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**Alexander et al.**

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

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(52) **U.S. Cl.** ..... **370/352**; 370/401; 379/93.01;  
379/211.02; 379/221.01; 455/445

(58) **Field of Search** ..... 370/352, 353,  
370/354, 355, 356, 389, 400, 401, 522;  
379/88.17, 93.01, 207.02, 207.03, 207.04,  
207.08, 207.09, 211.01, 211.03, 211.04,  
212.01, 220.01, 221.01, 221.02, 221.08,  
221.09; 455/445, 461

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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**

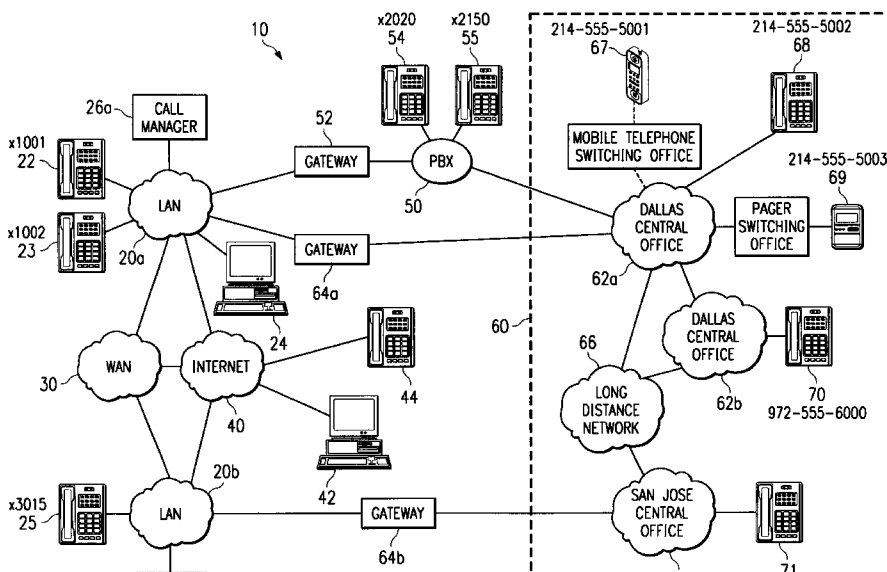


FIG. 1

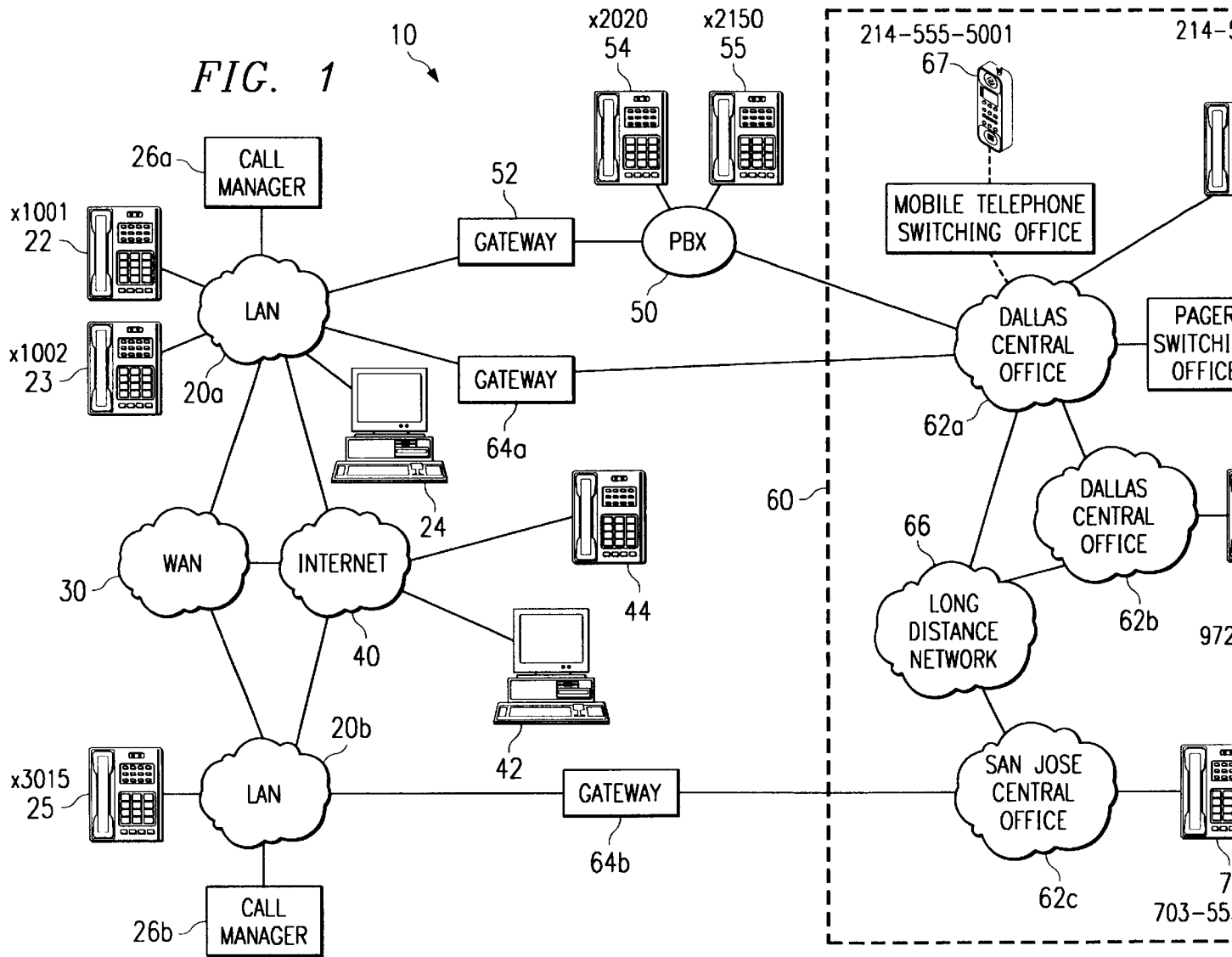
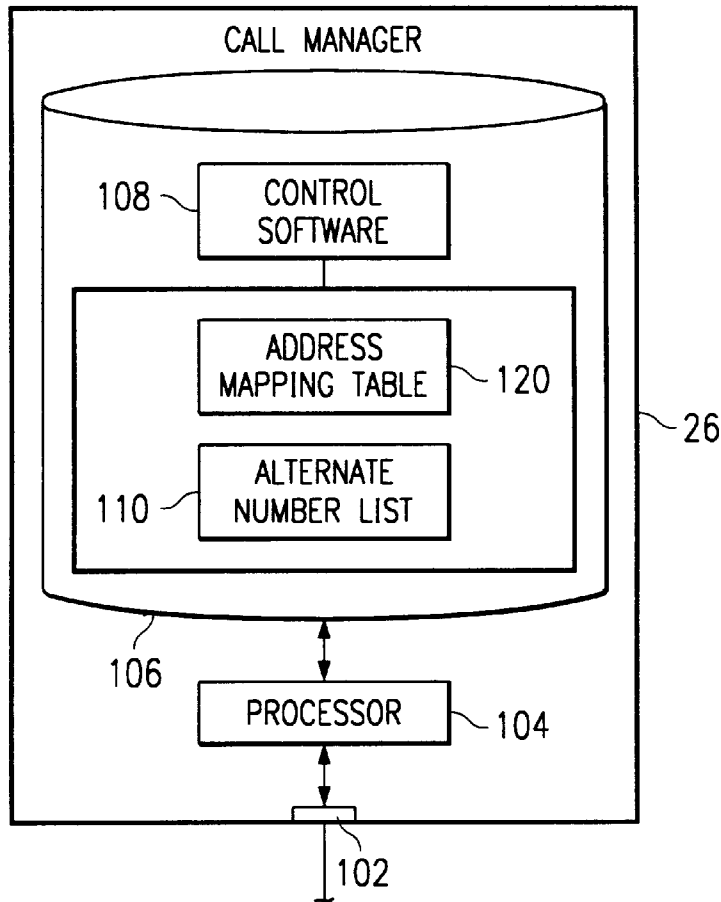


FIG. 2



110  
FIG. 3

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

112

114

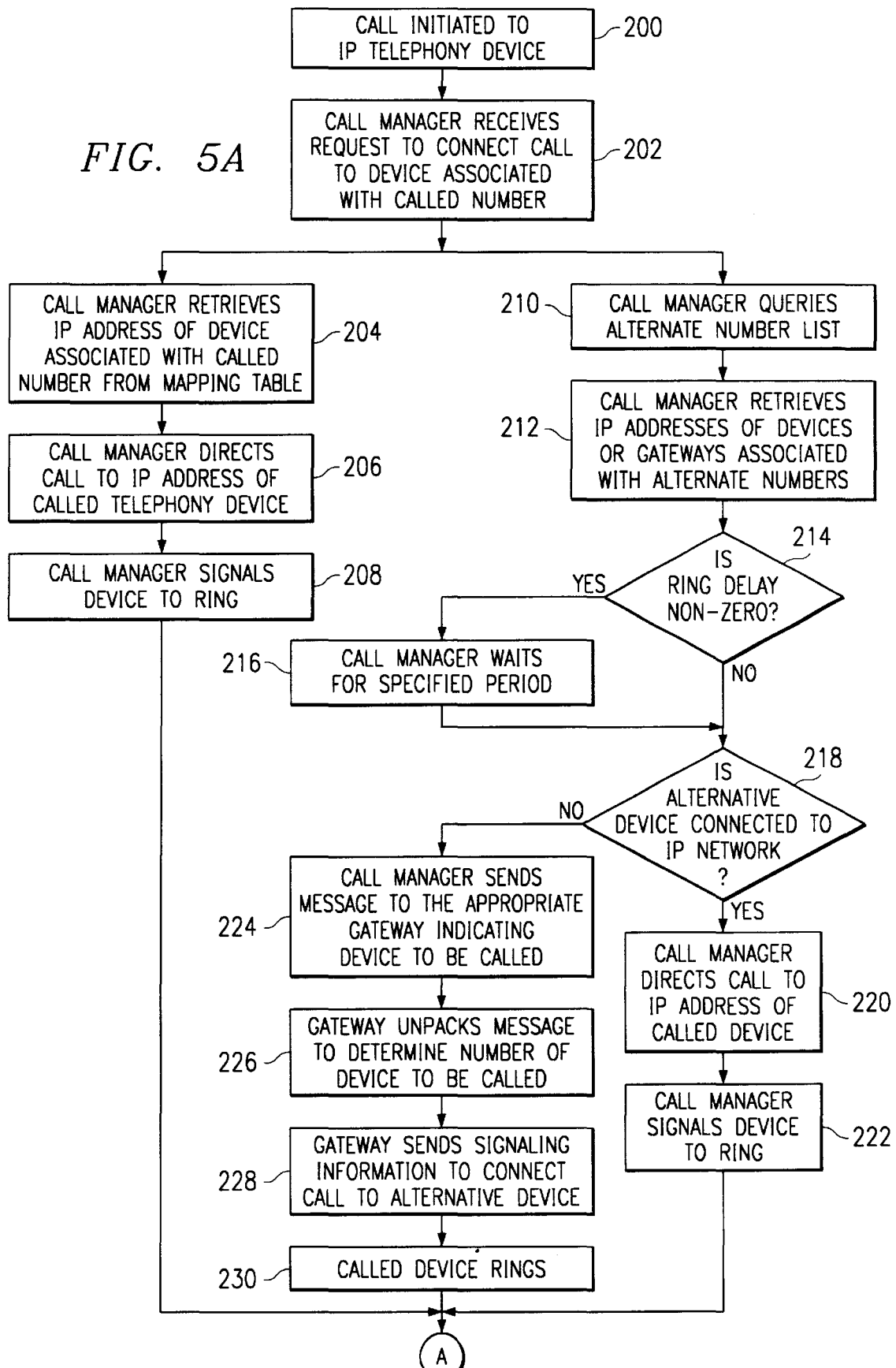
FIG. 4A <sup>120a</sup>

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

FIG. 4B <sup>120b</sup>

| DEVICE NAME | IP ADDRESS    |
|-------------|---------------|
| 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 |
| GATEWAY5    | 150.100.30.58 |
| PHONE25     | 150.200.70.15 |
| GATEWAY10   | 150.200.70.50 |
| GATEWAY11   | 150.200.70.51 |

FIG. 5A



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