US006891820B1

(12) **United States Patent**   (10) Patent No.: **US 6,891,820 B1**
Pham et al.                      (45) Date of Patent:     **May 10, 2005**

(54) **UTILIZATION OF THE INTERNET PROTOCOL TO FACILITATE COMMUNICATION INVOLVING MOBILE DEVICES**

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( * ) 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.: **09/347,374**

(22) Filed: **Jul. 6, 1999**

(51) **Int. Cl.$^7$** ................................................. **H04Q 7/24**
(52) **U.S. Cl.** ....................................... **370/338**; 370/401
(58) **Field of Search** .............................. 370/310, 310.2, 370/328–338, 351–3, 389–402, 431–437, 445, 403–409, 475, 395.2

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(57)                **ABSTRACT**

A data communication system capable of forwarding IP-addressed data to devices as such devices move among networks having different IP addresses is disclosed herein. The system includes first and second networks containing first and second pluralities of nodes. At least one of the first plurality of nodes is adapted to receive data transmissions from an external IP-based network. Upon joining the first network, this device is assigned an IP address which remains with it irrespective of whether it moves beyond the range of the first network. When this device roams into the vicinity of the second network, data addressed to the device which is received at the first network is forwarded via at least one node of the second network to the device.

**16 Claims, 3 Drawing Sheets**
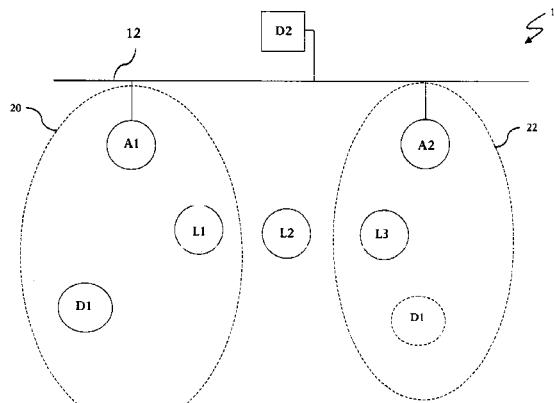
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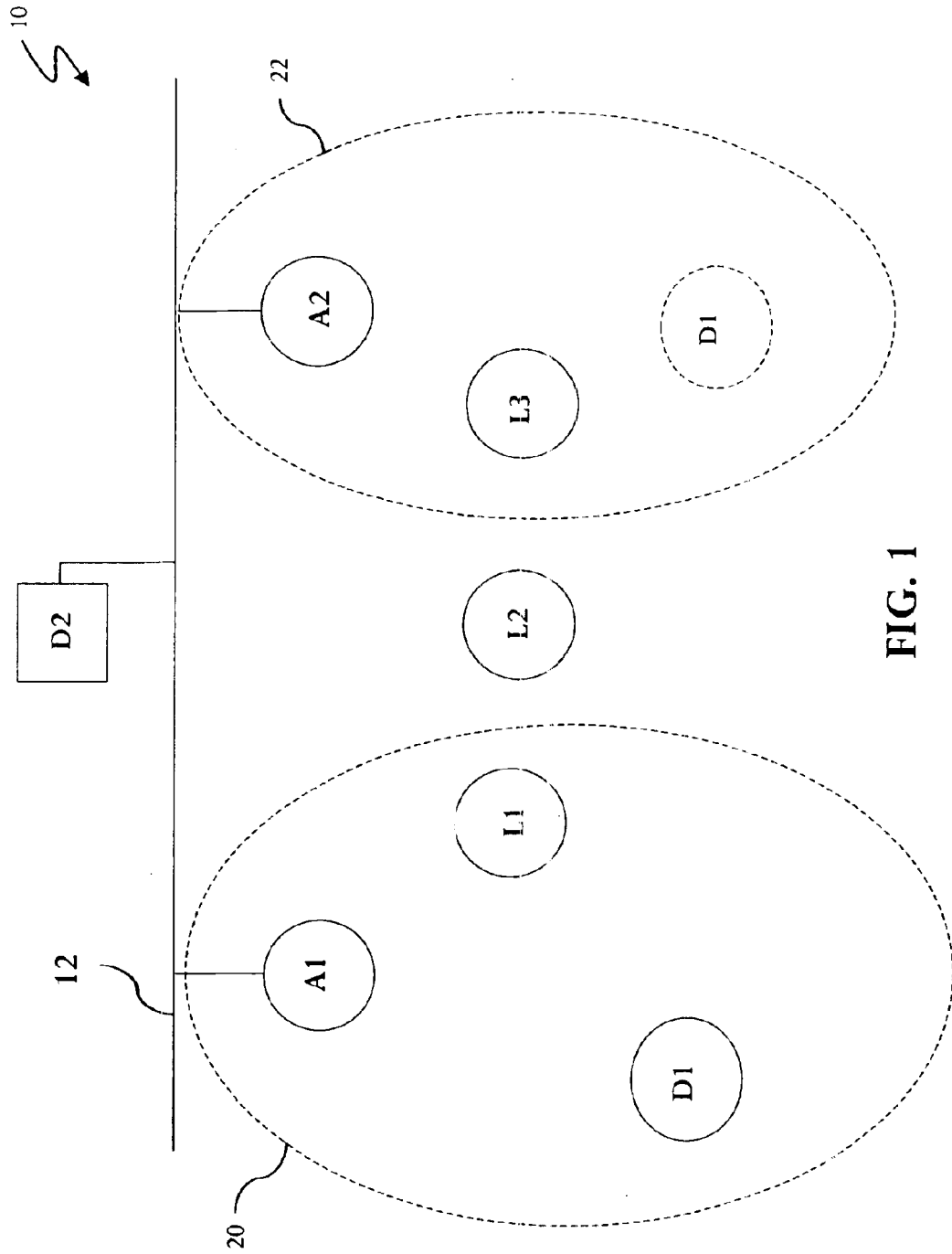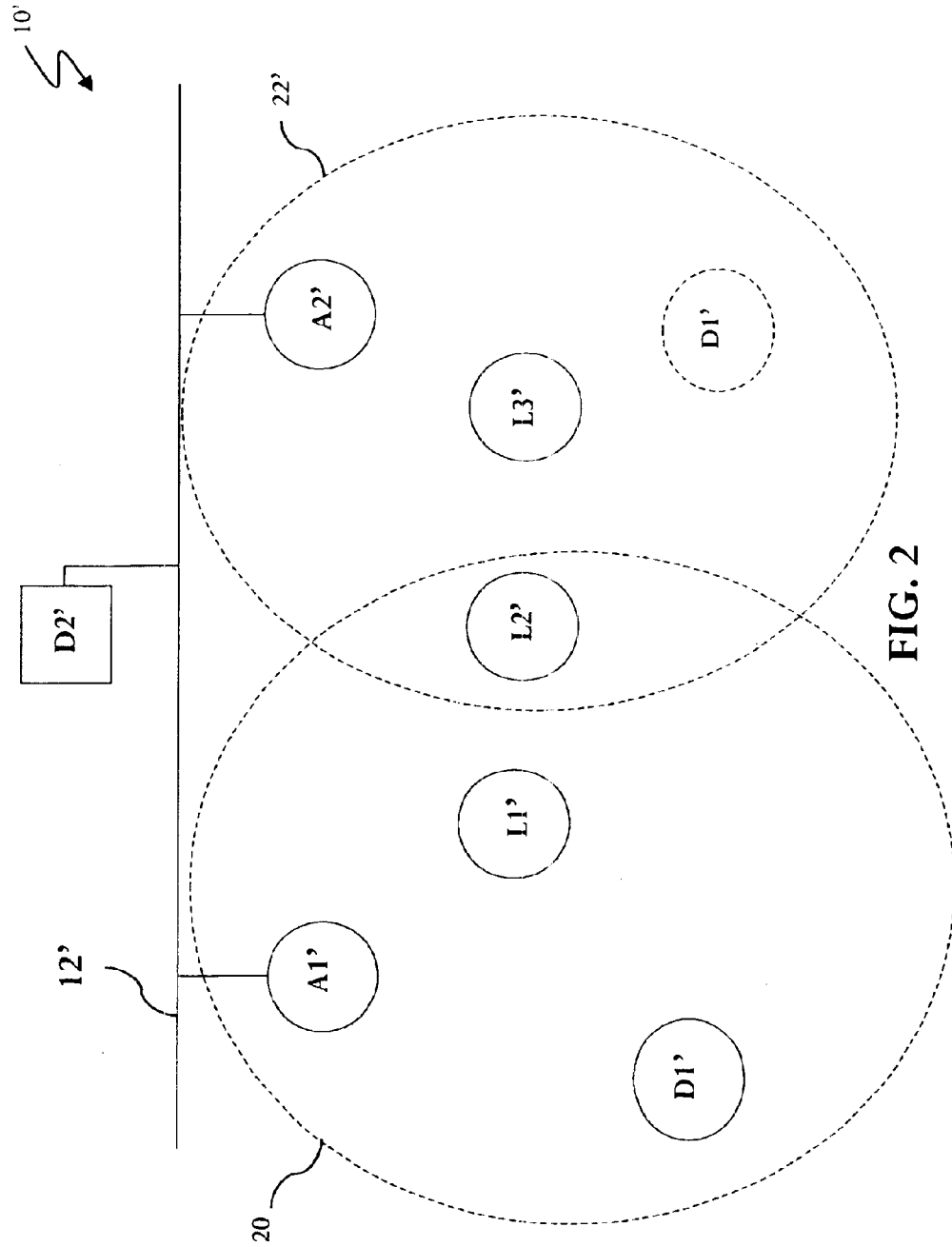
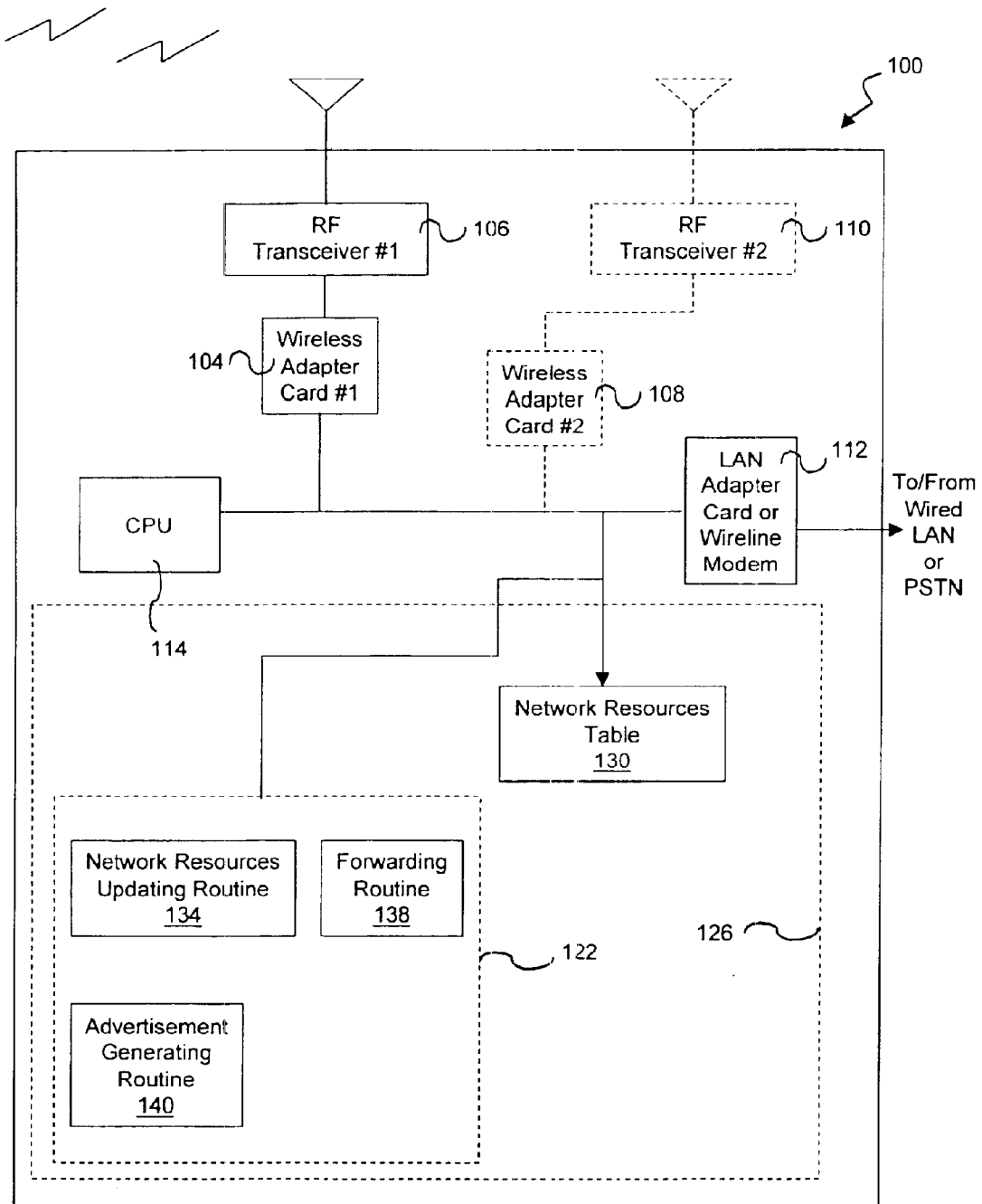* cited by examiner

FIG. 1

**FIG. 2**

**FIG. 3**

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