

US006157705A

United States Patent [19]

Perrone

[11] **Patent Number:** 6,157,705

[45] **Date of Patent:** Dec. 5, 2000

[54] VOICE CONTROL OF A SERVER [75] Inventor: Jeffrey Perrone, San Francisco, Calif. [73] Assignee: E*Trade Group, Inc., Palo Alto, Calif.

[21] Appl. No.: **08/985,565**

[22] Filed: Dec. 5, 1997

[51] Int. Cl.⁷ H04M 1/64

379/88.04, 88.17, 88.13; 705/36, 37, 39,

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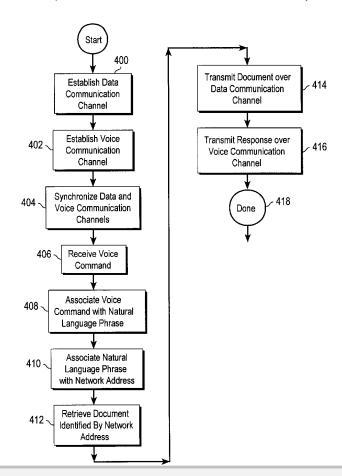
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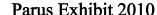
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[57] ABSTRACT

A method for controlling a server using voice is disclosed. In one embodiment, a client such as a Web browser is coupled over a data communication channel to a server. A telephone at the client side is connected to an interactive voice response (IVR) system that has a speech recognizer at the server side, over a separate, parallel voice communication channel. The IVR system has a control connection to the server. A table of associations between resource identifiers and network addresses is stored in association with the IVR system. A user at the client side establishes a data connection between the client and the server, and a voice connection between the telephone and the IVR system. Control software on the IVR system synchronizes an IVR session to a server session. The control software receives a spoken utterance over the voice communication channel, interprets the utterance to recognize a resource identifier in the utterance, and associates the resource identifier with a network address of a server resource. The IVR system commands the server to deliver the server resource identified by that network address to the client. Thus, the server delivers server resources in response to voice commands at the client side. In an alternate embodiment, the voice communication channel is integrated with the data communication channel. The invention also encompasses an apparatus, computer system, computer program product, and computer data signal configured to carry out the foregoing steps.

27 Claims, 12 Drawing Sheets







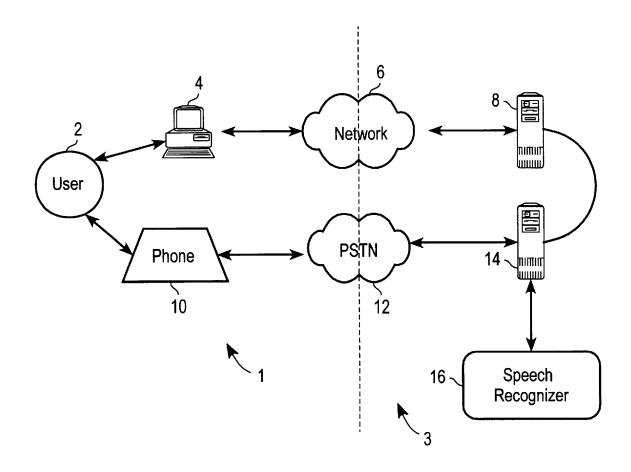


Fig. 1A

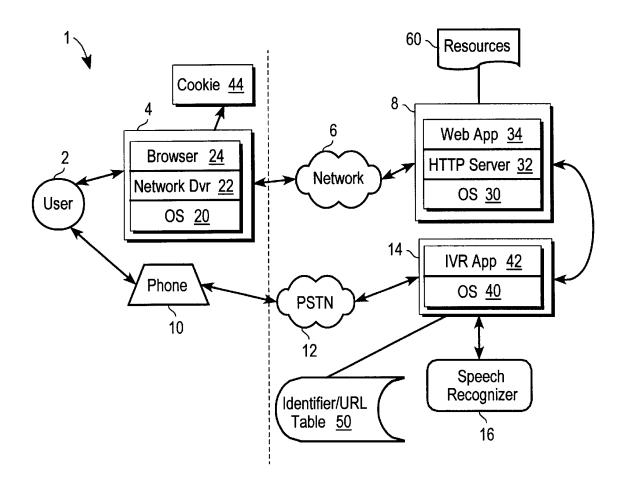
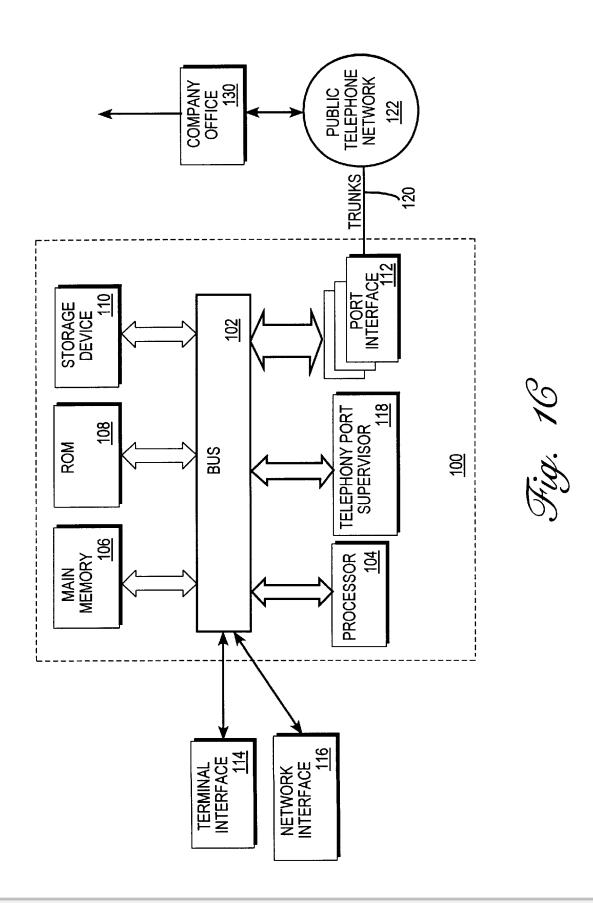


Fig. 1B





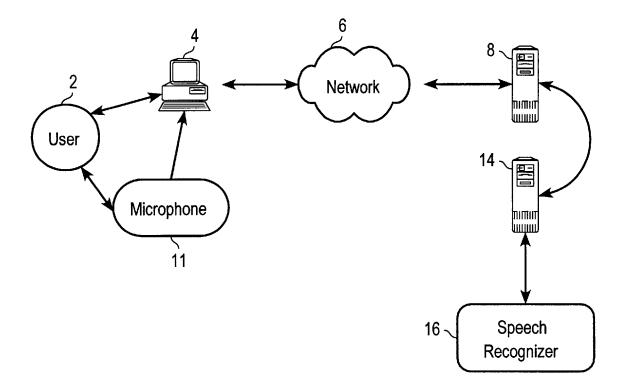


Fig. 2A

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