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(54) **Title:** IMPLEMENTATION OF CORE CELLULAR NETWORKING STACK ON CLOUD INFRASTRUCTURE

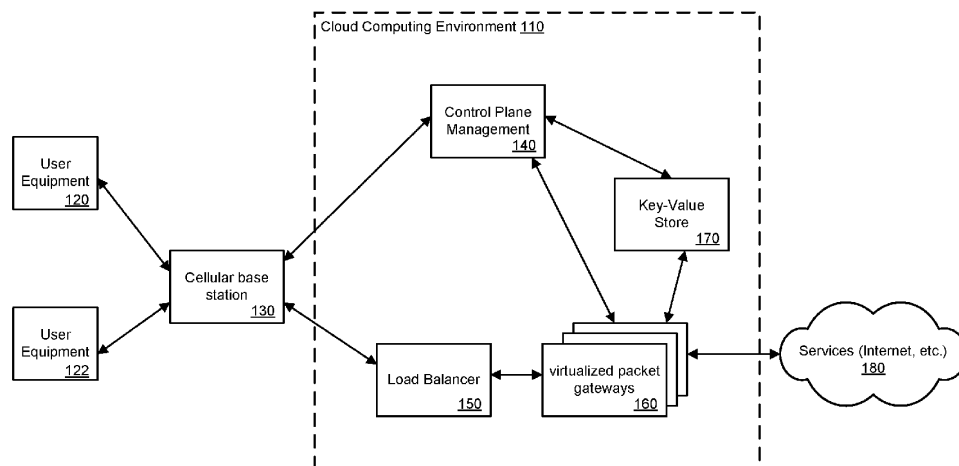


FIG. 1

(57) **Abstract:** Techniques are described for operating a core cellular network stack on a cloud computing environment (e.g., a public cloud infrastructure). For example, virtualized packet gateways can be run on virtual machines of the cloud computing environment and standard load balancers can distribute network traffic of the cellular network among the virtualized packet gateways. The virtualized packet gateways can be setup with a local cache of an external key-value store containing bearers of the cellular network and process received data plane network packets using the local cache. Bearers can be updated within the cellular network using the external key-value store, and virtualized packet gateways can obtain and use updated bearer details.

[Continued on next page]

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- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

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