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

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221.09; 455/445, 461

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(51) Int. Cl.⁷ H04L 12/66

(56) References Cited

U.S. PATENT DOCUMENTS

4,876,707 5,742,905 5,809,128 5,862,207 5,963,864	A A A	4/1998 9/1998 1/1999	
			O'Neil et al
			Ramamurthy 370/352

6,327,267 B1 * 12/2001	Valentine et al 370/466
6,327,358 B1 * 12/2001	March et al 379/221.01
6,359,892 B1 3/2002	. Szlam
6,421,339 B1 7/2002	Thomas
6,421,437 B1 * 7/2002	Slutsman 379/201.02
6,445,682 B1 9/2002	. Weitz
6,445,694 B1 9/2002	Swartz
6,449,269 B1 9/2002	: Edholm
6,453,034 B1 * 9/2002	2 Donovan et al 379/220.01
6,480,484 B2 * 11/2002	Morton 370/352
6,515,997 B1 * 2/2003	Feltner et al 370/401
6,519,252 B2 2/2003	Salberg
6,526,033 B1 2/2003	Wang et al.
6,532,286 B1 3/2003	Burg

OTHER PUBLICATIONS

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

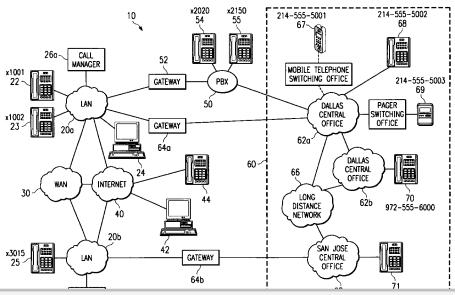
* cited by examiner

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(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





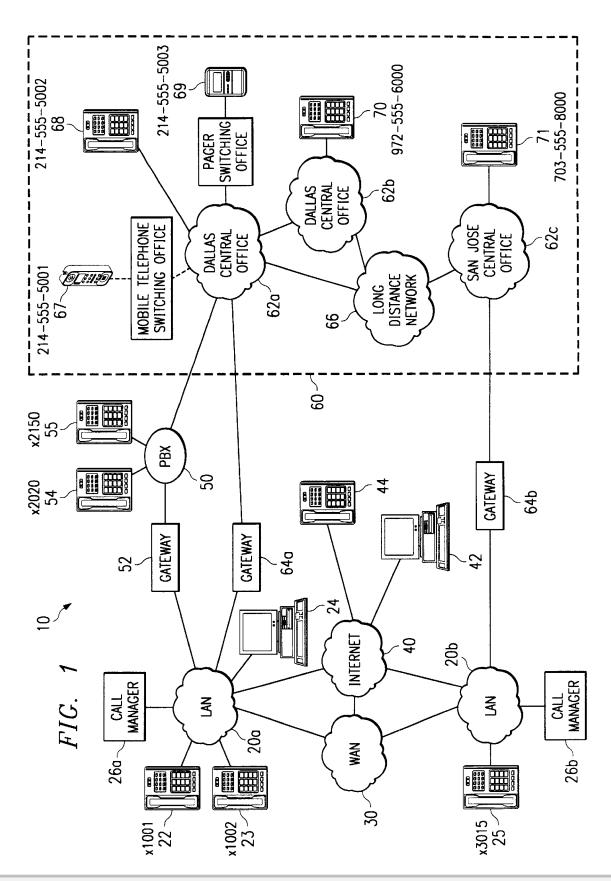
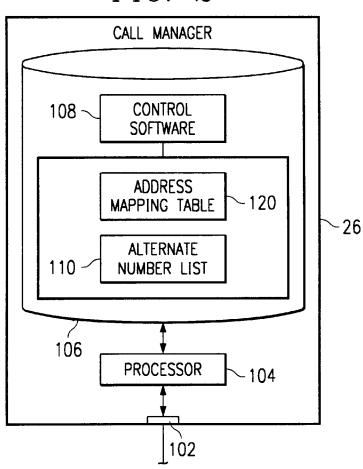




FIG. 2



110 FIG. 3

	ALTERNATE NUMBER	RING DELAY TIME	
112 {	1002	0	
	2150	0	114
	214-555-5001	3	
	3015	3	
	214-555-5003	7	



FIG. 4A 120a

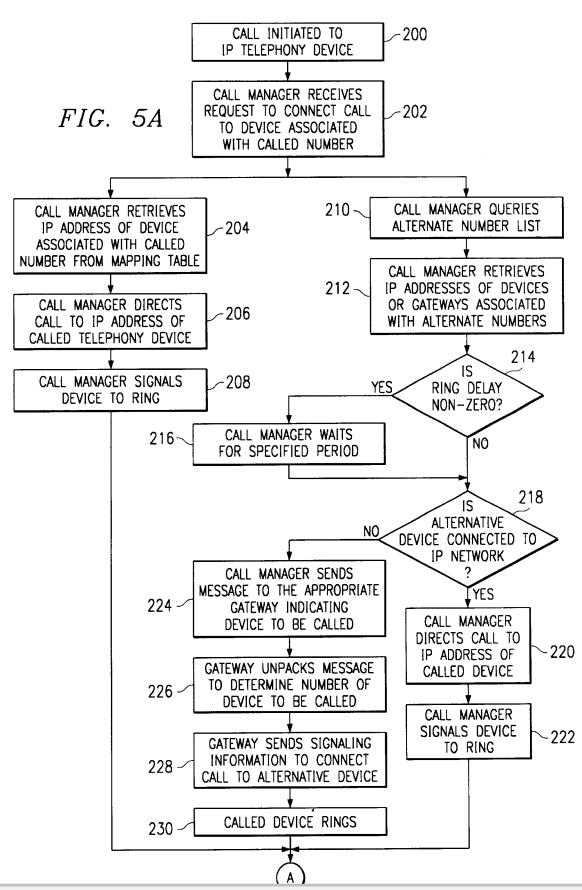
	•	,	
	PHONE NUMBER	DEVICE/GROUP NAME	_
122	1001	PHONE1	
	1002	PHONE2	
	1002	PHONE3	
	2000-2999	PBXGATEWAY	
	214-555-5001	GATEWAYGROUP1	123
	214-555-5002	GATEWAYGROUP1	123
	214-555-5003	GATEWAYGROUP1	
	972-555-6000	GATEWAY5	
	3015	PHONE25	
	703-XXX-XXXX	GATEWAYGROUP2	
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FIG. 4B 120b

	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	124
	GATEWAY5	150.100.30.58	
	PHONE25	150.200.70.15	
	GATEWAY10	150.200.70.50	
	GATEWAY11	150.200.70.51	



Sep. 28, 2004





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