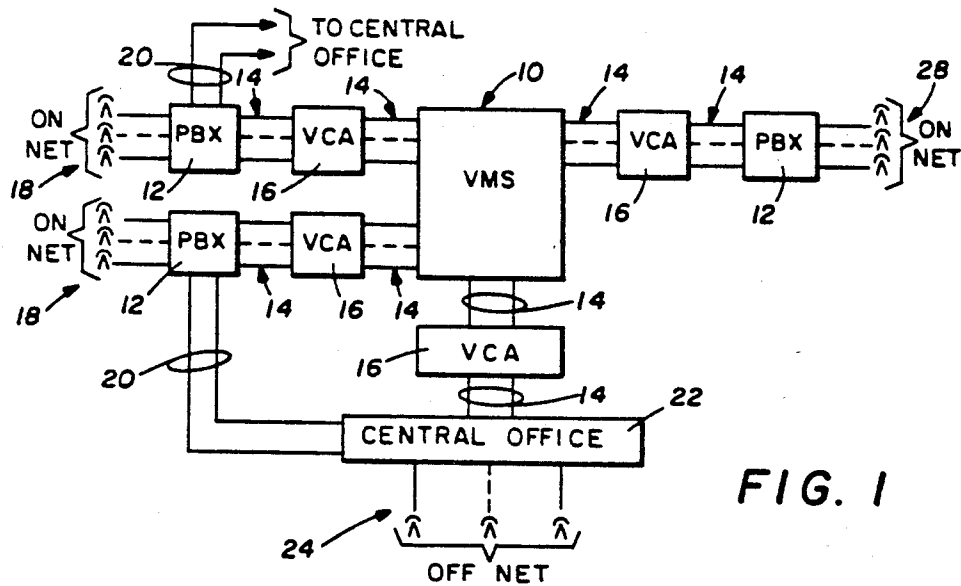
U.S. PATENT DOCUMENTS

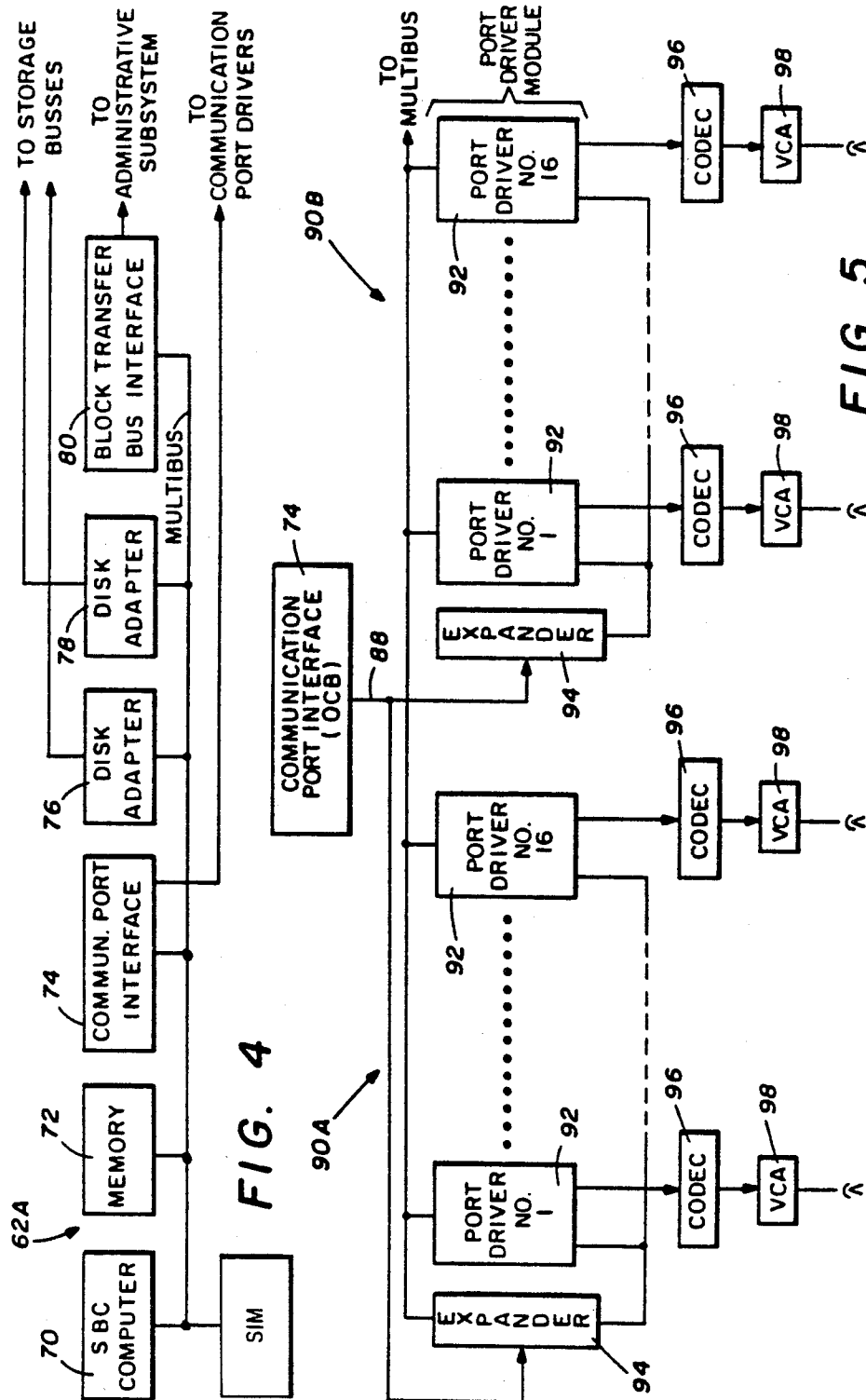
3,461,241 8/1969 Menke 179/5 P
 3,510,598 5/1970 Ballin et al. 179/18 BE
 3,538,257 11/1970 Wright, Jr. et al. 179/5 P
 3,595,999 7/1971 Cole 179/5 P X
 3,728,486 4/1973 Kraus 179/2 R
 3,780,227 12/1973 Pirnie, Jr. et al. 179/27 D X
 3,789,144 1/1974 Doyle 381/30
 3,894,188 7/1975 Konno 179/6.11
 3,925,622 12/1975 Robinson 179/18 BE
 3,934,095 1/1976 Matthews et al. 179/18 D
 3,938,091 2/1976 Atalla et al. 340/825.34
 3,976,840 8/1976 Cleveland et al. 179/2 DP
 3,987,247 10/1976 Fizer 179/2 A
 3,995,121 11/1976 Alvis 179/16 EA
 4,002,842 1/1977 Meyr et al. 370/86
 4,054,756 10/1977 Comella et al. 179/18 B
 4,068,099 1/1978 Mikkola et al. 370/62
 4,072,825 2/1978 McLay et al. 179/18 B
 4,072,986 2/1978 Heidergren 360/12
 4,114,139 9/1978 Boyd et al. 179/2 DP X
 4,121,052 10/1978 Richard 179/2 DP
 4,122,306 10/1978 Friedman et al. 179/6.06
 4,138,597 2/1979 Ashford 370/67
 4,140,876 2/1979 Gagnon 381/30
 4,144,582 3/1979 Hyatt 364/900
 4,154,988 5/1979 Fechalos et al. 179/18 B
 4,160,125 7/1979 Bower 179/18 B X
 4,188,507 2/1980 Meri et al. 179/6.02
 4,196,311 4/1980 Hoven 370/48
 4,218,738 8/1980 Matyas et al. 364/200
 4,221,933 9/1980 Cornell et al. 179/6.17
 4,229,624 10/1980 Haben et al. 179/18 E
 4,230,906 10/1980 Davis 381/38
 4,247,910 1/1981 Cornell et al. 364/900

4,255,618 3/1981 Danner et al. 364/513.5
 4,260,854 4/1981 Kolodny et al. 179/6.09
 4,270,027 5/1981 Agrawal et al. 179/81 R
 4,272,810 6/1981 Gates 364/900
 4,277,649 7/1981 Sheinbein 179/18 B
 4,371,751 2/1983 Hilligoss, Jr. et al. 179/5 R
 4,375,083 2/1983 Maxemchuk 364/900

OTHER PUBLICATIONS

"IBM Voice Storage Network Described," R. A. Frank, *Communications Weekly*, 1978.
 "Prospectives in Voice Response from Computers," Wm. D. Chapman, *Proceedings of International Conference on Communications*, San Francisco, Jun., 1970, pp. 45-1 to 8.
 "DMS-10 System Organization," Rushing & Totti, *Telesis* (Canada) 8/78, pp. 303-308.
 "Petition for Waiver of American Telephone & Telegraph Company," before the Federal Communications Commission, Mar. 20, 1981.
 "Reply Comments and Omnibus Motion of ECS Telecommunications, Inc. to Petition for Waiver of American Telephone & Telegraph Company" by Ray Bosing, 5/14/81.
 "Information Processing", *Business Week*, Jun. 9, 1980, pp. 80-82.
 "Voice Message Service," *ECS Telecommunications, Inc.* (1980).
 "The Voice Message Exchange," *Business Communications Review*, Jan.-Feb. 1981, pp. 37-40.





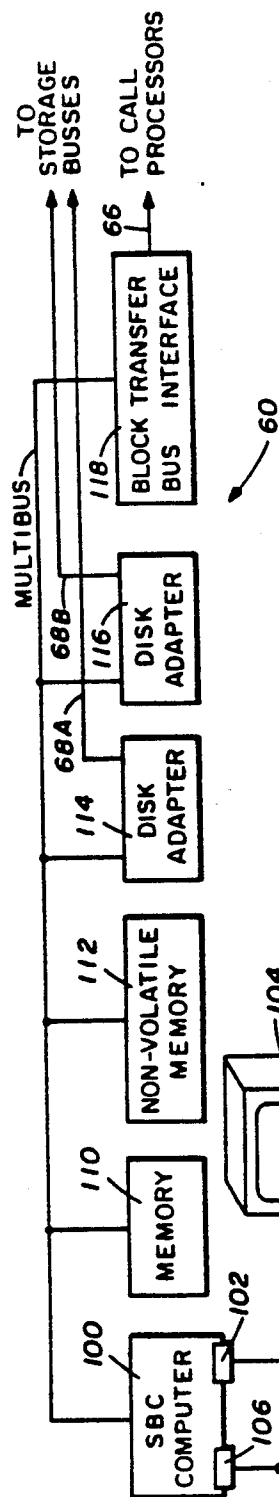


FIG. 6

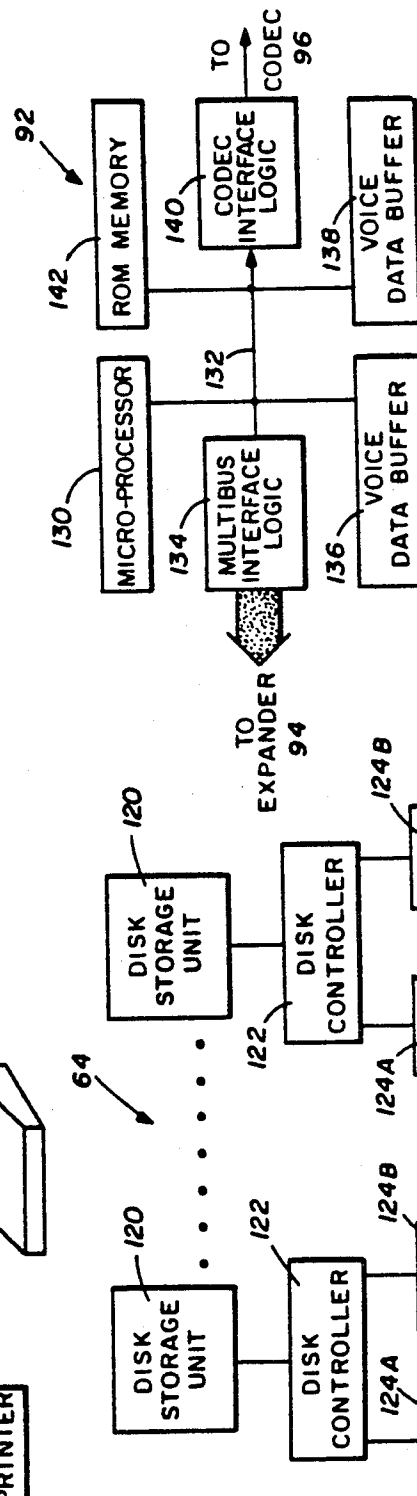
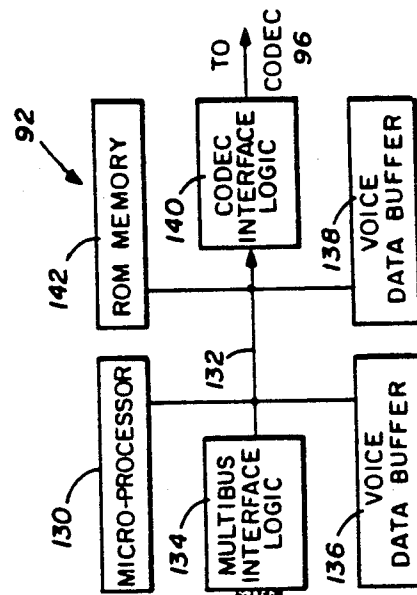


FIG. 7

FIG. 8



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.