



US005920616A

United States Patent [19] Hazenfield

[11] Patent Number: **5,920,616**
[45] Date of Patent: ***Jul. 6, 1999**

- [54] **ON-HOLD MESSAGING SYSTEM AND METHOD**
- [76] Inventor: **Joey C. Hazenfield**, 2677 Little Dry Run Rd., Cincinnati, Ohio 45244
- [*] Notice: This patent is subject to a terminal disclaimer.
- [21] Appl. No.: **08/893,296**
- [22] Filed: **Jul. 15, 1997**

Related U.S. Application Data

- [62] Division of application No. 07/999,592, Dec. 31, 1992, abandoned.
- [51] Int. Cl.⁶ **H04M 1/00**
- [52] U.S. Cl. **379/162; 379/90.01**
- [58] Field of Search 379/67, 88, 89, 379/201, 67.1, 88.07, 88.16, 88.22, 88.25, 88.28; 369/275.1, 275.2, 275.3

References Cited

U.S. PATENT DOCUMENTS

3,733,442	5/1973	Lee	379/162
3,794,774	2/1974	Kemmerly et al.	379/162
4,429,187	1/1984	Butcher	379/162
4,588,865	5/1986	Hestad	379/162
4,636,880	1/1987	Debell	360/72.3
4,656,660	4/1987	Nishimura et al.	379/162
4,860,338	8/1989	Waldman	379/72
4,891,835	1/1990	Leung et al.	379/73
5,003,587	3/1991	Forbes	379/162
5,091,635	2/1992	Akatsuka et al.	369/275.3
5,095,504	3/1992	Nishikawa et al.	379/162
5,131,031	7/1992	Waldman	379/162
5,148,418	9/1992	Tsurushima	369/32
5,218,590	6/1993	Miyasaka	369/54
5,321,740	6/1994	Gregorek et al.	379/67
5,552,896	9/1996	Yoshida	358/342

OTHER PUBLICATIONS

Yamaha YPDR—Professional Disc Recorder YPDR601/RC601—Operating Manual (Yamaha Corporation).

Primary Examiner—Scott L. Weaver

Attorney, Agent, or Firm—Roynance, Abrams, Berdo & Goodman, LLP

[57] ABSTRACT

An on-hold messaging system is provided for use with a business telephone system having an on-hold audio input. The system includes an optical disc having one or more messages recorded thereon, an optical disc player having an audio output, and a connection or interface between the audio output of the optical disc player and the on-hold input of the business telephone system. The optical disc player is enabled to continuously play the message or messages through the business telephone system, so that at least a portion of a message can be heard by an outside party when a telephone call between the outside party and a user of the business telephone system has been completed and the outside party is placed on hold by a user of the business telephone system. Optionally, an audio amplifier may be used as an interface between the optical disc player and the on-hold input of the business telephone system, so that the sound quality of the message as heard by the outside party is satisfactory. The optical disc preferably comprises a table of contents defining a plurality of tracks on the disc for containing messages, with the table of contents having been recorded on the disc before any messages were recorded thereon. This allows different messages to be recorded onto the optical disc during separate recording operations, so that the capacity of the on-hold messaging system can be changed without having to re-record old messages as in prior endless-loop tape systems. Methods for on-hold messaging, and methods for servicing on-hold messaging systems by recording new messages onto previously-recorded optical discs, are also disclosed.

23 Claims, 1 Drawing Sheet





