

US006798767B1

(12) United States Patent

Alexander et al.

(54) SYSTEM AND METHOD FOR GENERATING MULTIPLE LINE APPEARANCES IN A COMMUNICATION NETWORK

- (75) Inventors: John D. Alexander, Plano, TX (US); Kenneth P. Pruski, Plano, TX (US); Michael H. Mcclung, Alexandria, VA (US)
- (73) Assignce: Cisco Technology, Inc., San Jose, CA (US)
- (*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.
- (21) Appl. No.: 09/442,161
- (22) Filed: Nov. 16, 1999
- (51) Int. Cl.⁷ H04L 12/66

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,876,707 A		10/1989	Hashimoto
5,742,905 A	*	4/1998	Pepe et al 455/461
5,809,128 A	*	9/1998	McMullin 379/215.01
5,862,207 A		1/1999	Aoshima
5,963,864 A	*	10/1999	O'Neil et al 455/445
6,282,275 B1	*	8/2001	Gurbani et al 379/142.06
6,304,565 B1	*	10/2001	Ramamurthy 370/352

(10) Patent No.: US 6,798,767 B1 (45) Date of Patent: Sep. 28, 2004

6,327,267 B1 * 12/2	2001 Valentine et al
6,327,358 B1 * 12/2	2001 March et al 379/221.01
6,359,892 B1 3/2	2002 Szlam
6,421,339 B1 7/2	2002 Thomas
6,421,437 B1 * 7/2	2002 Slutsman 379/201.02
6,445,682 B1 9/2	2002 Weitz
6,445,694 B1 9/2	2002 Swartz
6,449,269 B1 9/2	2002 Edholm
6,453,034 B1 * 9/2	2002 Donovan et al 379/220.01
6,480,484 B2 * 11/2	2002 Morton 370/352
6,515,997 B1 * 2/2	2003 Feltner et al 370/401
6,519,252 B2 2/2	2003 Salberg
6,526,033 B1 2/2	2003 Wang et al.
6,532,286 B1 3/2	2003 Burg

OTHER PUBLICATIONS

Cisco Systems, Inc.; "System Description for the Cisco Communications Network Version 2.1;" Cisco Communications Network; all, 1997.

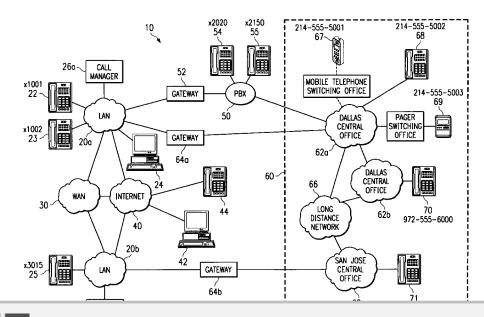
* cited by examiner

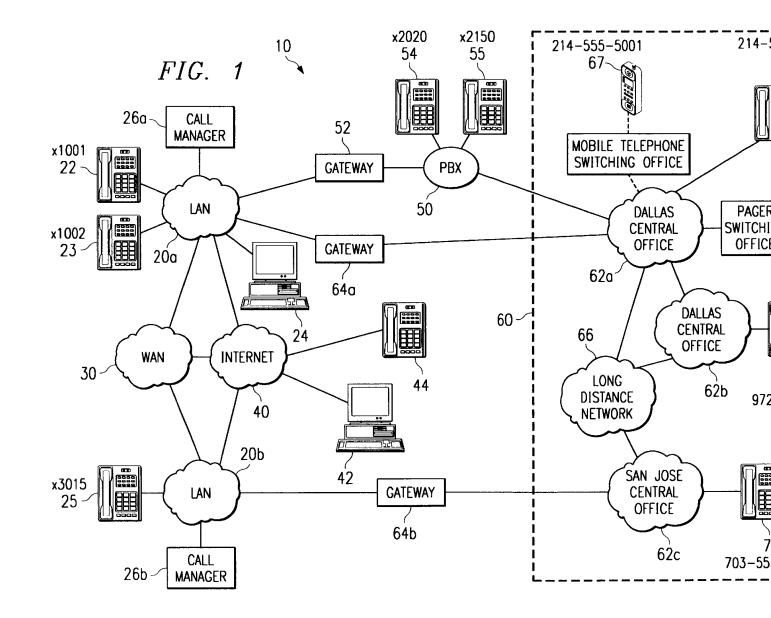
Primary Examiner—Bob A. Phunkijlh (74) Attorney, Agent, or Firm—Baker Botts L.L.P.

(57) ABSTRACT

A communication system includes a communication network, and an originating telephony device, a target telephony device, and a call manager coupled to the communication network. The call manager signals the target telephony device to indicate an incoming call from the originating telephony device. The call manager includes an alternate number list that identifies at least one alternate telephony device to be signaled in response to an incoming call directed to the target telephony device. The call manager additionally includes one or more mapping tables associating a network address with each identified alternate telephony device.

34 Claims, 5 Drawing Sheets





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

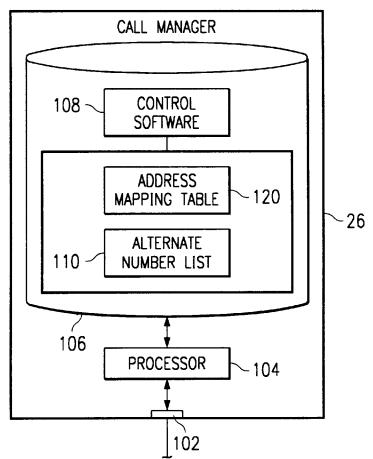
OCKFT

A

RM

Α

FIG. 2





	ALTERNATE NUMBER	RING DELAY TIME	
112	1002	0	Î
	2150	0	
	214-555-5001	3	
	3015	3	
	214-555-5003	7	

Find authenticated court documents without watermarks at docketalarm.com.

DOCKET

Δ

FIG. 4A +

	PHONE NUMBER	DEVICE/GROUP NAME	
122	1001	PHONE1	
	1002	PHONE2	
	1002	PHONE3	
	2000-2999	PBXGATEWAY	
	214-555-5001	GATEWAYGROUP1	12
	214-555-5002	GATEWAYGROUP1	
	214-555-5003	GATEWAYGROUP1	
	972-555-6000	GATEWAY5	
	3015	PHONE25	
	703-XXX-XXXX	GATEWAYGROUP2	
•			-

23

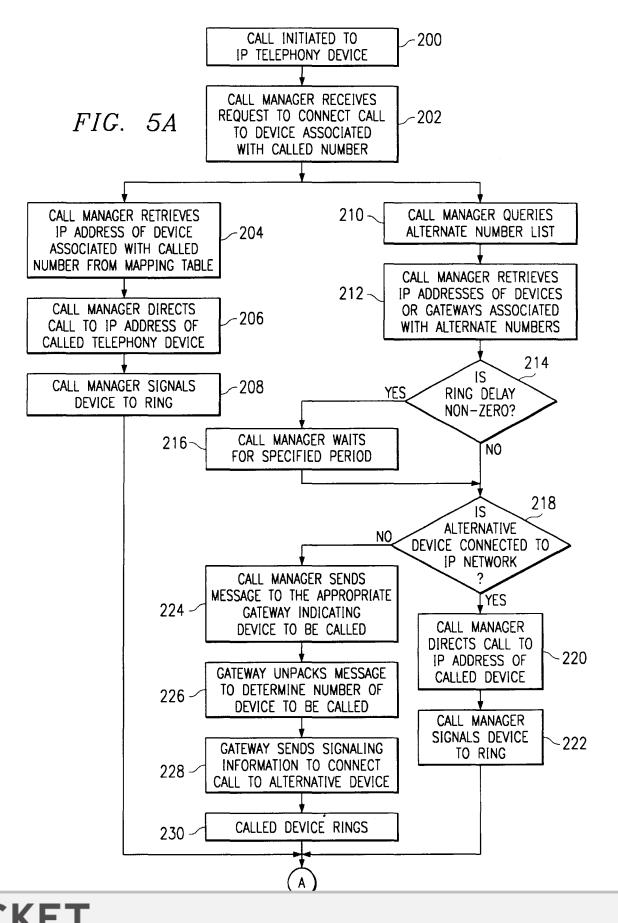
FIG. 4B

			_
	DEVICE NAME	IP ADDRESS]
123	PHONE1	150.100.30.1	
	PHONE2	150.100.30.2	
	PBXGATEWAY	150.100.30.50	
	GATEWAY1	150.100.30.55	
	GATEWAY2	150.100.30.56]
	GATEWAY3	150.100.30.57]['24
	GATEWAY5	150.100.30.58]
	PHONE25	150.200.70.15]
	GATEWAY10	150.200.70.50	
	GATEWAY11	150.200.70.51	

Δ

R

Μ



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.