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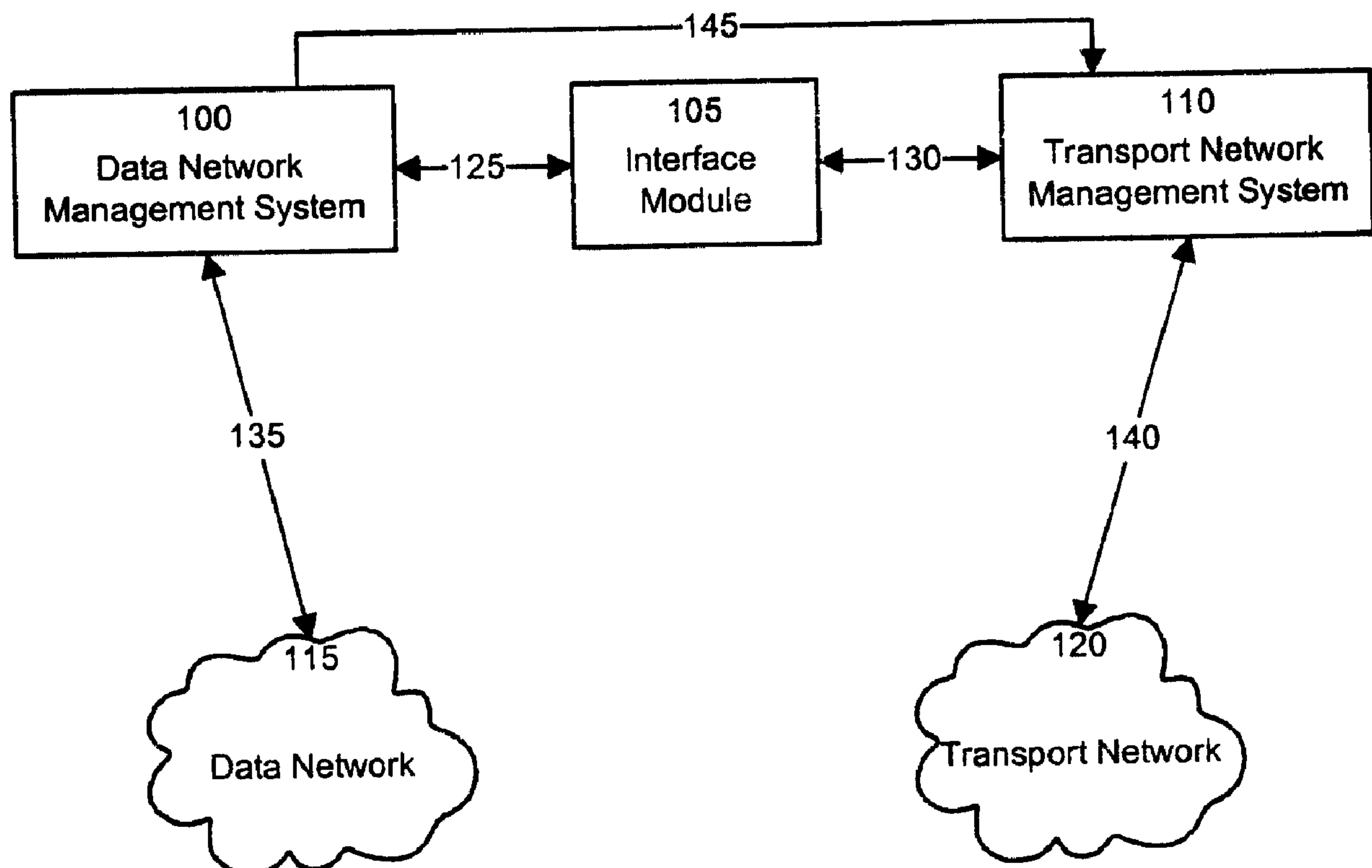
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(54) Titre : SYSTÈME DE GESTION DE RESEAU DE COMMUNICATION MULTINIVEAUX

(54) Title: MANAGEMENT SYSTEM FOR A MULTI-LEVEL COMMUNICATION NETWORK



(57) Abrégé/Abstract:

A communication network management system for integrating two network management systems working together in a client/server manner to provide an integrated view of a multi-layer, multi-technology network. The invention provides a novel interface module that permits a network management system to represent different logical levels in a communication system. For instance, one logical level of the communication system could be the transport network while another logical level is the data

(57) **Abrégé(suite)/Abstract(continued):**

network. The main advantages of the invention is that it provides to a network administrator a system which permits management of two levels of a networks a data network to tell how the two networks are integrated and what the entire topology is, and therefore renders it possible to manage both networks through the same system.

Abstract of the disclosure

A communication network management system for integrating two network management systems working together in a client/server manner to provide an integrated view of a multi-layer, multi-technology network. The invention provides a novel interface module that permits a network management system to represent different logical levels in a communication system. For instance, one logical level of the communication system could be the transport network while another logical level is the data network. The main advantages of the invention is that it provides to a network administrator a system which permits management of two levels of a networks a data network to tell how the two networks are integrated and what the entire topology is, and therefore renders it possible to manage both networks through the same system.

TITLE: MANAGEMENT SYSTEM FOR A MULTI-LEVEL COMMUNICATION NETWORK***Field of the Invention***

The present invention relates to a communication network management system. The novel system is particularly useful for integrating two or more network management systems working together in a client/server manner to provide an integrated view of a multi-layer, multi-technology network.

Background of the invention

Management functions (visualizing, monitoring, configuring, etc.) for multi-level networks using state-of-the-art communication network management systems is performed by a separate management system for each level of the network. That is, present network management systems do not manage multiple levels of a network. For example, the data network level (e.g. IP, Ethernet) is managed by systems such as HP OpenView™ or Cabletron Spectrum™ while transport network level (e.g., SONET, ATM or SDH) are managed by other technology-specific management systems.

The problem lies in the fact that a network administrator managing a data network which has, for example, SONET as its backbone, either cannot manage the backbone or has to use two different management systems to do so. A data management system may show a single link between two routers when in fact there may be an entire SONET network. It is therefore not presently possible to tell how the two networks are integrated and what the entire topology is, and therefore not possible to manage both networks through the same system.

Thus, there exists a need in the industry to provide an integrated system for managing multi-level communication networks.

