



US007539656B2

(12) **United States Patent**  
**Fratkina et al.**

(10) **Patent No.:** **US 7,539,656 B2**  
(45) **Date of Patent:** **May 26, 2009**

(54) **SYSTEM AND METHOD FOR PROVIDING AN INTELLIGENT MULTI-STEP DIALOG WITH A USER**

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(\* ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 1207 days.

(21) Appl. No.: **09/798,964**

(22) Filed: **Mar. 6, 2001**

(65) **Prior Publication Data**

US 2001/0049688 A1 Dec. 6, 2001

**Related U.S. Application Data**

(60) Provisional application No. 60/187,472, filed on Mar. 6, 2000.

(51) **Int. Cl.**  
**G06F 17/00** (2006.01)  
**G06F 17/30** (2006.01)  
**G06N 5/00** (2006.01)

(52) **U.S. Cl.** ..... **706/45; 707/3; 707/104.1**

(58) **Field of Classification Search** ..... **706/45**  
See application file for complete search history.

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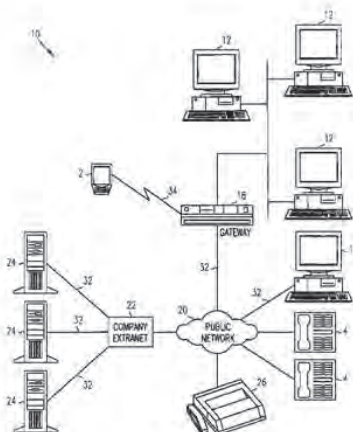
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(57) **ABSTRACT**

A method and system are disclosed for retrieving information through the use of a multi-stage interaction with a client to identify particular knowledge content associated with a knowledge map. The present invention is an application program running on a server accessed via the world-wide web or other data network using standard Internet protocols, a web browser and web server software. In addition to an automated portion, the present invention allows a human dialog designer to model the way the system elicits information, giving a human feel to the dialog and a better customer experience. In operation, users start a dialog by directing their web browser to a designated web page. This web page asks the user some initial questions that are then passed to a dialog engine. The dialog engine then applies its methods and algorithms to a knowledge map, using dialog control information and the user's responses to provide feedback to the user. The feedback may include follow-up questions, relevant documents, and instructions to the user (e.g., instructions to contact a human customer service representative). This dialog engine response is rendered as a web page and returned to the user's web browser. The user can then respond further to the follow-up questions he or she is presented, and the cycle repeats. The invention can be implemented so that it can interact with customers through a wide variety of communication channels including the Internet, wireless devices (e.g., telephone, pager, etc.), handheld devices such as a Personal Data Assistant (PDA), email, and via a telephone where the automated system is delivered using an interactive voice response (IVR) and/or speech-recognition system.

**15 Claims, 19 Drawing Sheets**



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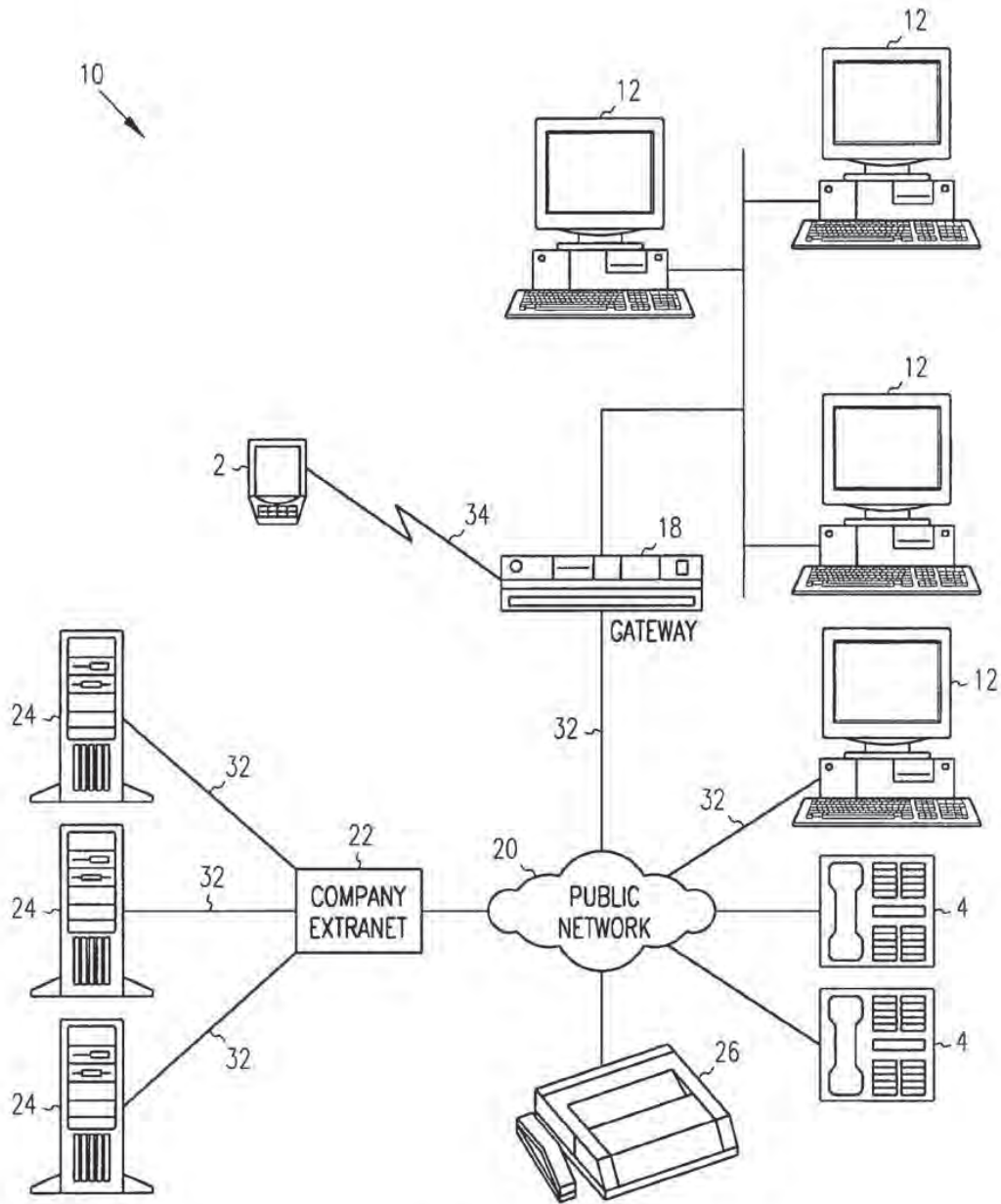


FIG. 1

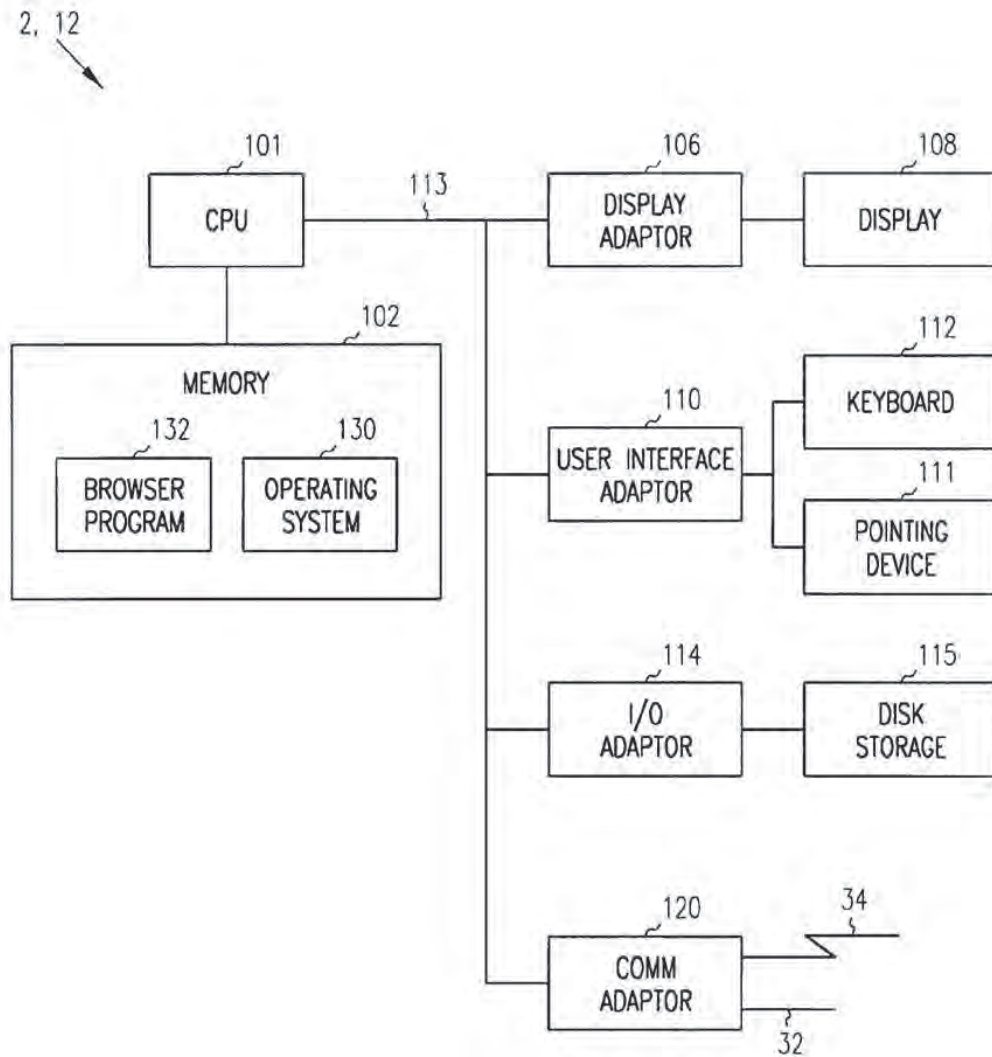


FIG. 2

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