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(54) **Title:** DYNAMICALLY SCALABLE SATELLITE COMMUNICATION NETWORK

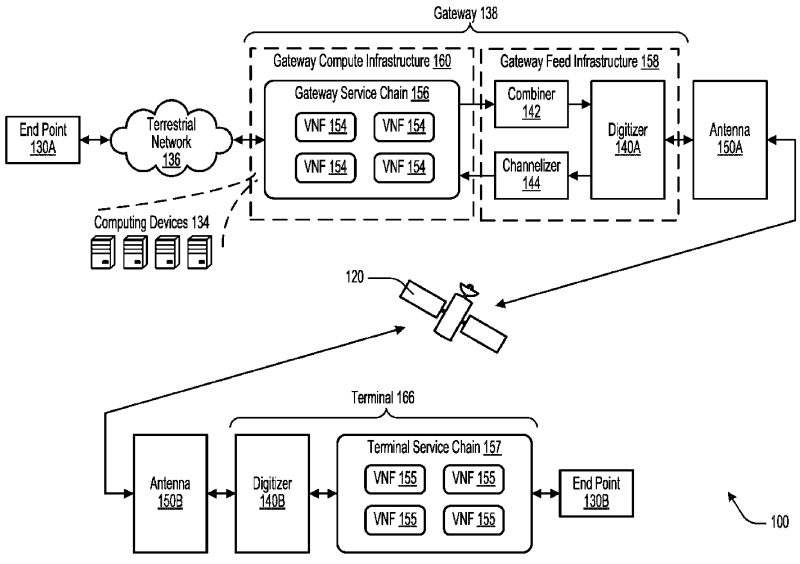

FIG. 1

(57) **Abstract:** Described herein are systems, methods, and other techniques for scaling a satellite communication system. A gateway includes a compute infrastructure running a traffic adapter, a first virtual transmitter, and a first virtual receiver. The first virtual transmitter modulates signals for transmission to a first remote terminal. The first virtual receiver demodulates signals received from the first remote terminal. The traffic adapter transmits first outbound baseband frames to the first virtual transmitter and receives first inbound baseband frames from the first virtual receiver. A request is received to add a second remote terminal to the satellite communication system. A second virtual receiver is instantiated at the compute infrastructure to demodulate signals received from the second remote terminal. The traffic adapter is reconfigured to receive second inbound baseband frames from the second virtual receiver.

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