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**Pham et al.**

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(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  
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(51) **Int. Cl.**<sup>7</sup> ..... **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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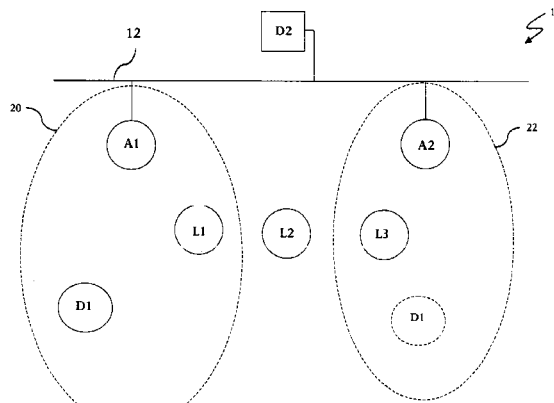
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(57) **ABSTRACT**

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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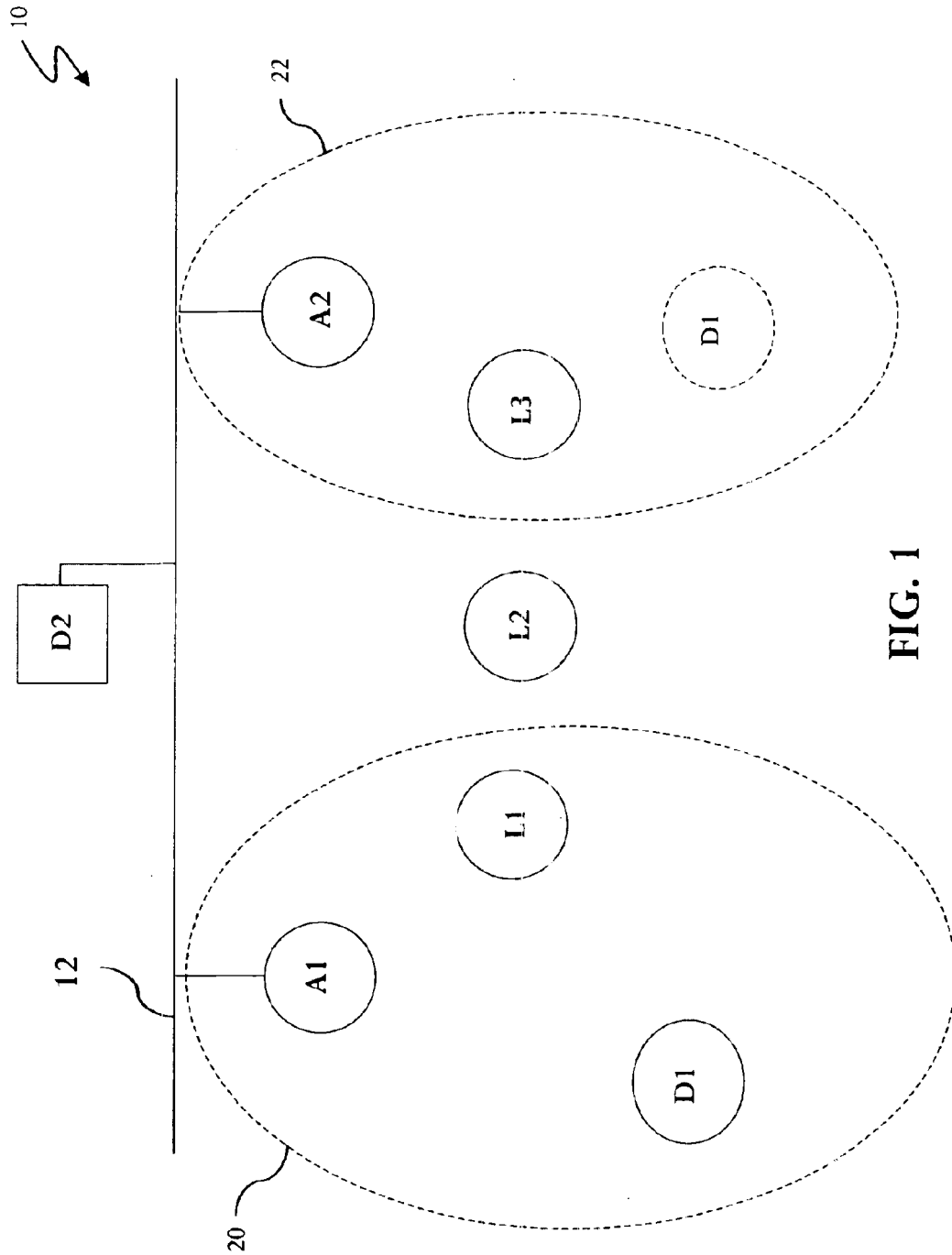


FIG. 1

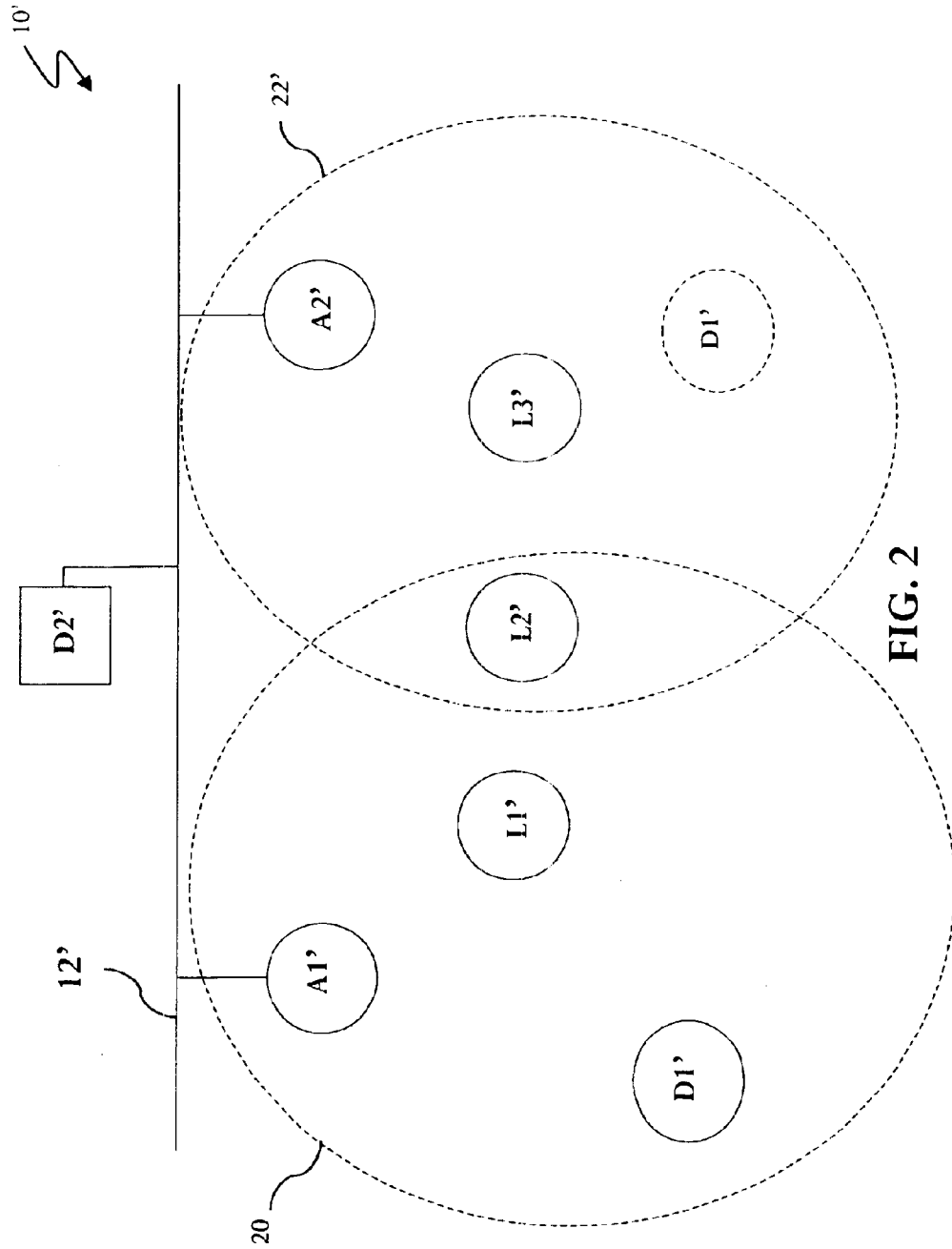


FIG. 2

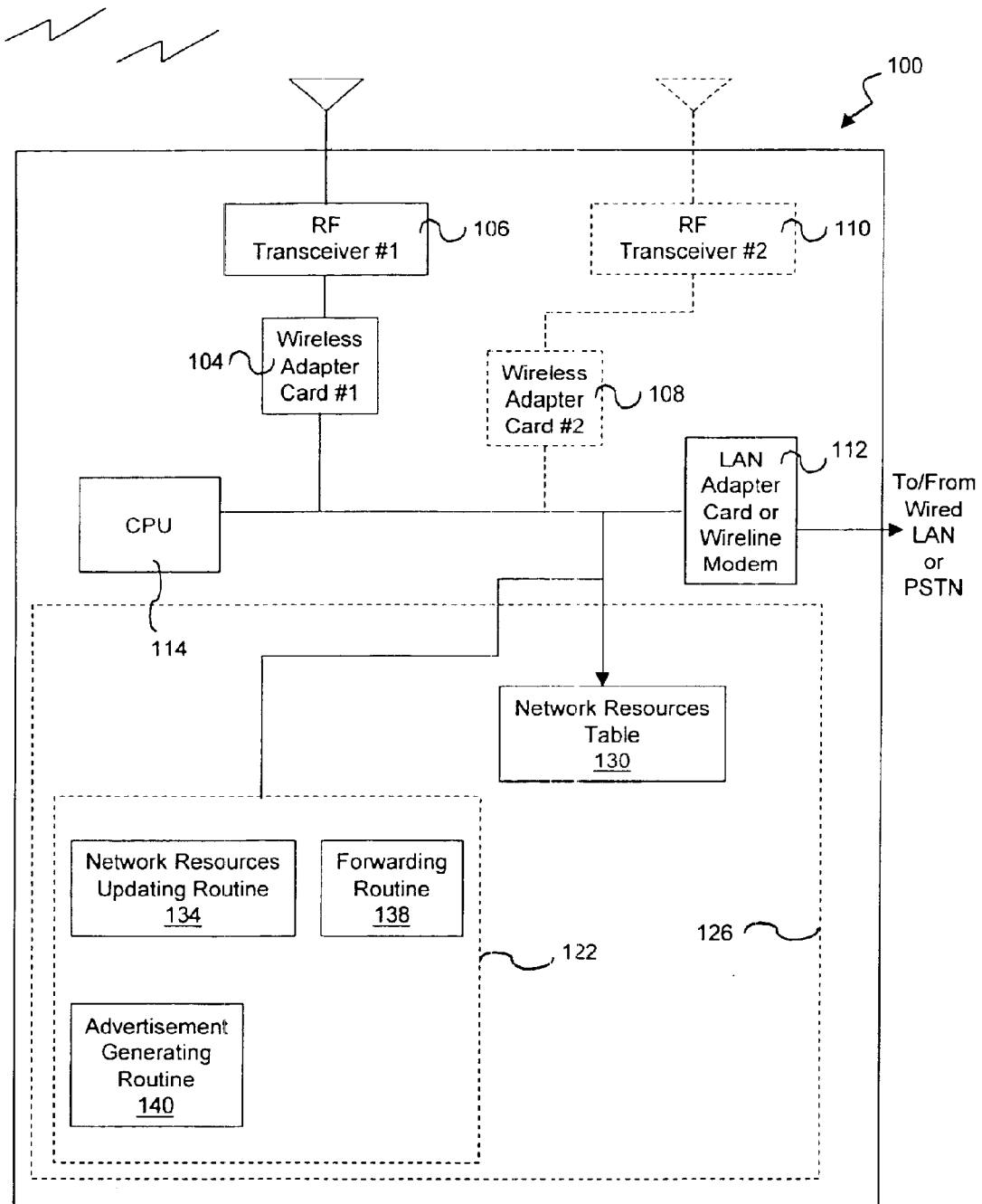


FIG. 3

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