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Mithyantha

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(54) **SYSTEMS AND METHODS FOR USING ECMP ROUTES FOR TRAFFIC DISTRIBUTION**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 312 days.

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(65) **Prior Publication Data**

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(51) **Int. Cl.**
G06F 15/173 (2006.01)

(52) **U.S. Cl.**
USPC **709/238; 709/249; 370/235; 370/352; 370/392**

(58) **Field of Classification Search**
CPC H04L 45/24; H04L 45/138; H04L 47/125
USPC 709/238, 249; 370/235, 352, 392
See application file for complete search history.

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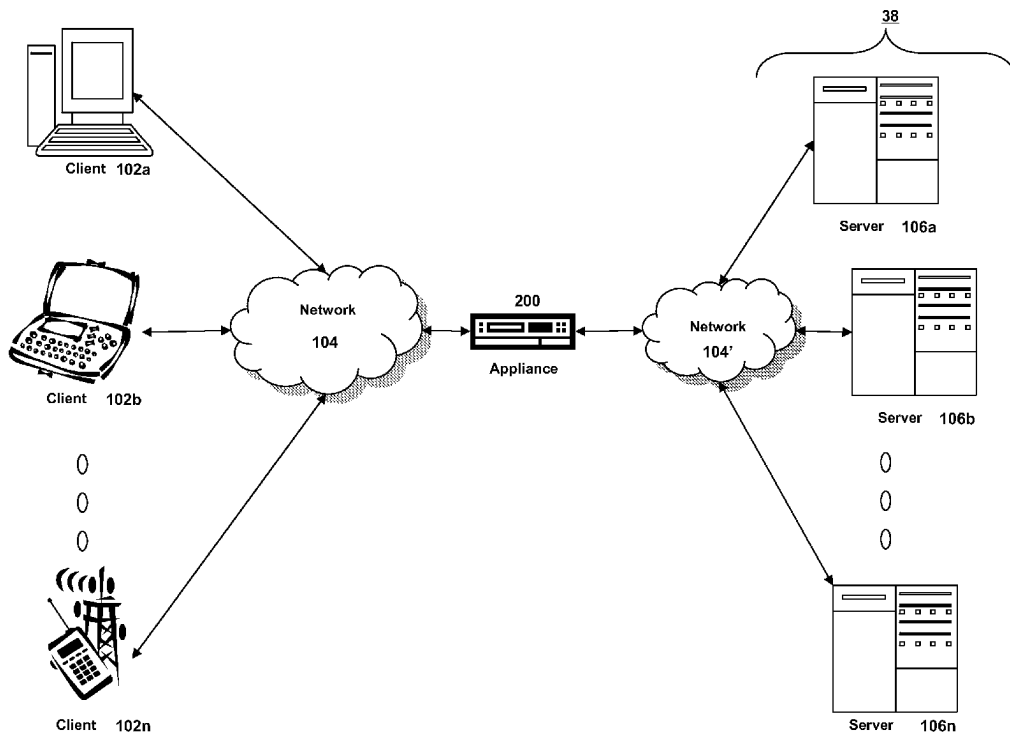
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(57) **ABSTRACT**

The present application is directed towards systems and methods for using equal cost multi-path routing for traffic distribution in a cluster environment. Each intermediary device of a cluster may advertise, via a routing protocol to a router, a corresponding internet protocol (IP) address of a virtual server and one or more connection metrics having predetermined values. Upon determining that another intermediary device of the cluster is unavailable, each active device may re-advertise the IP address of the virtual server executing on the intermediary device and the one or more connection metrics with the previously advertised value reduced by a predetermined amount. In some embodiments, each active device may wait a predetermined time period, such as a time period for expiration of routing protocol tables, and then re-advertise the IP address of the virtual server executing on the intermediary device and the one or more connection metrics with the predetermined values.

18 Claims, 20 Drawing Sheets



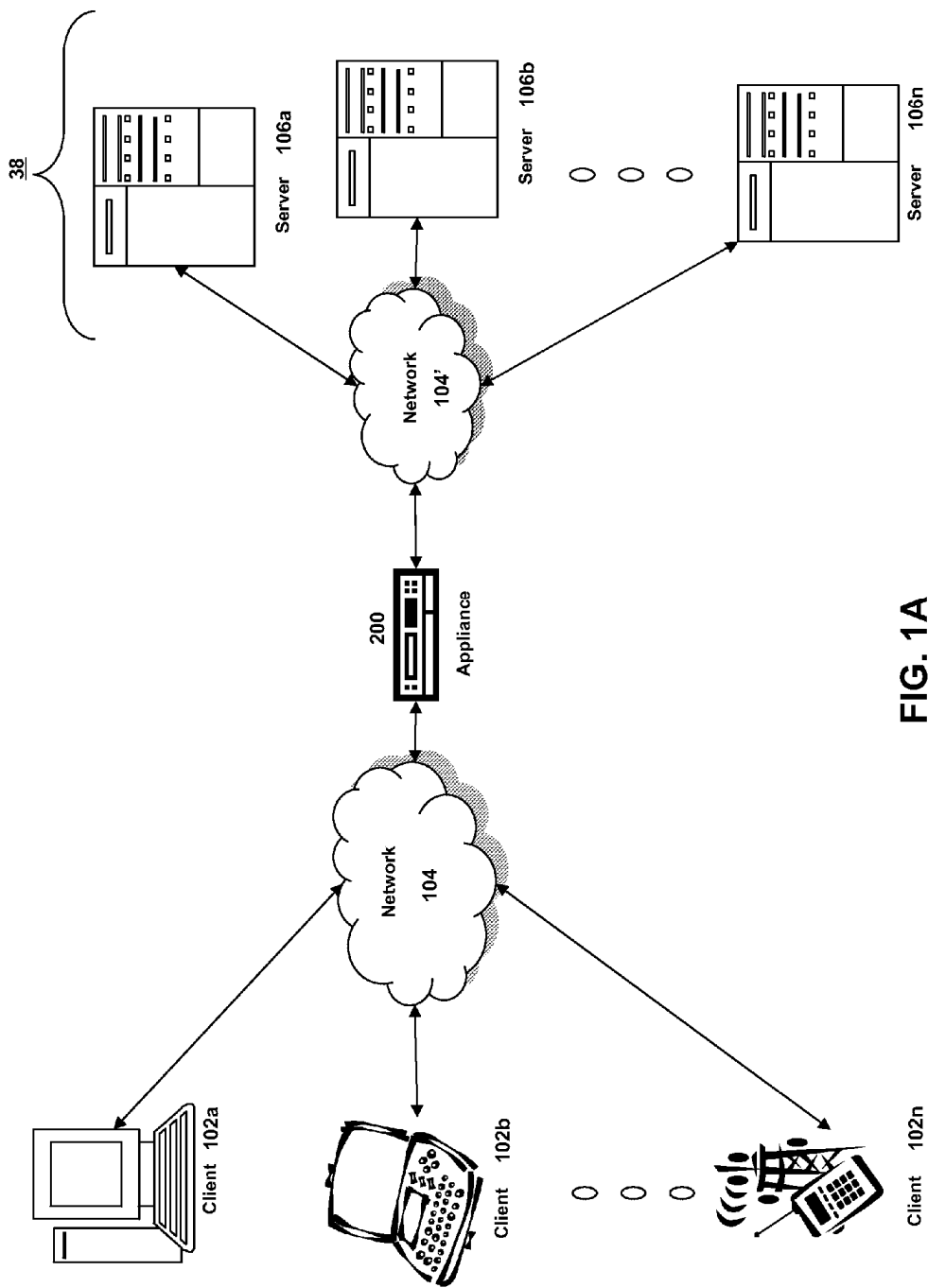


FIG. 1A

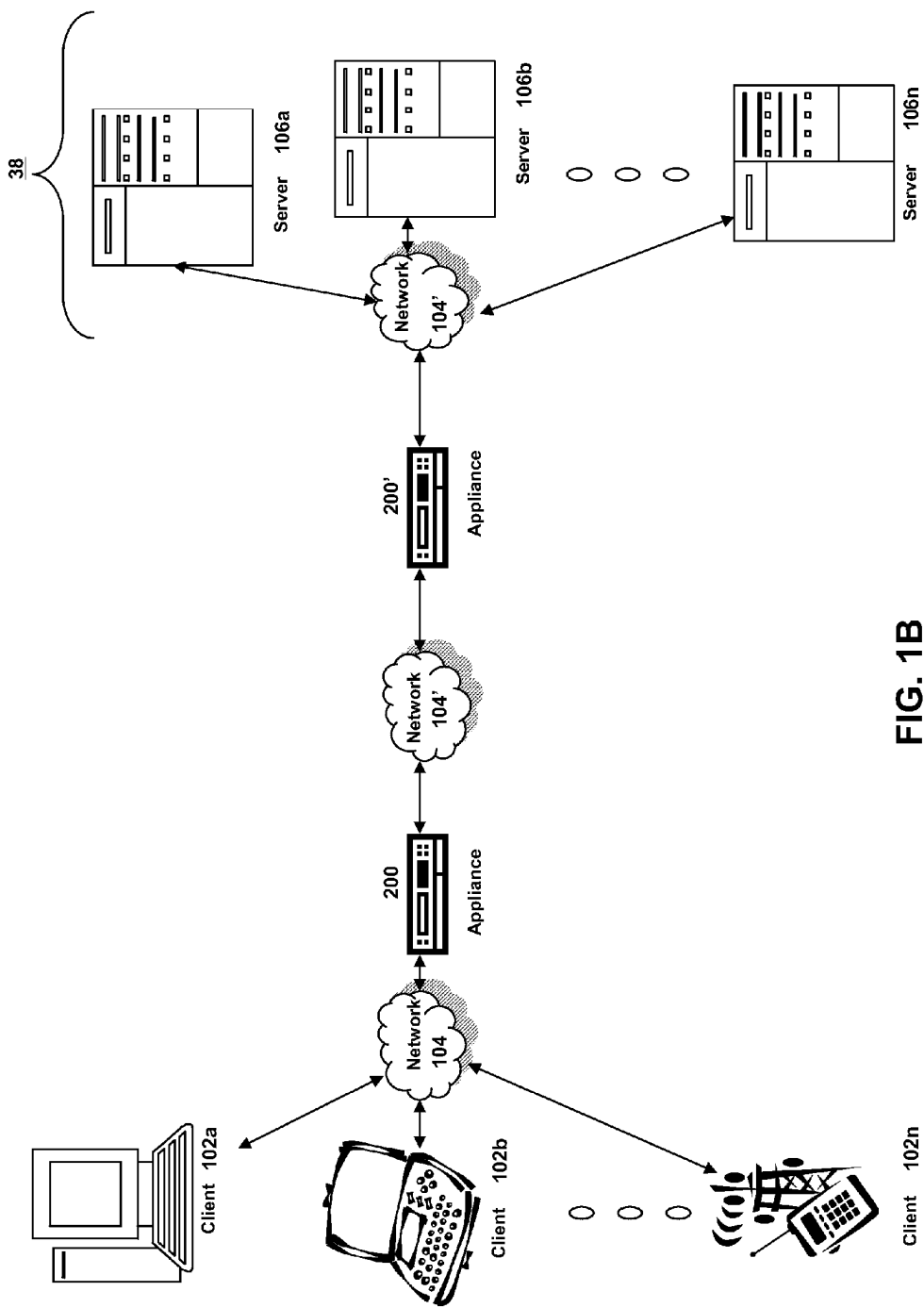


FIG. 1B

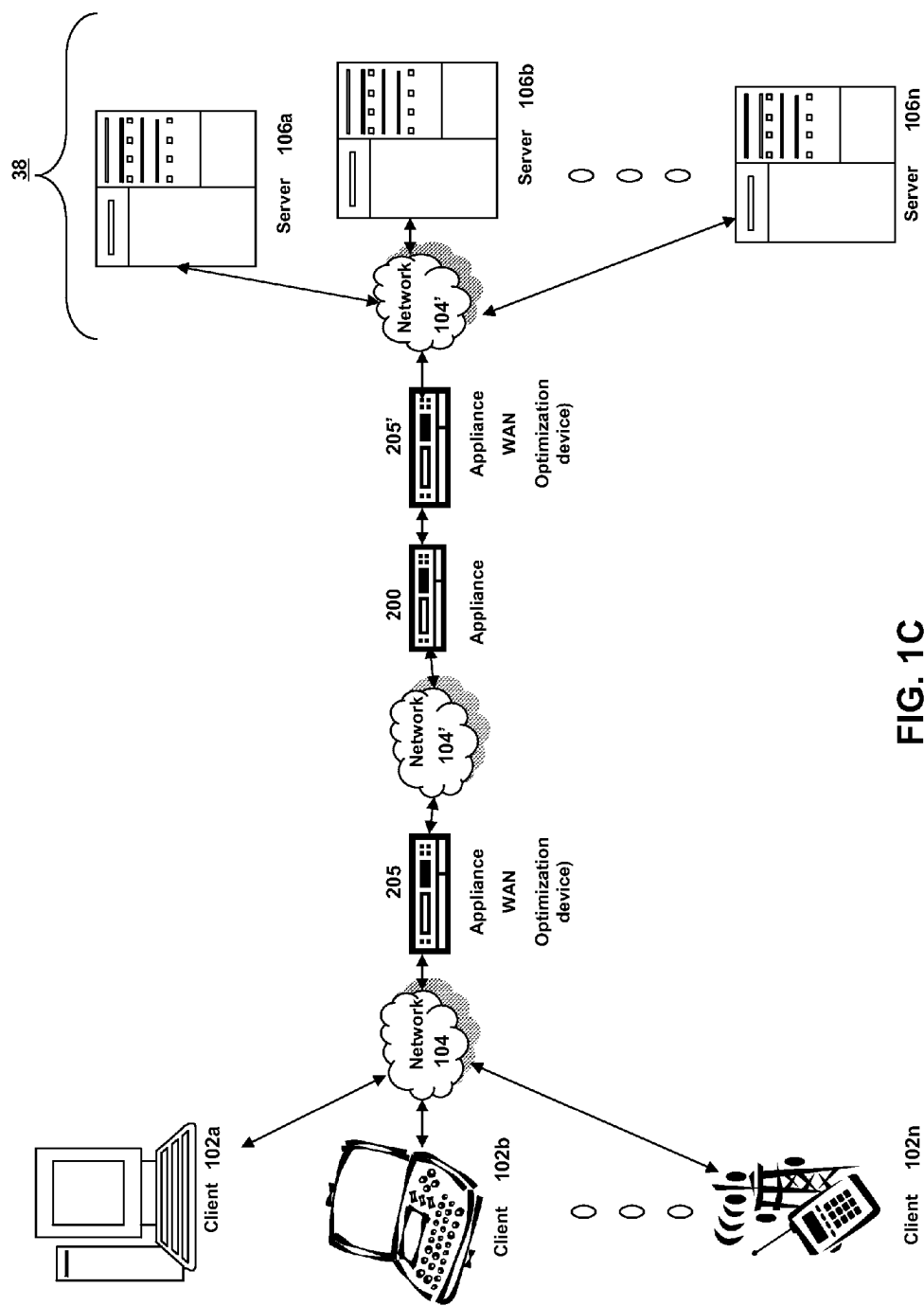


FIG. 1C

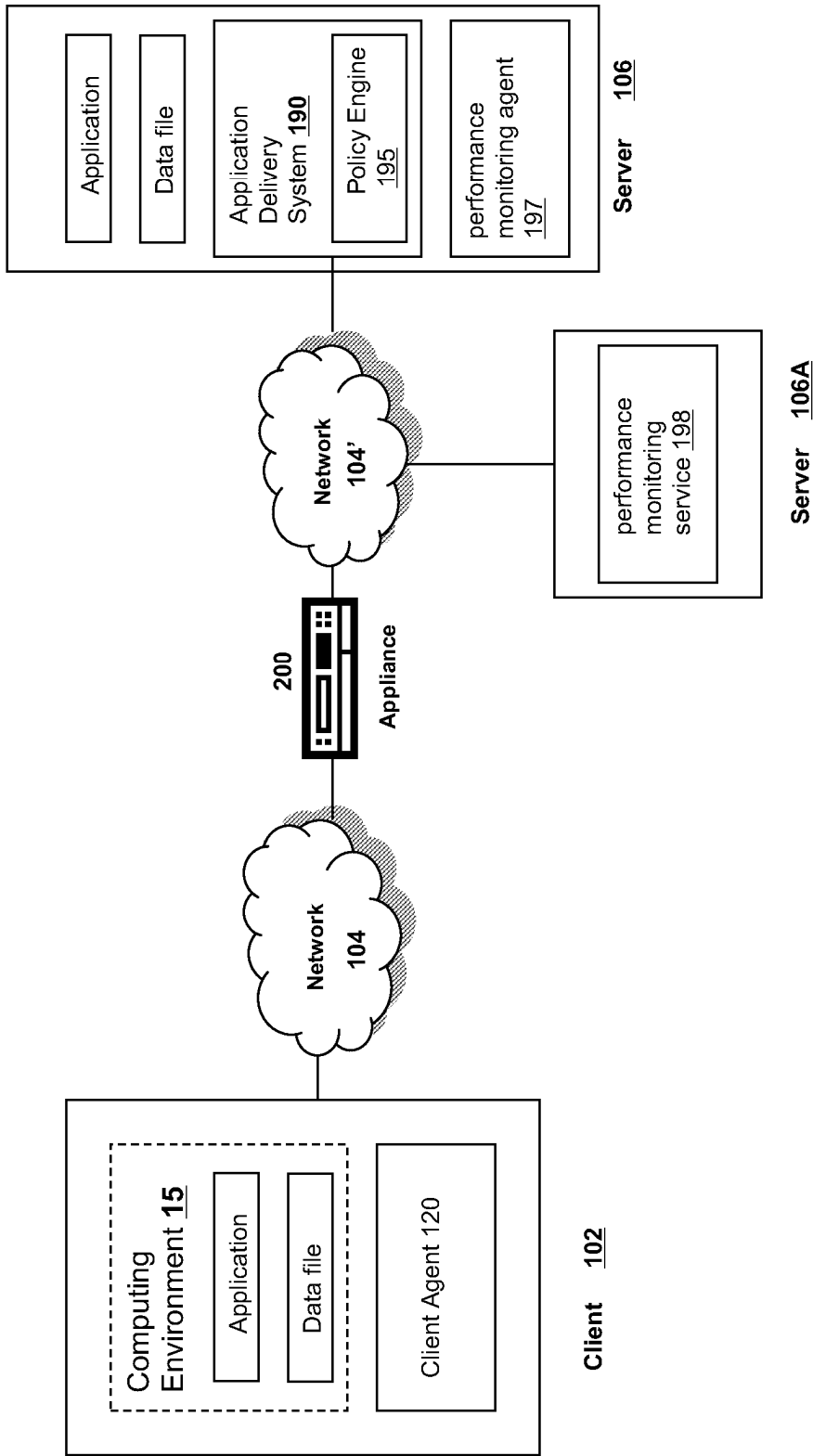


FIG. 1D

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