



[54] **OFFICE COMMUNICATION SYSTEM** 5,737,333 4/1998 Civanlar ..... 370/352  
5,771,459 6/1998 Demery ..... 370/401

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[52] **U.S. Cl.** ..... **370/338; 370/401**  
[58] **Field of Search** ..... 370/395, 338,  
370/400, 401, 315, 328, 452, 349; 455/552,  
553

**FOREIGN PATENT DOCUMENTS**

2131349 5/1995 Canada .  
0 526 106 A2 2/1993 European Pat. Off. .  
44 06 505 A1 8/1995 Germany .

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*Assistant Examiner*—Thin Vu  
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[57] **ABSTRACT**

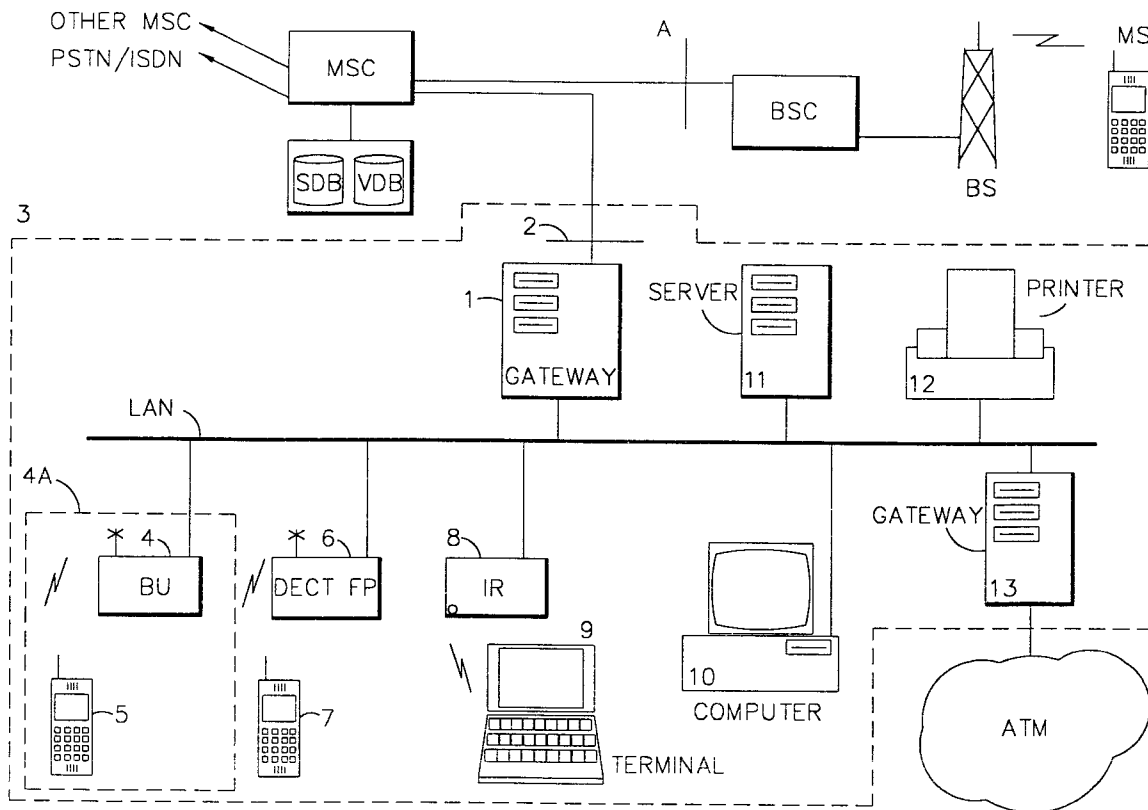
The invention relates to integrated office communication systems employing a local area network (LAN) for intra-office communications. In the arrangement according to the invention, no other internal networks are needed in the office because computers (10) are connected to the local area network and telephones (5, 7) are either mobile or cordless phones for which there are low-power room-specific base stations (4, 6) in the local area network (LAN). Connections to the outside world are made via a gateway computer (1) and public cellular radio network. Inside the office, the coverage areas of the small base stations (4, 6, 8) are nanocells (4a) of one or a few rooms. A home or small office user has a similar small base station (14) which is cotified to said local area network via a public communication network (15) and a gateway equipment (13).

**15 Claims, 4 Drawing Sheets**

[56] **References Cited**

**U.S. PATENT DOCUMENTS**

5,175,758 12/1992 Levanto et al. .... 379/57  
5,257,257 10/1993 Chen et al. .... 370/18  
5,321,542 6/1994 Freitas ..... 370/338  
5,473,669 12/1995 Kanada et al. .... 379/59  
5,475,689 12/1995 Kay ..... 370/338  
5,598,407 1/1997 Bud ..... 370/330



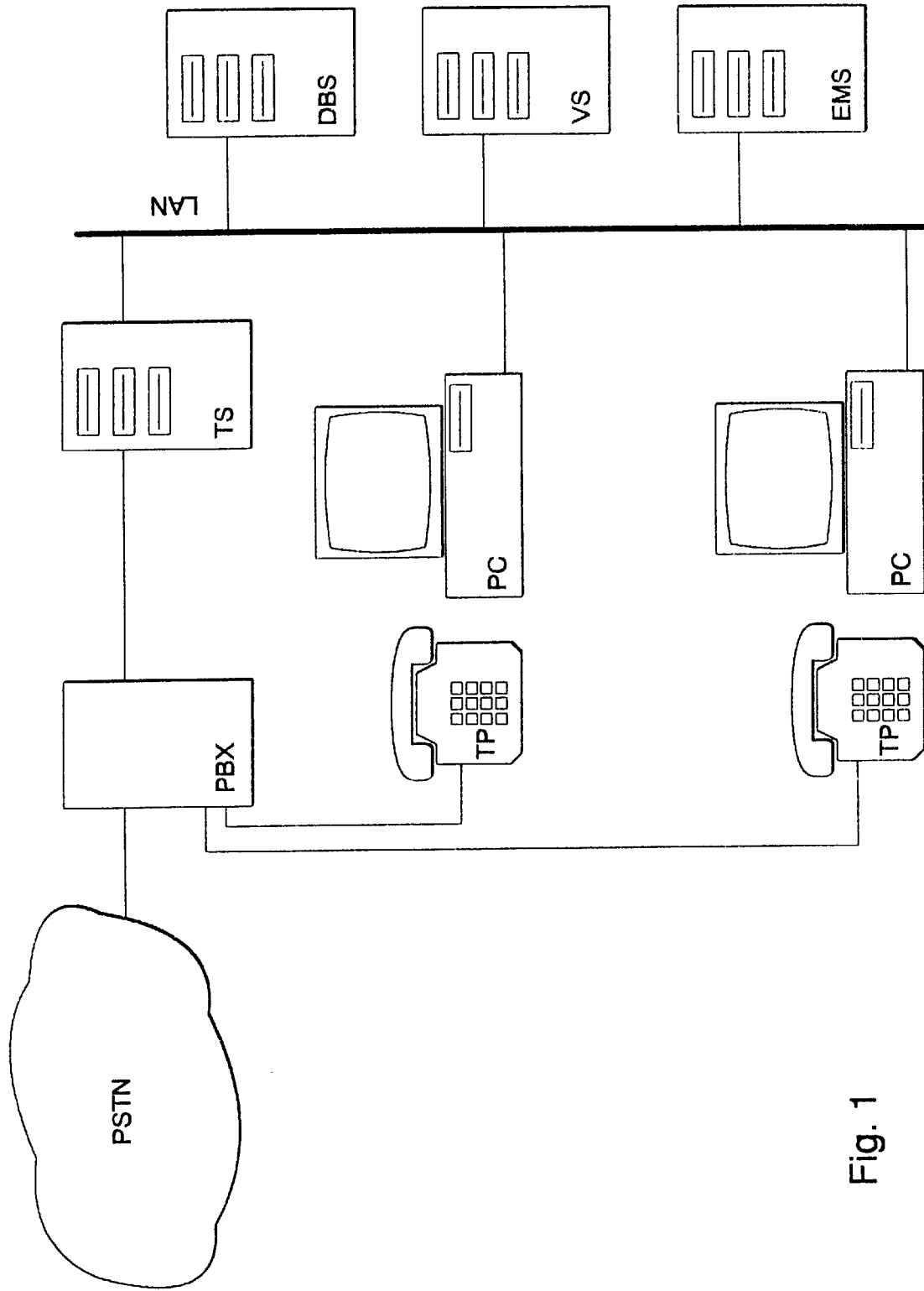


Fig. 1

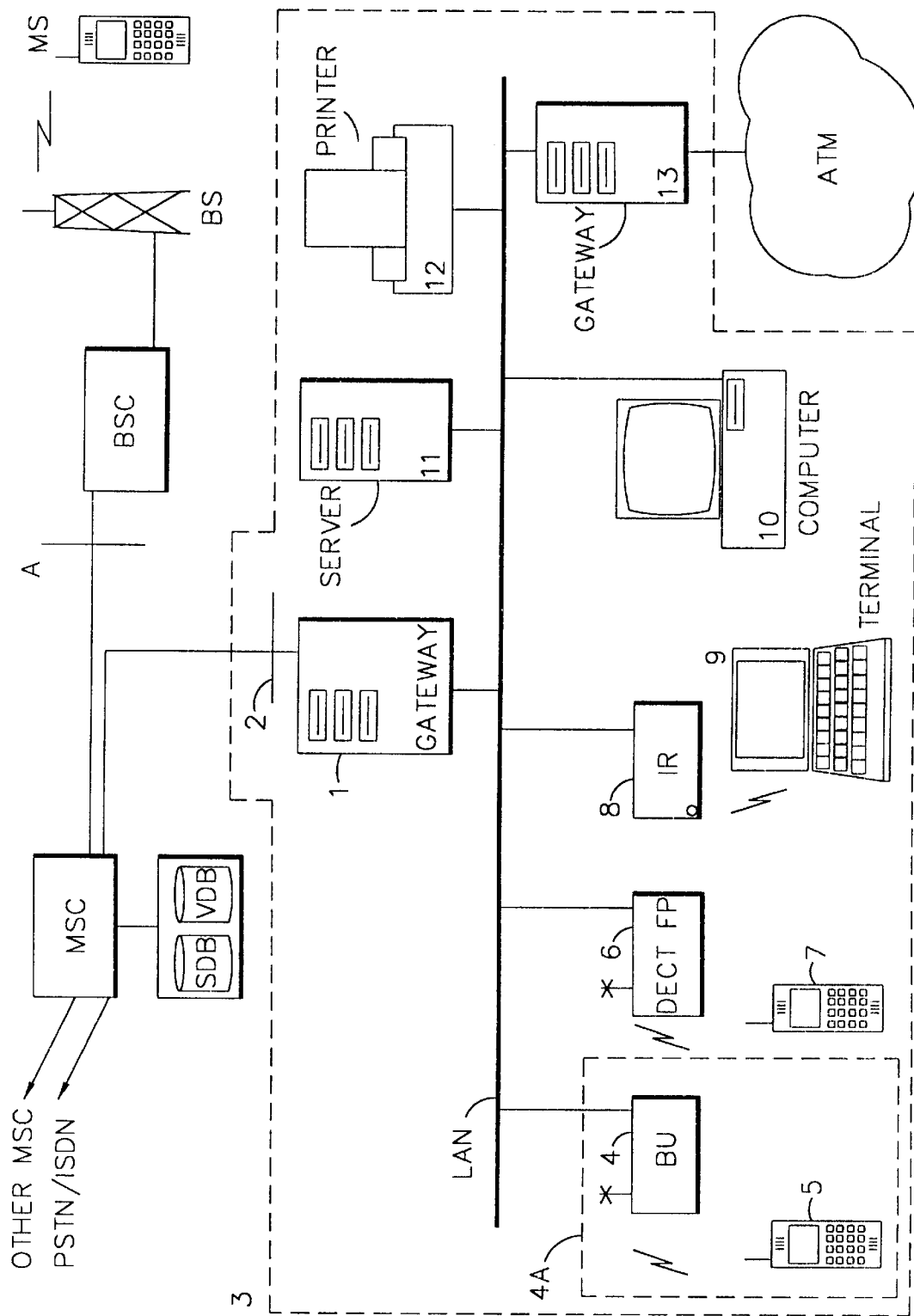


FIG. 2

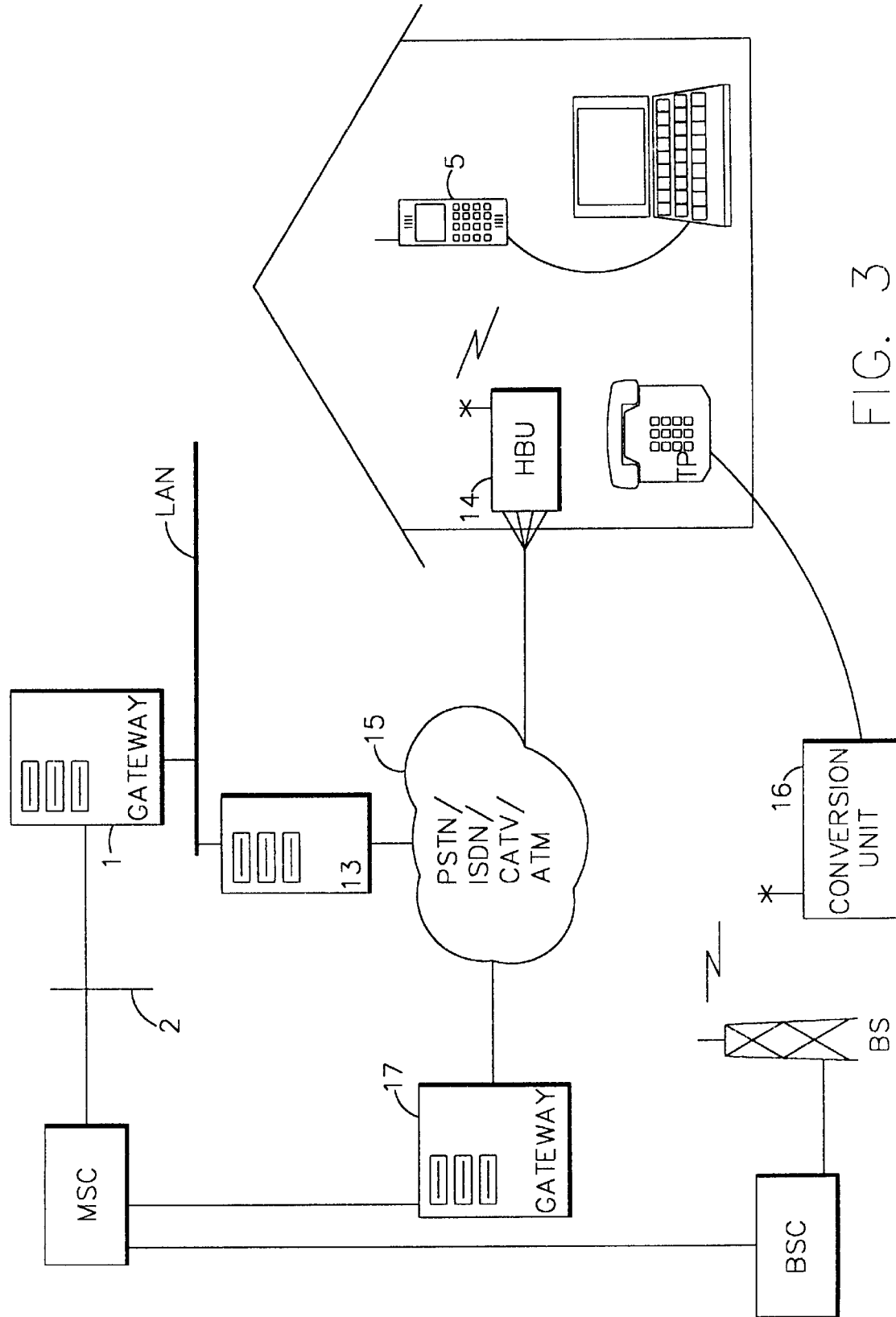
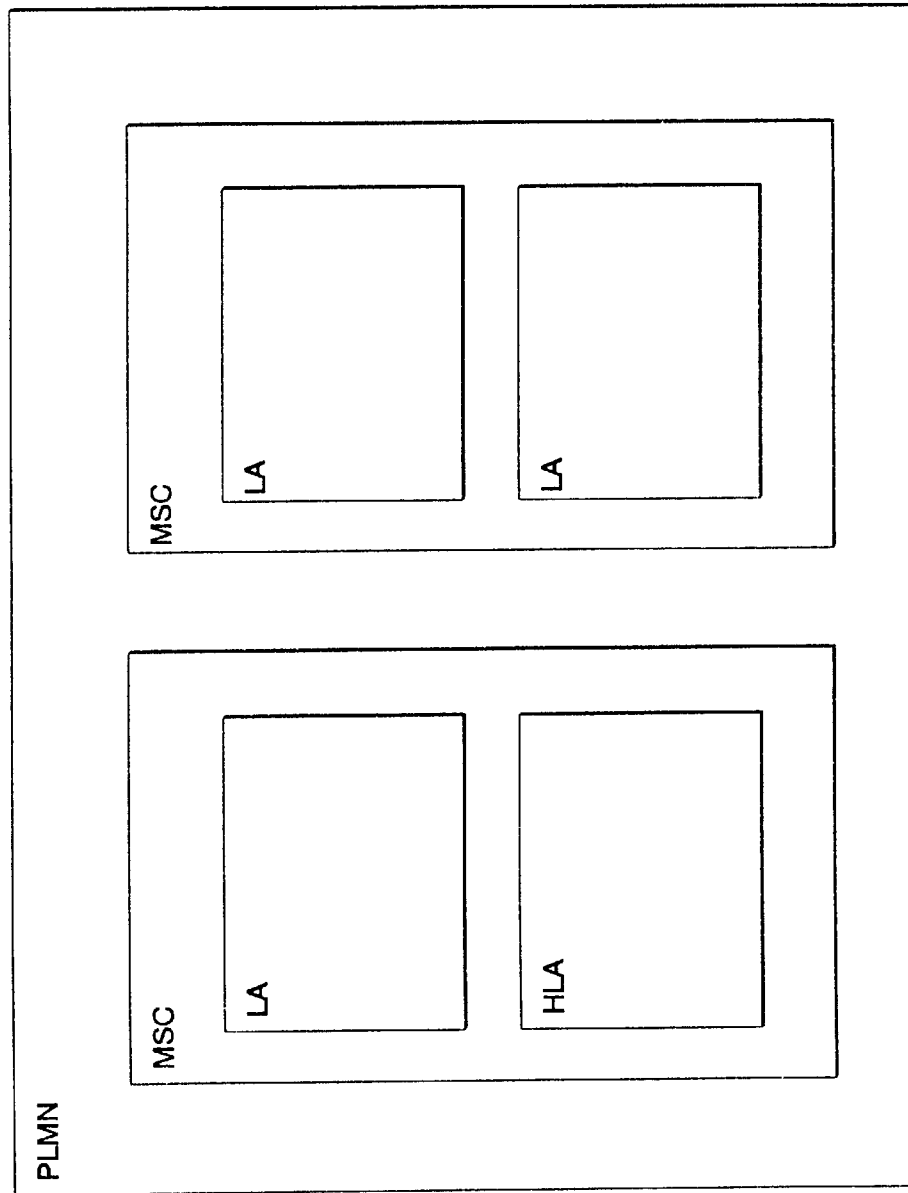


FIG. 3

Fig. 4



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