



- [54] FLEXIBLE DIRECT SIGNALING SYSTEM
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- [73] Assignee: **Lucent Technologies Inc.**, Murray Hill, N.J.
- [21] Appl. No.: **08/635,800**
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- [51] Int. Cl.⁶ **H04M 3/42; H04M 7/00**
- [52] U.S. Cl. **379/207; 379/219; 379/229; 379/209**
- [58] Field of Search **379/201, 207, 379/220, 221, 230, 216, 209, 229, 219; 455/466; 370/352**

OTHER PUBLICATIONS

Thomas F. La Porta, Malathi Veeraraghavan, Direct Signaling: A New Access Signaling Architecture, 1995 IEEE, pp. 93-98, Feb.
 Bell Atlantic, Repeat Call, Mar. 1989.
 Bell Atlantic, Customer Satisfaction Guarantee, Dec. 1992.
 Bell Atlantic, Identia Ring, Feb. 1993.
 Bell Atlantic, Return Call, Feb. 1990.

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Assistant Examiner—Benny Q. Tieu

[57] ABSTRACT

A direct signaling system for providing system subscribers with the freedom to access service providers of their choice, regardless of their access network arrangement, with substantially minimum change to existing telecommunication software and architecture. The system provides a home interface unit and a call server that enables a subscriber to send signaling messages to and receive messages from the service providers of their choice. The home interface unit and call server execute state machines that provide specific details of system operation. The call server state machine triggers a state machine and thus operation of the service specific servers chosen by the subscriber.

[56] References Cited

U.S. PATENT DOCUMENTS

4,897,866	1/1990	Majmudar et al.	379/201
5,473,679	12/1995	La Porta et al.	379/201
5,563,938	10/1996	Soshea et al.	379/201
5,563,939	10/1996	La Porta et al.	379/201
5,659,605	8/1997	Voit et al.	379/220

27 Claims, 9 Drawing Sheets

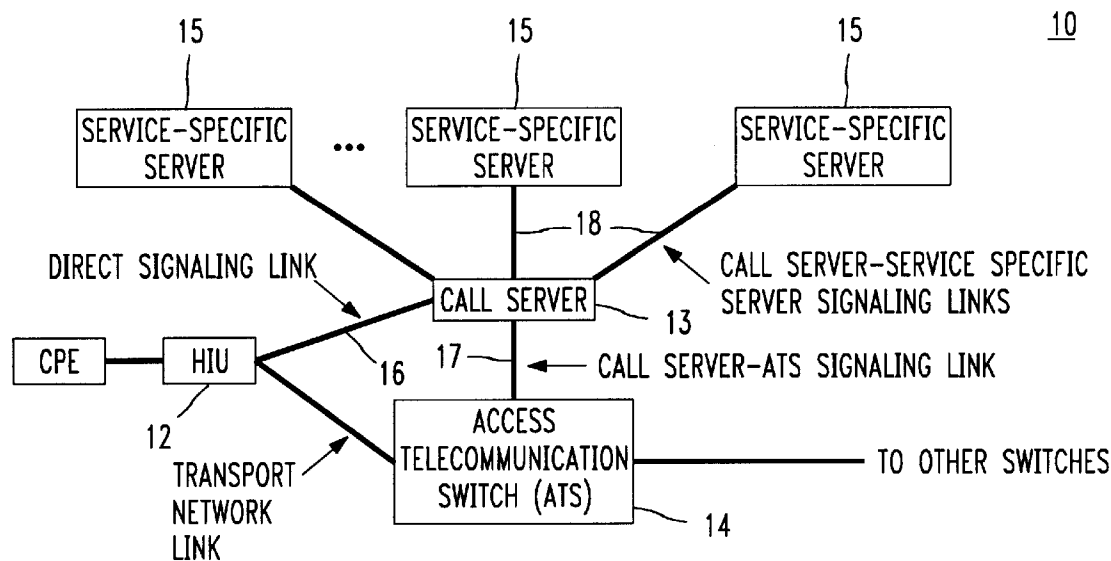


FIG. 1
PRIOR ART

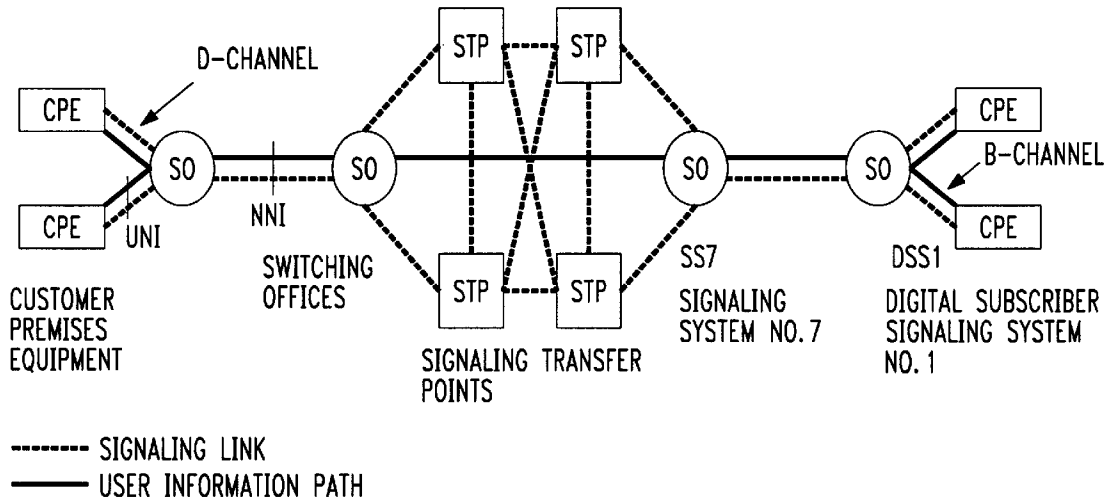


FIG. 2
PRIOR ART

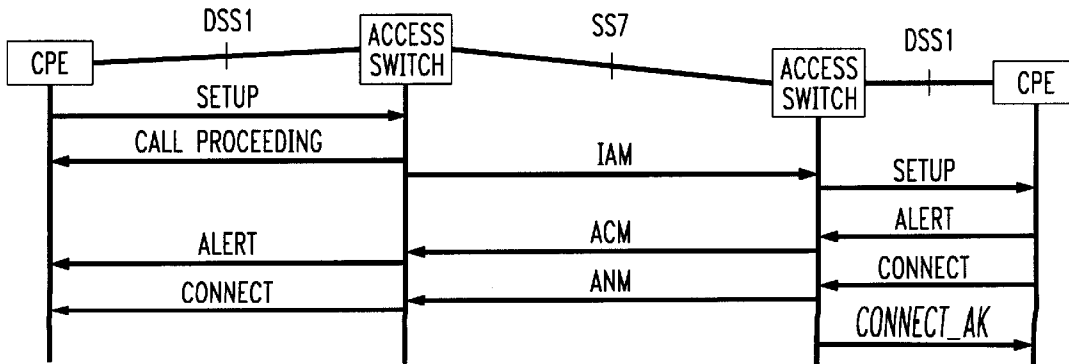


FIG. 3

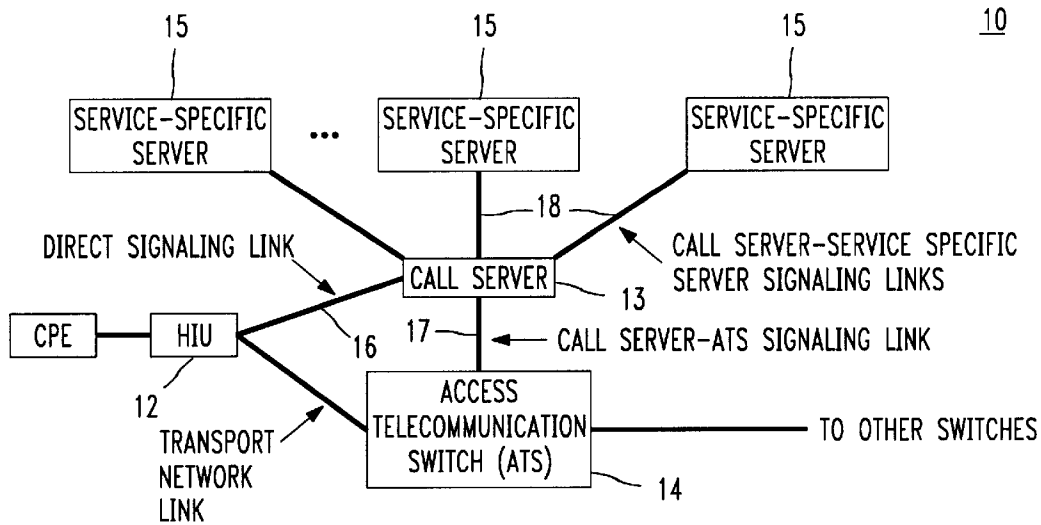


FIG. 4

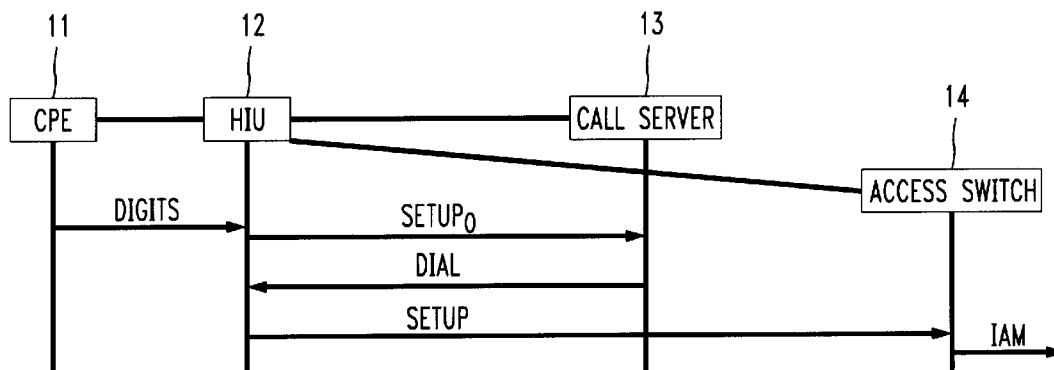


FIG. 5

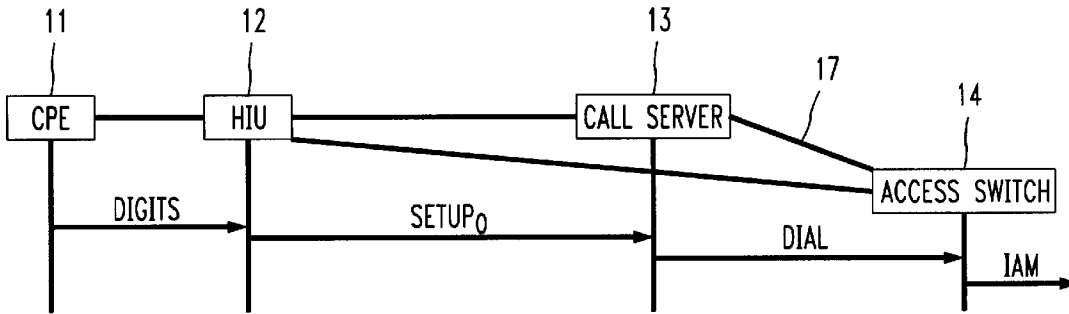


FIG. 6

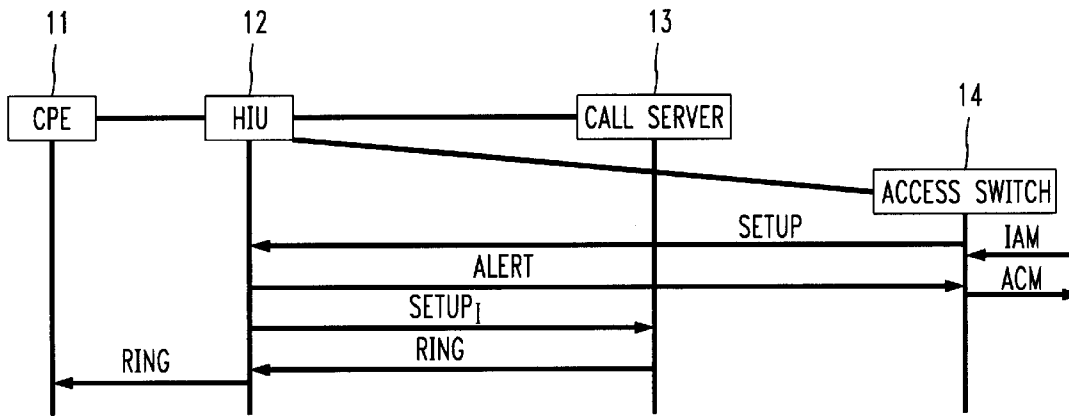


FIG. 7

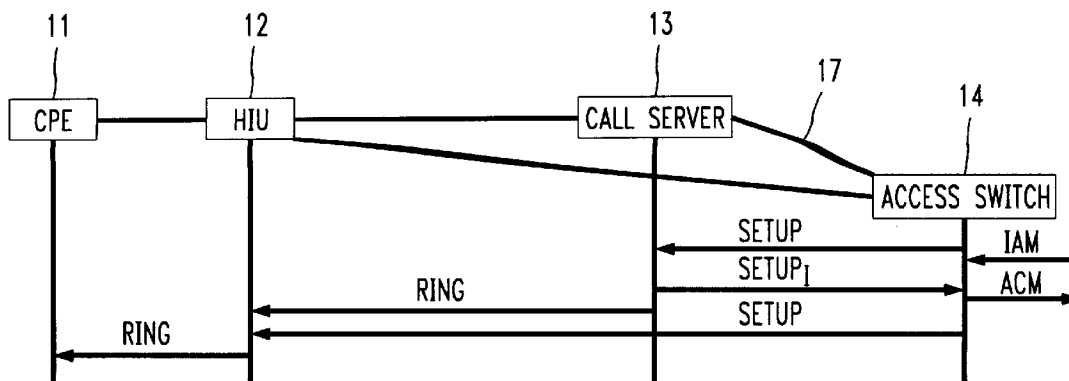
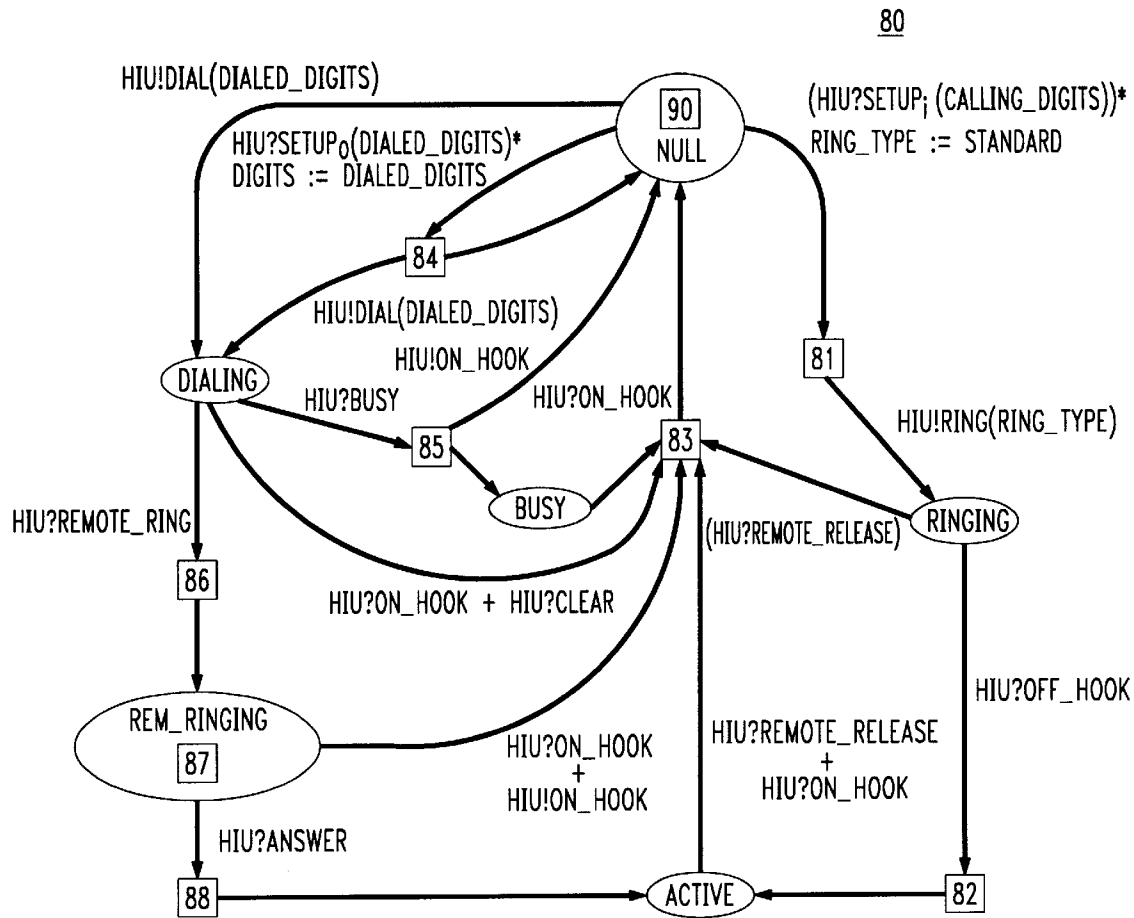


FIG. 8



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