

ABSTRACT

Data elements stored in a distributed data structure are accessible by means of a hierarchical routing network in which routes through the network to individual data elements are flagged. The network comprises communicating links between nodes 1,2,3, extending from a "root node" 2 to a plurality of end nodes 3. The end nodes 3 contain the data elements.

- 10 To find a data element, a search message entering the network at an end node 3 passes through the network towards the root node 2 until it encounters a flagged route to the relevant data element. Thereafter it passes along the route to the end node 3 containing the relevant data element.
- 15 The invention is relevant to personal numbering services in a communications network. In this case, the data elements each comprise hardware addresses for users of the network. If a user moves in relation to the network, their hardware address will change and, in many cases, the relevant end node
- 20 3 will also change. However, the flagged route consequently changes and the routing network therefore provides automatic tracking of the user.

This Sheet Has Been Replaced

