United States Patent [19]

Goldman et al.

[54] METHOD AND SYSTEM FOR USER AUTHORIZATION OVER A MULTI-USER COMPUTER SYSTEM

- [75] Inventors: Jonathan Goldman, Menlo Park; Garry Saperstein, Sunnyvale, both of Calif.
- [73] Assignee: Synopsys, Inc., Mountain View, Calif.
- [21] Appl. No.: 619,892
- [22] Filed: Mar. 20, 1996
- [51] Int. Cl.⁶ G06F 11/00

3; 379/145

[56] References Cited

U.S. PATENT DOCUMENTS

Re. 34,95	54 5/1995	Haber et al 380/49
4,876,7	16 10/1989	Okamoto 380/21
5,136,64	42 8/1992	Kawamura et al 380/21
5,251,25	58 10/1993	Tanaka
5,261,03	52 11/1993	Shimamoto 395/200
5,398,28	85 3/1995	Borgelt et al 380/30
5,457,74	46 10/1995	Dolphin 380/4
5,465,30	00 11/1995	Altschuler et al 380/30
5,550,98	84 8/1996	Gelb 395/200.17
5,557,6	78 9/1996	Ganesan 380/21
5,598,4	70 1/1997	Cooper et al 380/4
5,598,53	36 1/1997	Slaughter, III et al 395/200.16
5,623,60	01 4/1997	Vu

OTHER PUBLICATIONS

Title: Secure Access to Data Over the Internet; Authors: Eric Bina et al.; pp. 99–102; Date: Sep. 1994.

Title: Dynamically Selecting Protocols for Socket Applications; Author: David M. Ogle et al.; pp. 48-57; Date: May 1993.

DOCKE

US005684951A

Patent Number:5,684,951Date of Patent:Nov. 4, 1997

Ari Lvotonen, Access Authorization Ovaview, Dec./1993, World Wide Web Document Chttp://www. w3:org/pub/ www/Access Authorization/Overview.html).

ABSTRACT

Primary Examiner—Robert W. Beausoliel, Jr. Assistant Examiner—Scott Baderman Attorney, Agent, or Firm—Wagner, Murabito & Hao

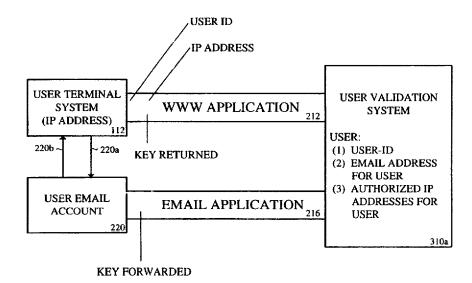
[57]

[11]

[45]

A method and system for performing user authorization in a multi-user computer system. The novel method has particular application to the multi-user internet protocol. Within the system, an application contains a list of registered users. For each registered user, the application stores a user identification, an email (electronic mail) address, and a database containing each authorized IP address for that user. When a user requests access to the application over the multi-user system, the application requires the user to input a user identification value and, simultaneously, the application accesses the user's current IP address (e.g., the user's internet domain address) over the multi-user system. The application attempts to validate the user identification, and if valid, the application examines its database to determine if the user is authorized for its current IP address. If so, access is permitted. If the user identification is valid but the current IP address is not authorized, the application determines a validation key ("key") based on the user identification and the current IP address. The pseudo unique key is then forwarded via the email protocol to the user's known email address. The user then is required to enter that key into the application to authorized the current IP address. Security is provided because (1) given a user identification, which can be stolen, the unauthorized user also needs to access the application using an authorized IP address and (2) email is used to transmit the keys to the user to a known user email address.

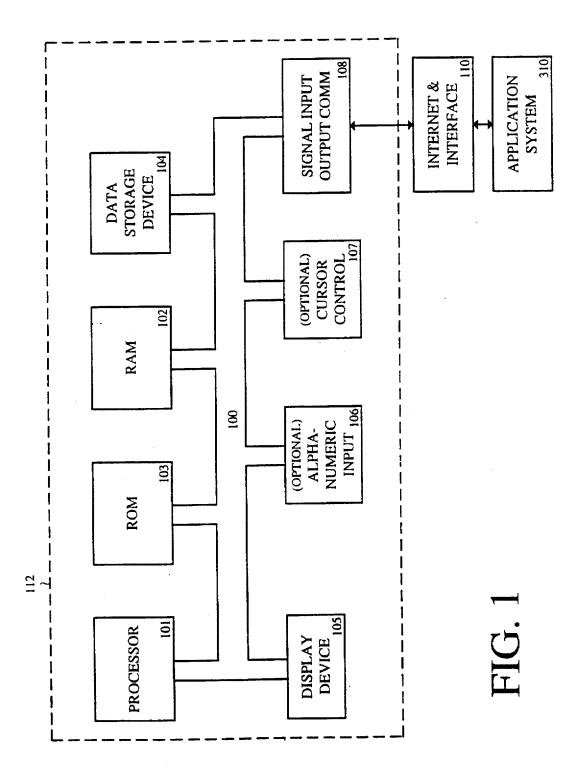
21 Claims, 12 Drawing Sheets



Find authenticated court documents without watermarks at docketalarm.com.

)

Δ



CKET A R M Find authenticated court documents without watermarks at <u>docketalarm.com</u>.

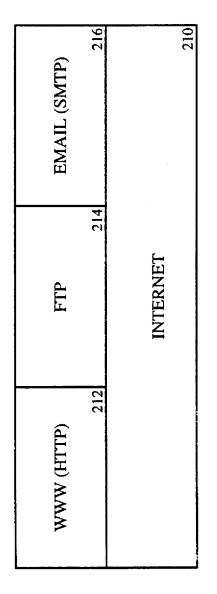


FIG. 2

0

D

Α

Find authenticated court documents without watermarks at <u>docketalarm.com</u>.

Δ

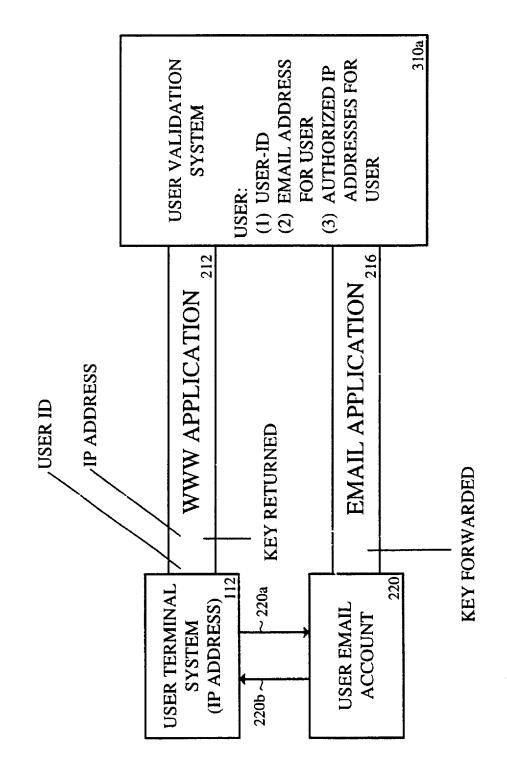


FIG. 3A

EXAMPLE A R M Find authenticated court documents without watermarks at <u>docketalarm.com</u>.

Δ

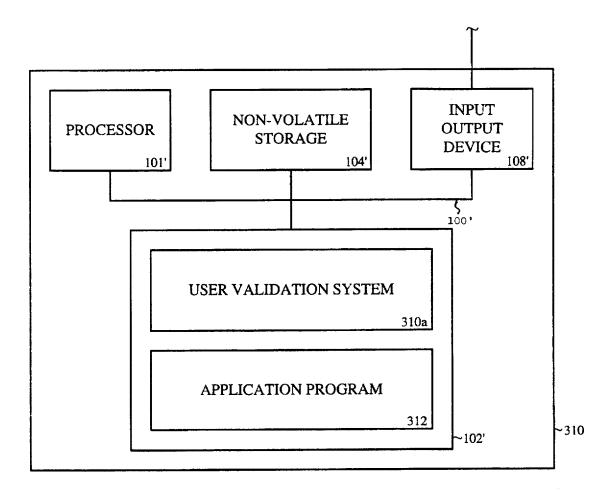


FIG. 3B

DOCKET Find authenticated court documents without watermarks at docketalarm.com.

DOCKET A L A R M



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.