

(12) **United States Patent**  
**Jones et al.**

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- (54) **MERGING NETWORK DATA SETS COMPRISING DATA ACQUIRED BY INTERROGATION OF A NETWORK**
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- (73) Assignee: **3Com Corporation**, Santa Clara, CA (US)
- (\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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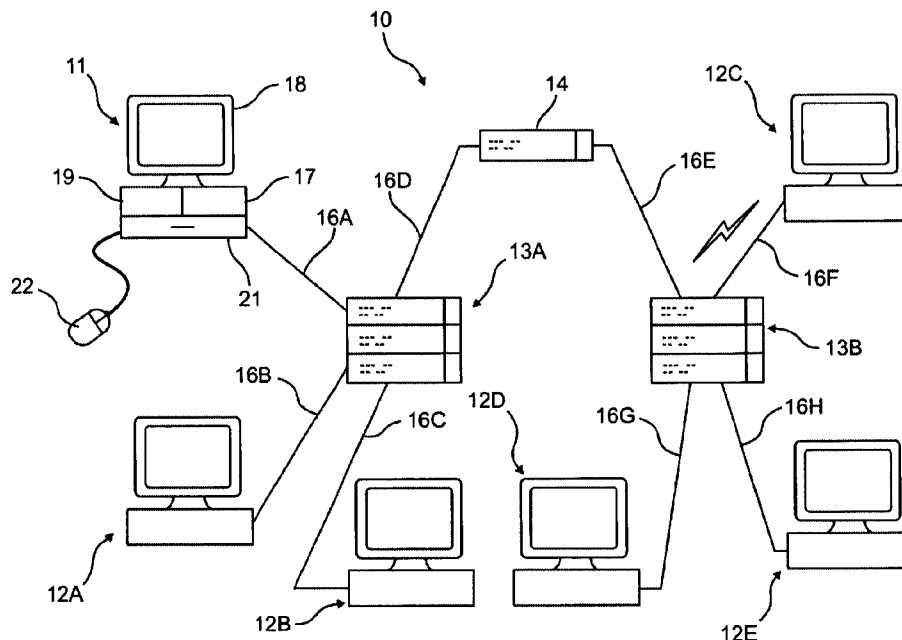
- (21) Appl. No.: **09/447,096**
- (22) Filed: **Nov. 22, 1999**
- (30) **Foreign Application Priority Data**
- |               |      |         |
|---------------|------|---------|
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| Jul. 20, 1999 | (GB) | 9917023 |
- (51) **Int. Cl.**<sup>7</sup> ..... **G06F 17/30**
- (52) **U.S. Cl.** ..... **707/200; 707/10**
- (58) **Field of Search** ..... **707/1, 4, 7, 10, 707/100-104.1, 200-203**

(57) **ABSTRACT**

A method for providing a data set relating to a network by merging a first data set relating to the network at a first time and a second data set relating to the network at a second, later, time, said first data set comprising data acquired by interrogation of the network and other data, and said second data set comprising data acquired by interrogation of the network, said method comprising: comparing the data in the first data set with the second data set, and updating the first data set to include additional data present in the second data set which is not present in the first data set.

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**42 Claims, 6 Drawing Sheets**



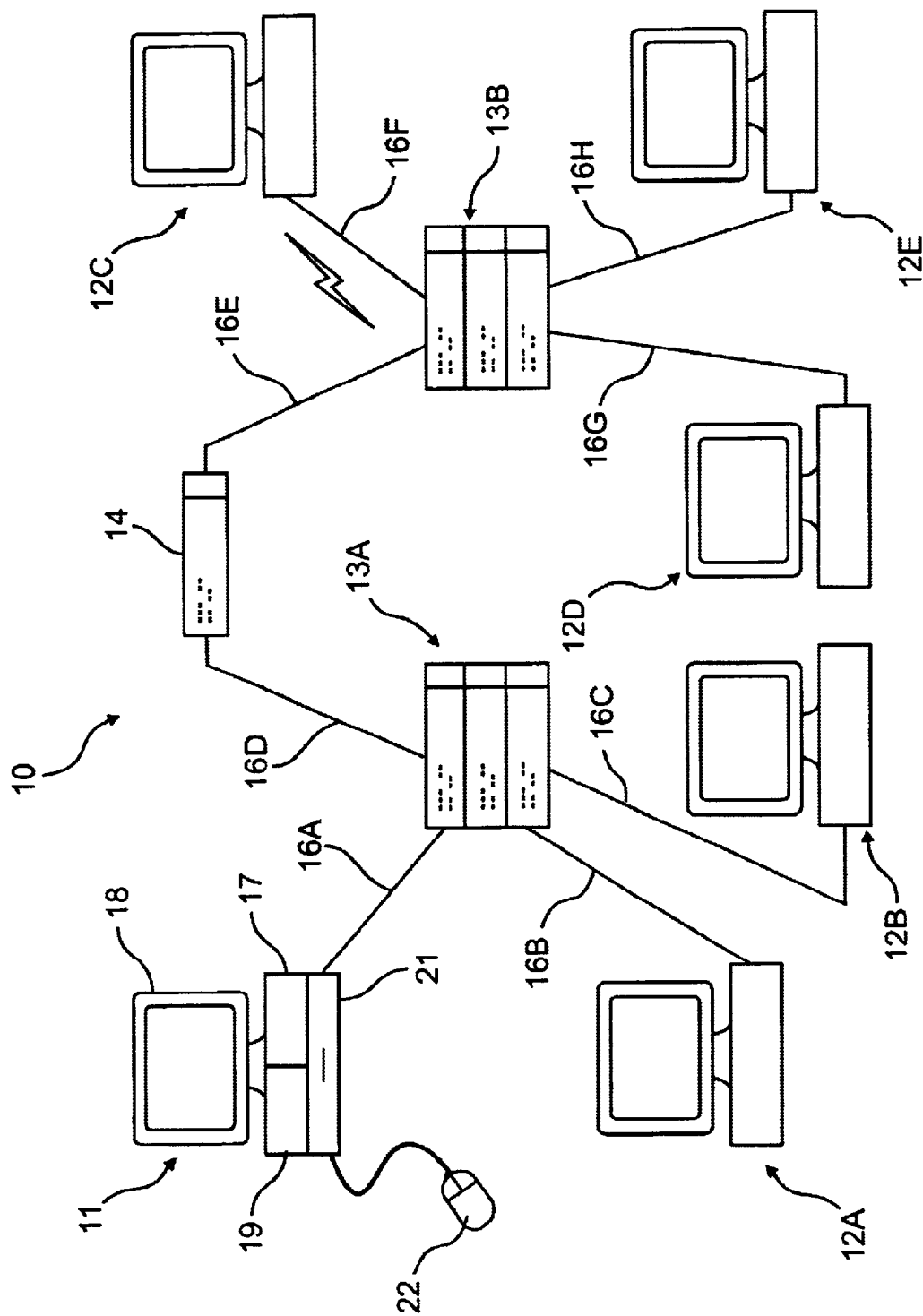
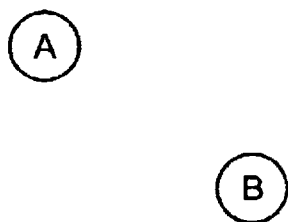


Fig. 1

LEGEND

○ Validated Device

BEFORE INTERROGATION



AFTER INTERROGATION

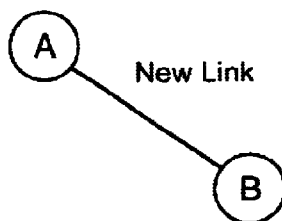
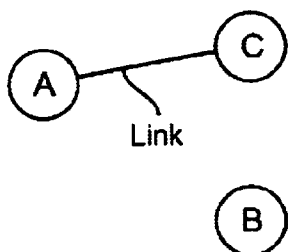


Fig. 2

BEFORE INTERROGATION



AFTER INTERROGATION

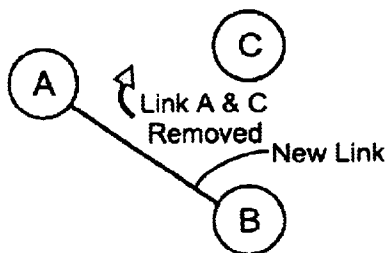
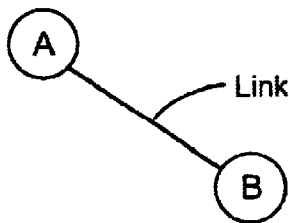


Fig. 3

BEFORE INTERROGATION



AFTER INTERROGATION

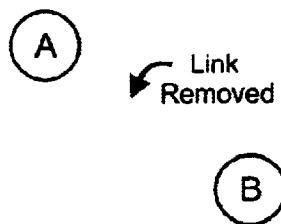
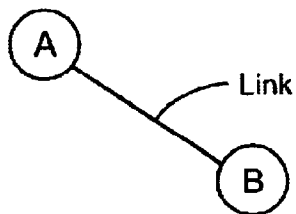


Fig. 4

BEFORE INTERROGATION



AFTER INTERROGATION

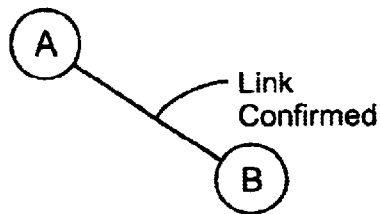
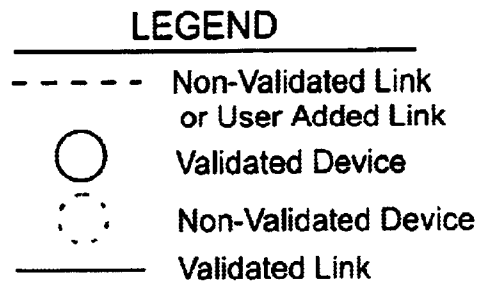
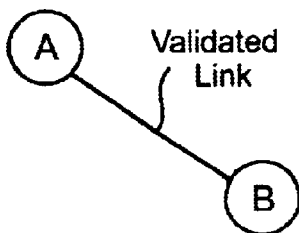


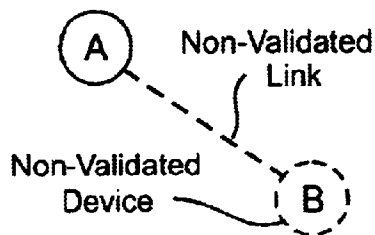
Fig. 5



BEFORE INTERROGATION

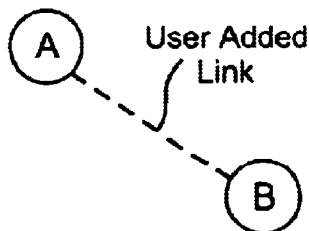


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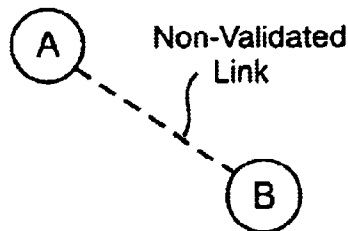


*Fig. 6*

BEFORE INTERROGATION

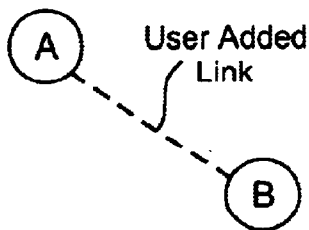


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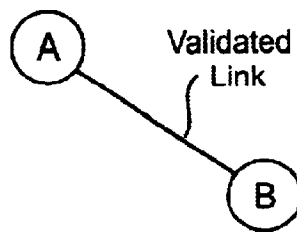


*Fig. 7*

BEFORE INTERROGATION



AFTER INTERROGATION



*Fig. 8*

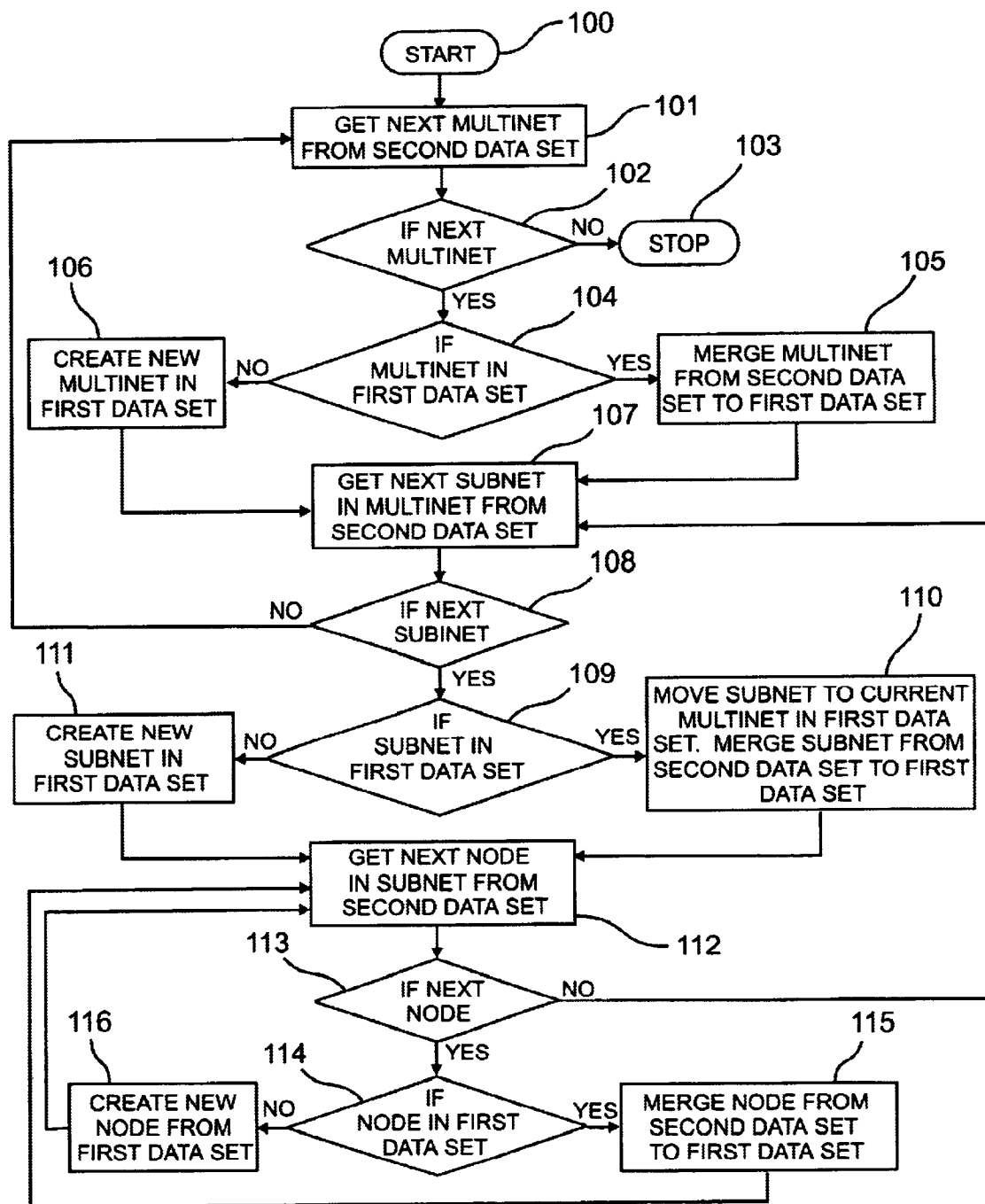


Fig. 9

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