

(19) **United States**

(12) **Patent Application Publication** (10) **Pub. No.: US 2003/0039340 A1**

Deshpande et al.

(43) **Pub. Date: Feb. 27, 2003**

(54) **ADAPTIVE INSTANT MESSAGING**

(21) Appl. No.: **09/938,778**

(75) Inventors: **Nikhil M. Deshpande**, Beaverton, OR (US); **Jay G. Gilbert**, Portland, OR (US); **Todd D. Harrison**, Beaverton, OR (US)

(22) Filed: **Aug. 24, 2001**

Publication Classification

(51) Int. Cl.7 **H04M 11/00**

(52) U.S. Cl. **379/88.16**

(57) **ABSTRACT**

A method, apparatus, and system for communicating an instant message where the destination of the instant message may select whether to receive the instant message as text or speech independent of the origin of the instant message.

Correspondence Address:

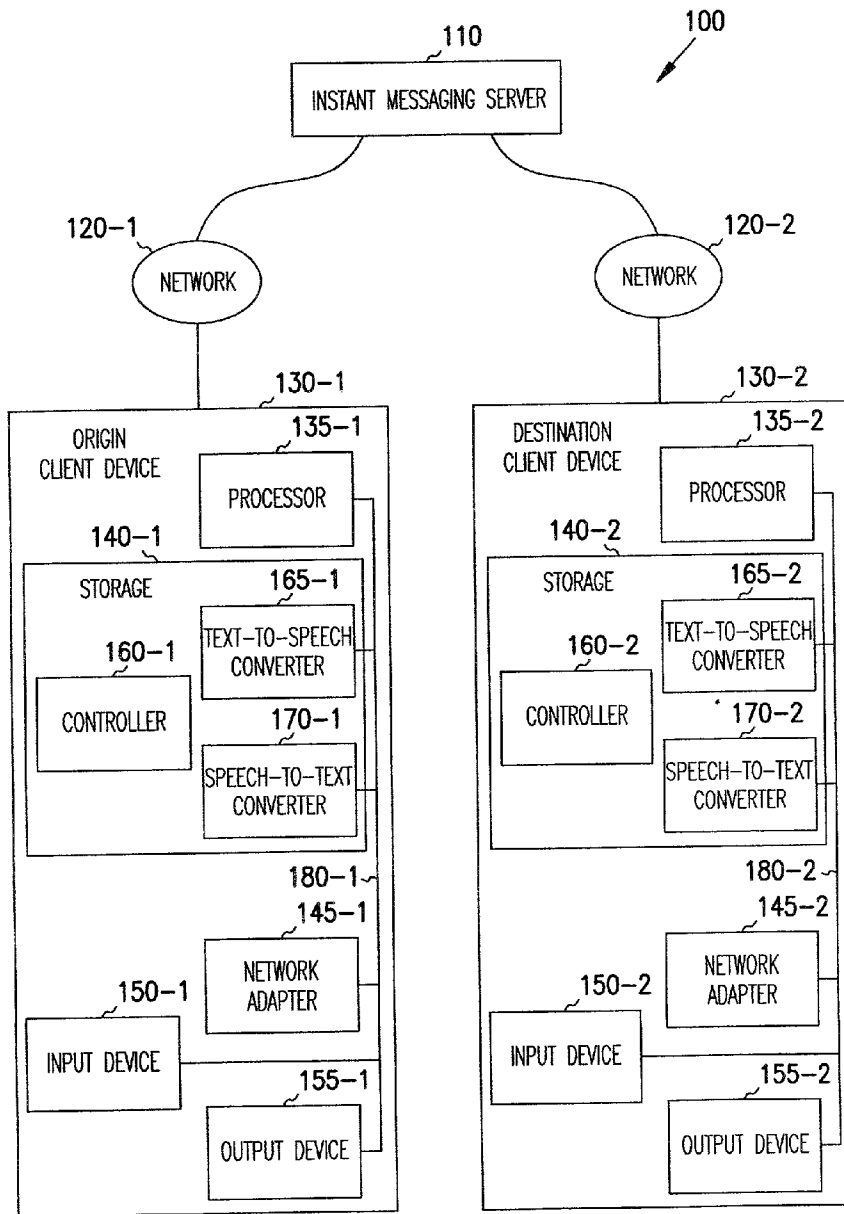
Schwegman, Lundberg,

Woessner & Kluth, P.A.

P.O. Box 2938

Minneapolis, MN 55402 (US)

(73) Assignee: **Intel Corporation**



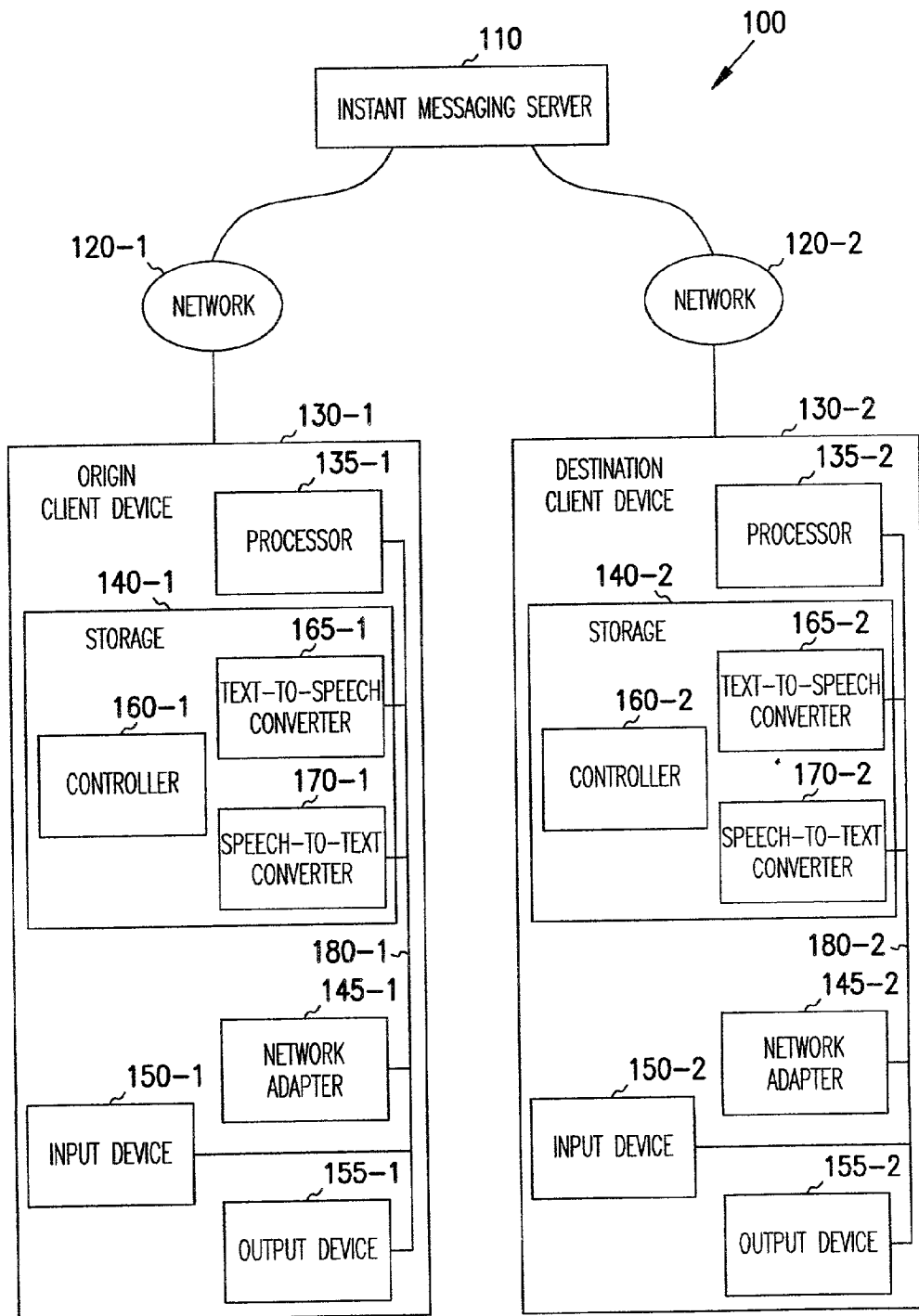


FIG. 1

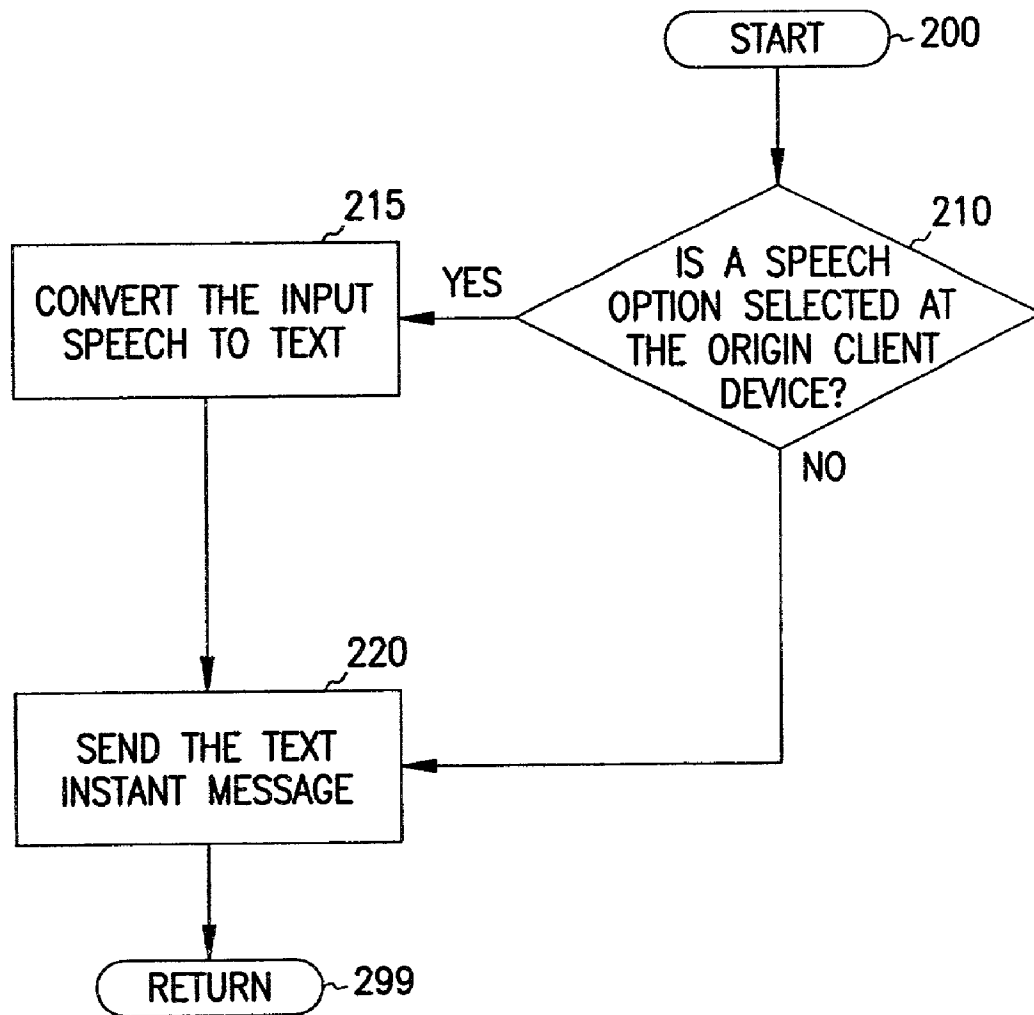


FIG. 2

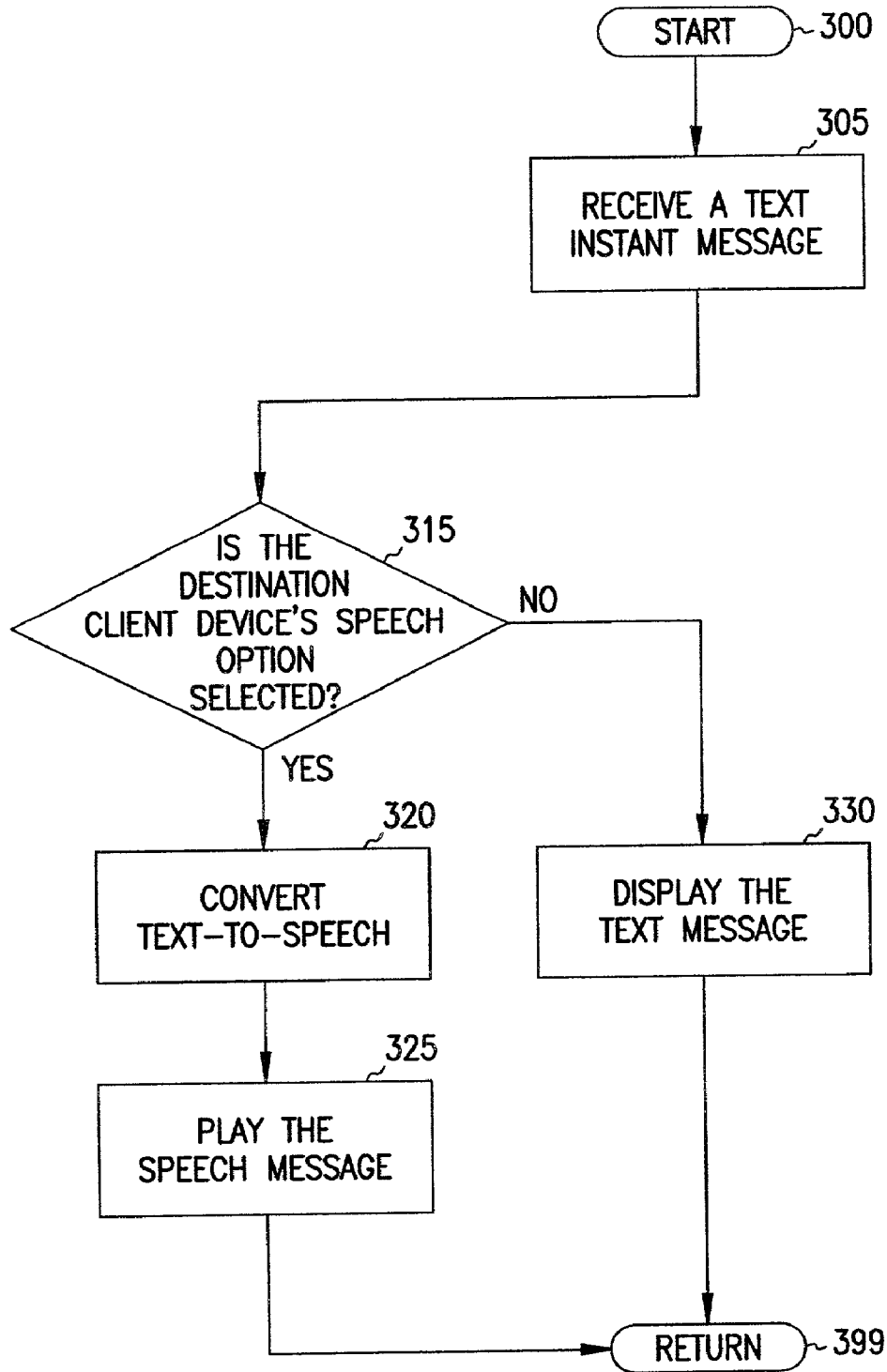


FIG. 3

ADAPTIVE INSTANT MESSAGING

FIELD

[0001] This invention relates generally to communication between computing devices and more particularly to instant messaging between computing devices in a network.

COPYRIGHT NOTICE/PERMISSION

[0002] A portion of the disclosure of this patent document contains material that is subject to copyright protection. The copyright owner has no objection to the facsimile reproduction by anyone of the patent document or the patent disclosure as it appears in the Patent and Trademark Office patent file or records, but otherwise reserves all copyright rights whatsoever. The following notice applies to the software and data as described below and in the drawings hereto: Copyright© Intel, Incorporated, 2001. All Rights Reserved.

BACKGROUND

[0003] When computer networks, such as the Internet, first began, users sent electronic mail (email) to each other. Email is passed between nodes in a network using a “store-and-forward” technique where an email is stored at a node in a network until a short-lived connection is established to the next node, at which time the email is passed along. Eventually, after traveling through possibly multiple nodes, the email arrives at the destination node.

[0004] But, users wanted a faster way to communicate more akin to talking, so now instant messaging services are available that deliver messages faster than email and allow text-based communication to occur in a rapid, conversational fashion. Whereas email is a store-and-forward system based on short-lived connections, recipients listening for instant messages remain connected to their server on a long-lived connection. This long-lived connection allows instant messages to be delivered in close to real time.

[0005] Another difference of some instant messaging systems from email systems is that instant messages are delivered to a recipient if the recipient is listening for messages and there are no obstacles to delivery. Otherwise, the message is dropped, and the sender is informed of the delivery failure. Thus, in some instant messaging systems, messages are not queued or saved.

[0006] A still further difference of instant messaging from email is that email is fundamentally built on one-way message passing, while instant messaging systems are typically built on request-reply pairs. Many instant messaging services also include a presence function, which enables the instant messaging system (and also other users) to know when a particular user is online.

[0007] Yet another difference of instant messaging from email is that many instant messaging services have the concept of presence information. That is, the instant messaging service and a user know when other users are connected. An example of an instant messaging service that does not have presence information is SMS (Short Message Service), which provides the capability to send short messages to mobile digital phones.

[0008] Users may send and receive instant messages from and to a wide variety of client computing devices. For

example, laptop or notebook computers, desktop computers, mainframe computers, handheld computers, and PDAs (Personal Digital Assistants) are a few of the possible client computing devices.

[0009] Also, users may operate the client devices in a wide variety of locations and circumstances. For example, one user might be in a meeting in a physical conference room and wish to have a side conversation via instant messaging without disturbing the other meeting participants. Another user might be alone in an automobile and wish to have hands-free operation of instant messaging, with no concern for the instant messages bothering others.

BRIEF DESCRIPTION OF THE DRAWINGS

[0010] FIG. 1 depicts a block diagram of an embodiment of the invention.

[0011] FIG. 2 depicts a flowchart of processing for a transmit instant-message function at an origin-client device, according to an embodiment of the invention.

[0012] FIG. 3 depicts a flowchart of processing for a receive instant-message function at a destination-client device, according to an embodiment of the invention.

DETAILED DESCRIPTION

[0013] In the following detailed description of exemplary embodiments of the invention, reference is made to the accompanying drawings (where like numbers represent like elements), which form a part hereof, and in which is shown by way of illustration specific exemplary embodiments in which the invention may be practiced. These embodiments are described in sufficient detail to enable those skilled in the art to practice the invention, but other embodiments may be utilized and logical, mechanical, electrical, and other changes may be made without departing from the scope of the present invention. The following detailed description is, therefore, not to be taken in a limiting sense, and the scope of the present invention is defined only by the appended claims.

[0014] In the following description, numerous specific details are set forth to provide a thorough understanding of the invention. However, it is understood that the invention may be practiced without these specific details. In other instances, well-known circuits, structures and techniques have not been shown in detail in order not to obscure the invention.

[0015] FIG. 1 depicts a block diagram of instant messaging system 100, according to an embodiment of the invention. Instant messaging system 100 includes instant-messaging server 110, networks 120-1 and 120-2, origin-client device 130-1, and destination-client device 130-2. Although two client devices (130-1 and 130-2) are shown, in other embodiments any number of client devices may be present.

[0016] Instant-messaging server 110 receives text messages across network 120-1 from origin-client devices, such as origin-client device 130-1, and forwards the text messages across network 120-2 to the appropriate destination-client device, such as destination-client device 130-2. Instant-messaging server 110 may be a server computer. Instant-messaging server 110 may use any suitable instant messaging functions. Examples of instant-messaging serv-

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.