

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

(10) **Patent No.:** **US 6,574,328 B1**
 (45) **Date of Patent:** ***Jun. 3, 2003**

(54) **TELEPHONE CALL CONTROL SYSTEM FOR THE PUBLIC SWITCHED TELEPHONE NETWORK**

6,078,581 A 6/2000 Shtivelman et al. 370/352
 6,104,800 A 8/2000 Benson 379/215
 6,259,692 B1 7/2001 Shtivelman et al. 370/355

(75) Inventors: **Samuel F. Wood**, Los Altos Hills, CA (US); **Margaret Susan Asprey**, Los Altos, CA (US); **Jerry A. Klein**, Los Altos, CA (US)

FOREIGN PATENT DOCUMENTS

EP 0 738 093 10/1996 H04Q/3/00
 EP 0 898 431 2/1999 H04Q/3/00

(73) Assignee: **Telemaze, Inc.**, Los Altos, CA (US)

OTHER PUBLICATIONS

ADC Telecommunications; *SS7 NewNet SS7 Tutorial*; © Copyright 1999.

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

* cited by examiner

This patent is subject to a terminal disclaimer.

Primary Examiner—Ahmad F. Matar
Assistant Examiner—Rasha AL-Aubaidi
 (74) *Attorney, Agent, or Firm*—Patent Law Group LLP; Brian D. Ogonowsky

(21) Appl. No.: **09/565,565**

(57) **ABSTRACT**

(22) Filed: **May 4, 2000**

In one embodiment, the system includes a processor (referred to herein as a tandem access controller) connected to the PSTN which would allow anyone to directly provision, that is to say set-up and make immediate changes to, the configuration of his or her phone line. In another embodiment, a tandem access controller (TAC) subsystem is connected internally to the PSTN in a local service area. The TAC provides features, selected by the subscriber, to all edge switches connected to the PSTN tandem switch. In one embodiment, the TAC is controlled by the subscriber using the web.

(51) **Int. Cl.⁷** **H04M 7/00**

(52) **U.S. Cl.** **379/224; 379/221.08; 379/221.11**

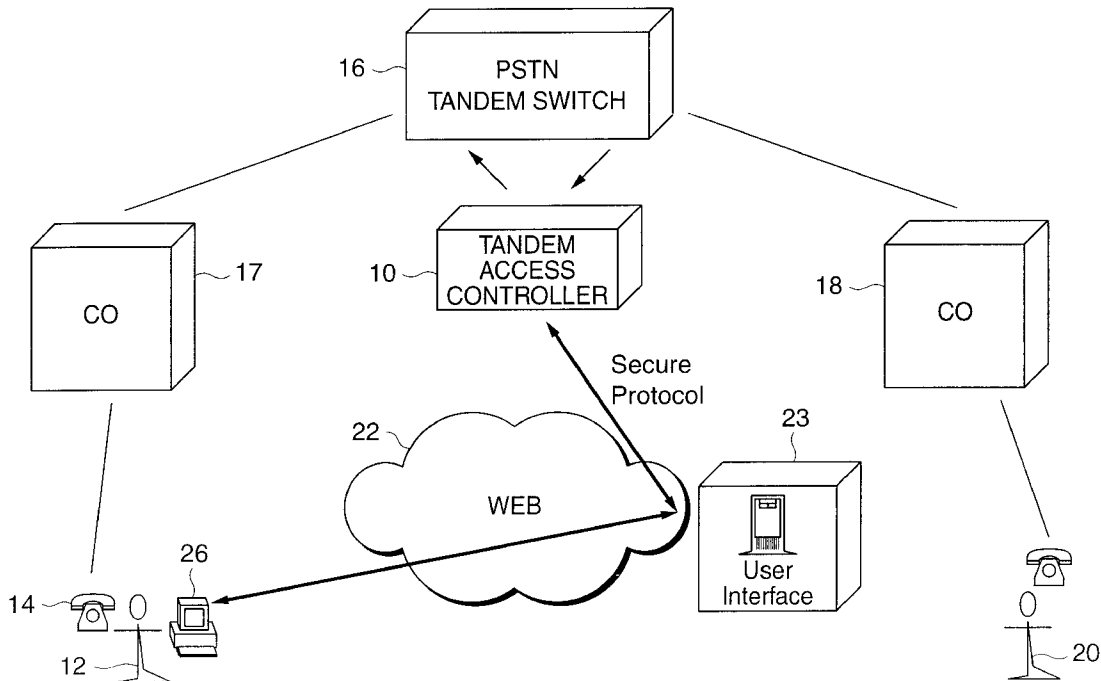
(58) **Field of Search** **379/224, 221.08, 379/221.11**

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,566,236 A * 10/1996 MeLampy et al. 379/210.01
 6,028,917 A 2/2000 Creamer et al. 379/100.01
 6,031,836 A * 2/2000 Haserodt 370/389

8 Claims, 9 Drawing Sheets



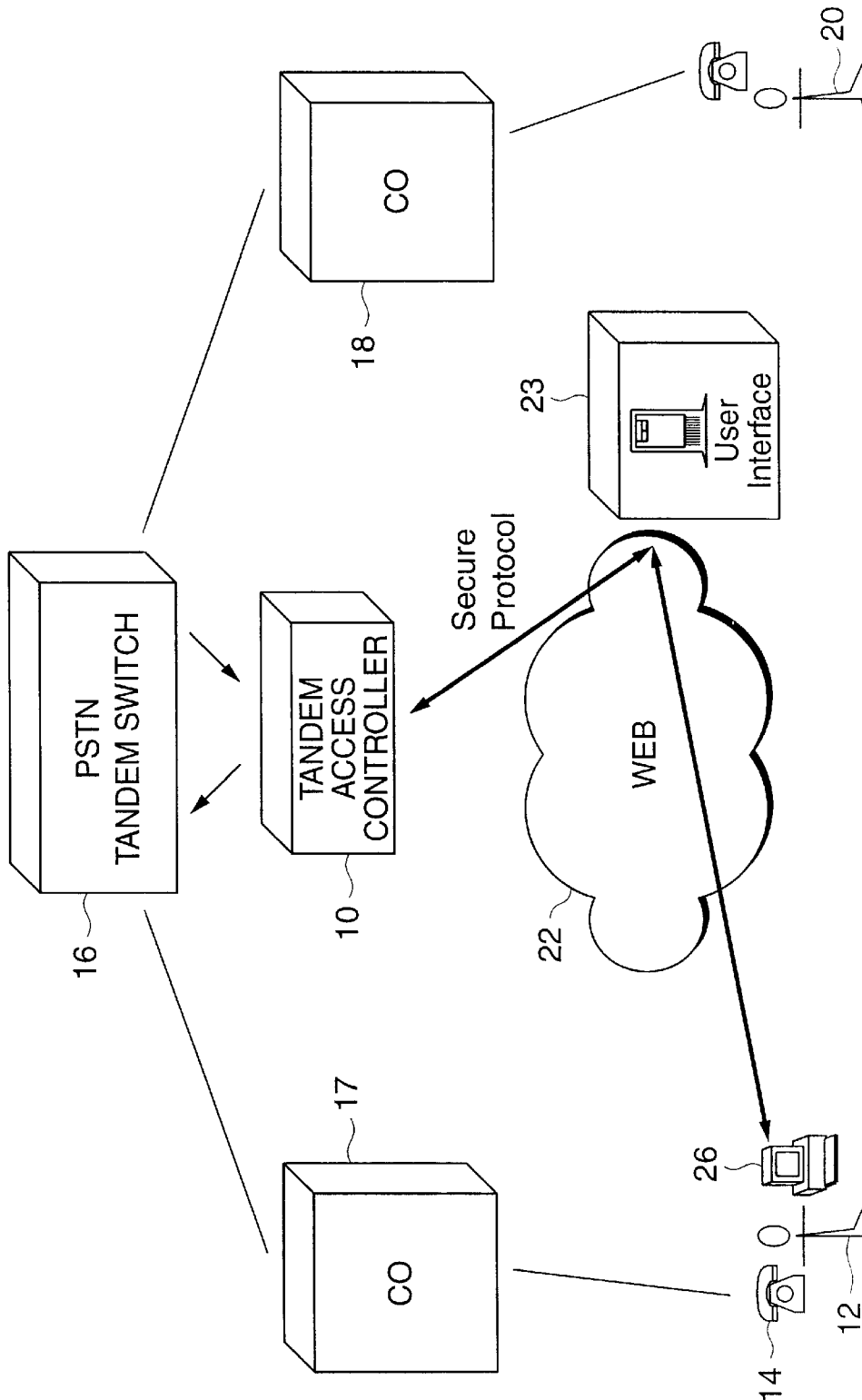


FIG. 1

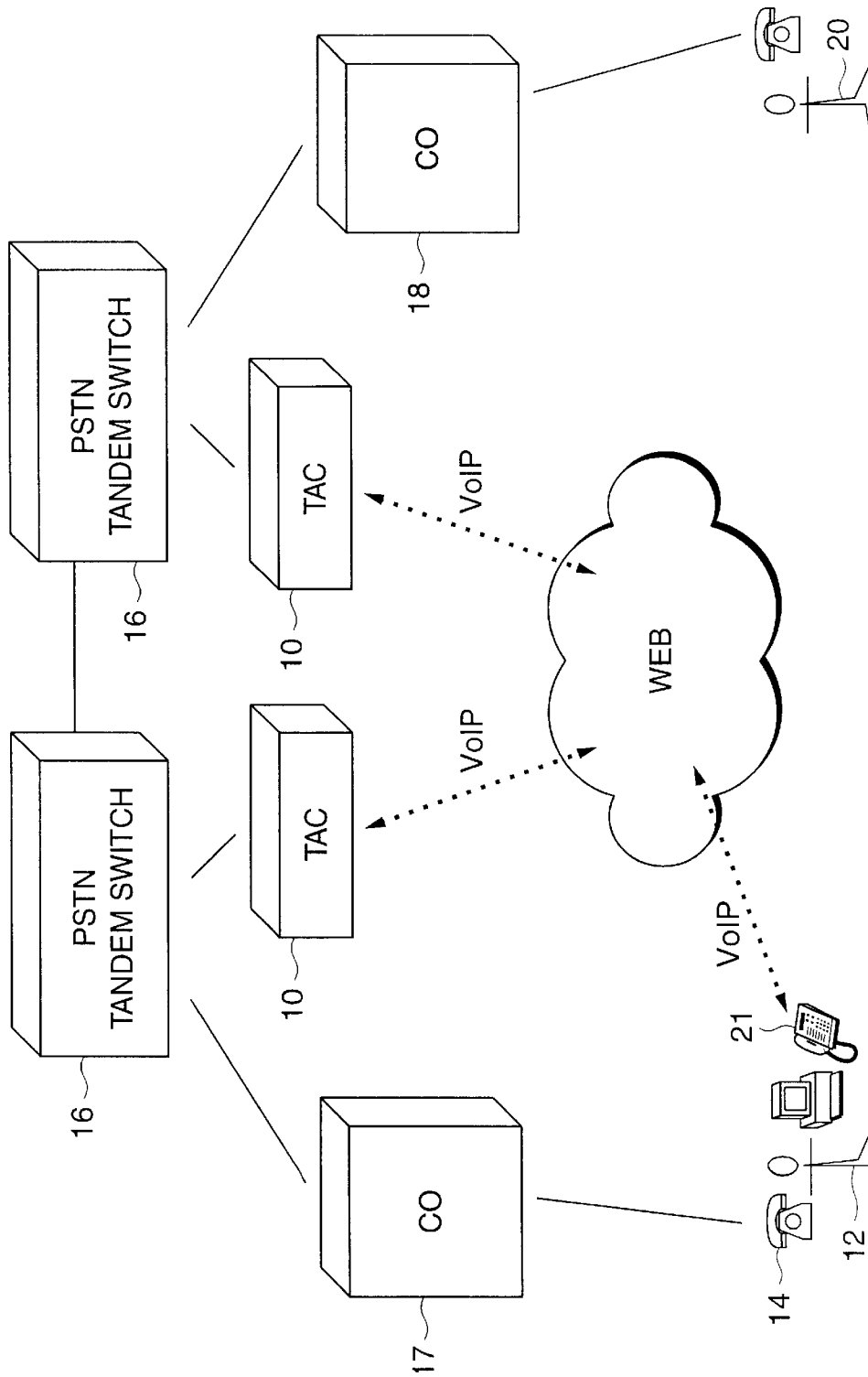
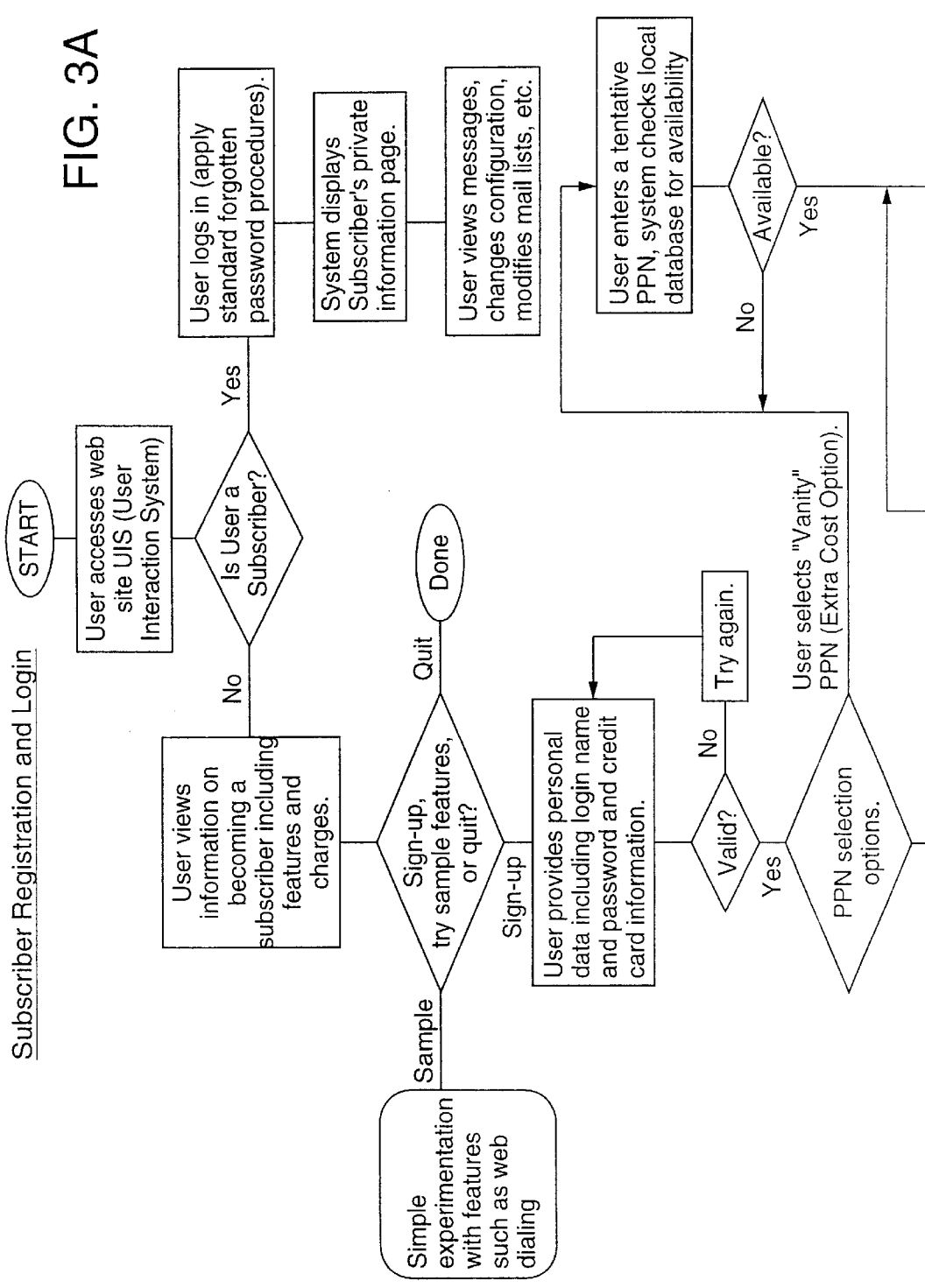
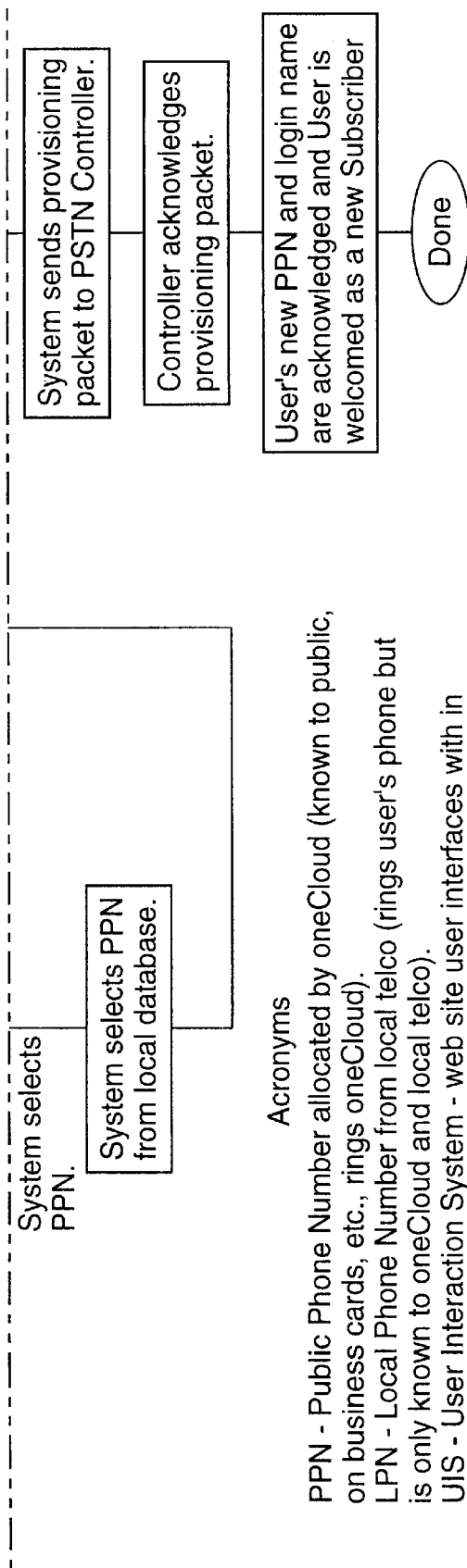


FIG. 2

Subscriber Registration and Login

FIG. 3A





Acronyms

- PPN - Public Phone Number allocated by oneCloud (known to public, on business cards, etc., rings oneCloud).
- LPN - Local Phone Number from local telco (rings user's phone but is only known to oneCloud and local telco).
- UIS - User Interaction System - web site user interfaces with in order to control phone features.
- TAC - Tandem Acces Controller - System that directly accesses the PSTN.

| |
|---------|
| FIG. 3A |
| FIG. 3B |

FIG. 3

FIG. 3B

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.