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(54) **TRAFFIC MANAGER, GATEWAY SIGNALING AND PROVISIONING SERVICE FOR ALL PACKETIZED NETWORKS WITH TOTAL SYSTEM-WIDE STANDARDS FOR BROAD-BAND APPLICATIONS INCLUDING ALL LEGACY SERVICES**

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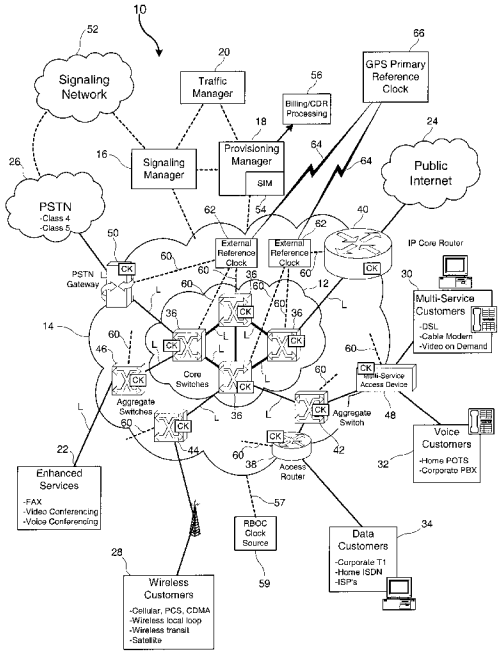
(57) **ABSTRACT**

Broadband integrated services are performed via digital, channelized or optically coded networks by a system which organizes, interfaces, provisions, loads and controls, in real time, the transport of grouped or organized information (such as packetized cell data) through interface access devices and packet switches that are compliant with domestic and international communication standards. A packet core network includes multiple packet switches and interface access devices coupled to an existing narrowband or broadband network. A signaling manager, a provisioning manager and a traffic manager perform all broadband and narrowband routing, port provisioning and connecting functions for all network devices. A set of software interface modules for each equipment vendor allows the provisioning manager, the signaling manager and the traffic manager to impose control demands and make network management decisions on a real time basis via an application protocol interface. Bit error rate caused by the disparity between low speed (such as TDM) networks and high speed (such as OCR) networks is substantially reduced by synchronizing the overall network and all switching components to a primary reference clock that has an accuracy of 1×10^{-11} second per month or better.

13 Claims, 4 Drawing Sheets