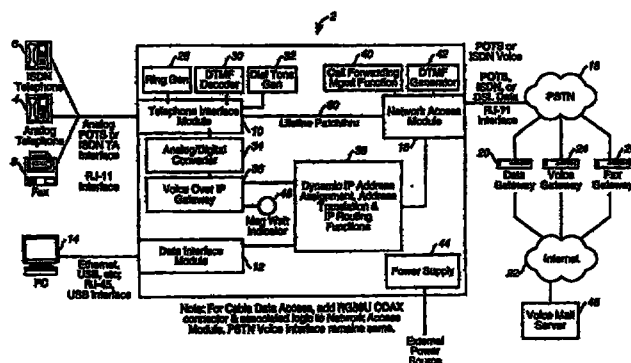




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(54) Title: COMMUNICATIONS CONTROLLER FOR PROVIDING MULTIPLE ACCESS USING A SINGLE TELEPHONE LINE

**(57) Abstract**

Instead of having to subscribe to multiple telephone lines for multiple devices that a user has, a module (2) of the present invention can connect each of the user's devices to an outside communications network using the same telephone line. Such multiple inside connections to the outside communication network using the same telephone line is achieved by provisioning within the invention module the appropriate telephone and computer interface units for the user's telephones (4 and 6) and computers (14), and an appropriate network interface unit (16) for connection to the telephone line that connects the invention module to the external communications network. The module of the instant invention is further provisioned with an IP routing submodule that communicatively connects the various interface units together by managing the addressing of the data that traverses between the outside network and the devices of the user, by routing the appropriate data packets to the appropriate devices by means of pseudo internal IP addresses assigned to the various devices of the user. Other components within the module convert those data packets that are a part of a voice signal into the appropriate analog signal for output to the telephone of the user. Conversely, such components convert any analog input from the user into a corresponding digital signal that is packetized and output to the external communications network.