



(12) **United States Patent**
Lewis

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(54) **SYSTEM AND METHOD FOR BYPASSING DATA FROM EGRESS FACILITIES**

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(58) **Field of Search** 370/461, 462, 370/401, 349, 352, 389, 392, 468; 379/221, 219, 215, 211, 230, 265, 266; 709/250; 395/114

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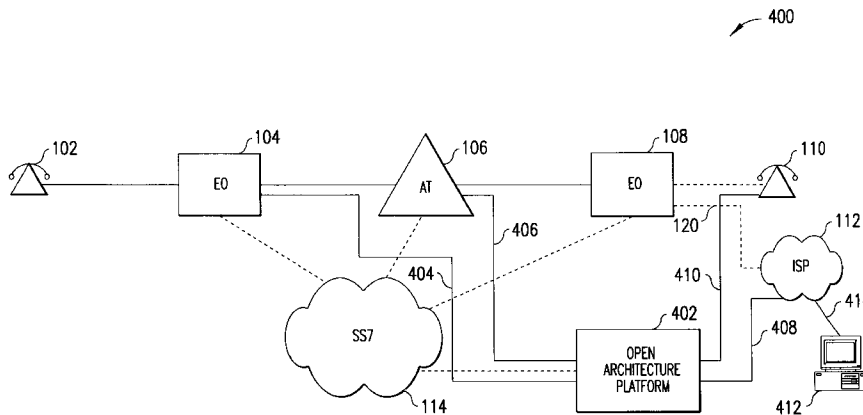
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(57) **ABSTRACT**

An open architecture platform bypasses data from the facilities of a telecommunications carrier, e.g. an incumbent local exchange carrier, by distinguishing between voice and data traffic, and handling voice and data traffic separately. An SS7 gateway receives and transmits SS7 signaling messages with the platform. When signaling for a call arrives, the SS7 gateway informs a control server on the platform. The control server manages the platform resources, including the SS7 gateway, tandem network access servers (NASs) and modem NASs. A tandem NAS receives the call over bearer channels. The control server determines whether the incoming call is voice traffic or data traffic, by the dialed number, and instructs the tandem NAS how to handle the call. Voiced traffic is transmitted to a switch for transmission from the platform. Data traffic is terminated at a modem NAS, where it is converted into a form suitable for a data network, such as a private data network or an Internet services provider (ISP). The converted data is sent by routers to the data network. The data network need not convert the data, as the function has already been provided by the platform. In lieu of a conversion, the modems can create a tunnel (a virtual private network) between a remote server and the data network.

11 Claims, 24 Drawing Sheets



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