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# (12) United States Patent

### 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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(22) Filed: Jun. 15, 2012

### (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.

#### (56) References Cited

### U.S. PATENT DOCUMENTS

7,568,047 E	31 * 7/20	009 Ay	san et al.		709/238
2013/0286846 A	11* 10/20	)13 Atl	as et al		370/236
2013/0336329 A	12/20	)13 Go	pinath et a	1	370/401

\* cited by examiner

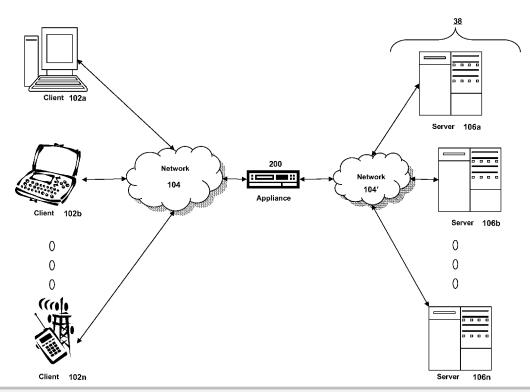
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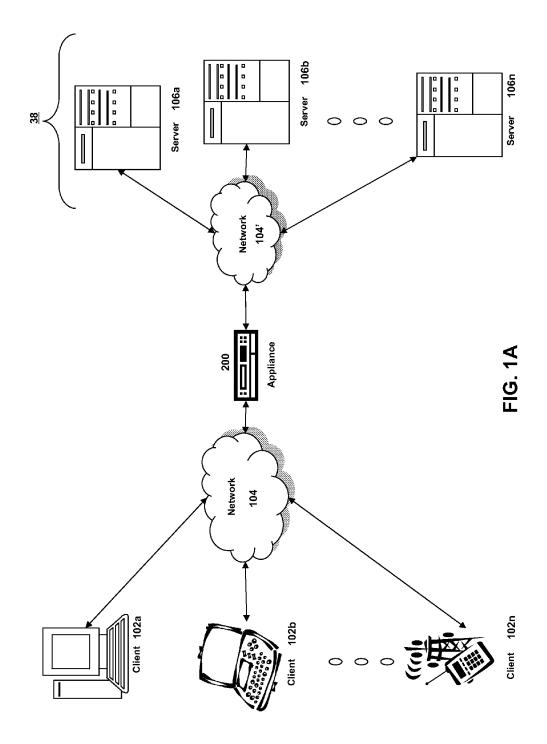
#### (57) ABSTRACT

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.

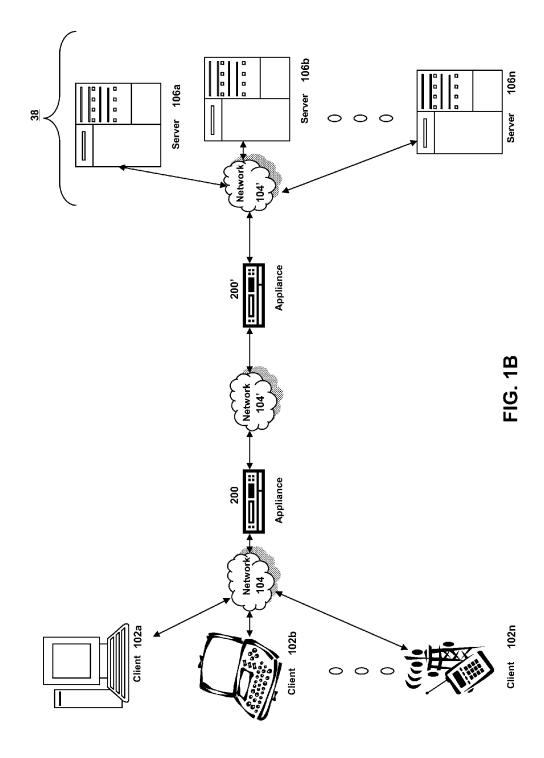
### 18 Claims, 20 Drawing Sheets



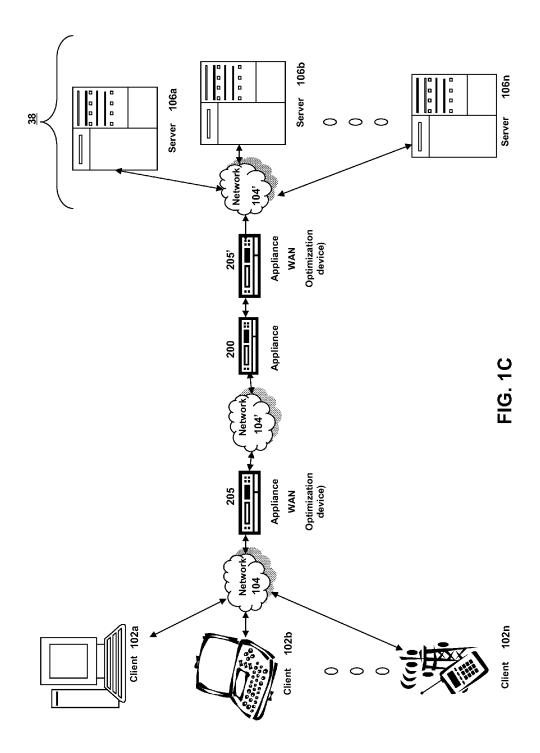














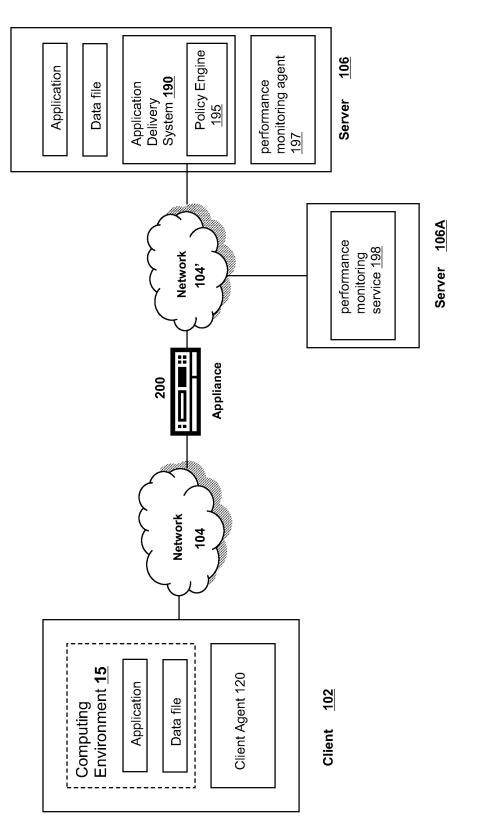


FIG. 10

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