

US007860999B1

(12) United States Patent

Subramanian et al.

(54) DISTRIBUTED COMPUTATION IN NETWORK DEVICES

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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 1839 days.

This patent is subject to a terminal disclaimer.

- (21) Appl. No.: 09/736,678
- (22) Filed: Dec. 13, 2000

Related U.S. Application Data

- (60) Provisional application No. 60/239,484, filed on Oct. 11, 2000.
- (51) Int. Cl. *G06F 15/16* (2006.01) *G06F 15/173* (2006.01)

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,167,033 A * 11/1992 Bryant et al. 709/235

(10) Patent No.: US 7,860,999 B1

(45) **Date of Patent:** *Dec. 28, 2010

5,377,327	A *	12/1994	Jain et al 709/235
5,495,426	A *	2/1996	Waclawsky et al 709/226
5,845,091	A *	12/1998	Dunne et al 709/240
5,854,899	A *	12/1998	Callon et al 709/238
6,044,075	A *	3/2000	Le Boudec et al 370/351
6,078,953	A *	6/2000	Vaid et al 709/223
6,151,633	A *	11/2000	Hurst et al 709/235
6,226,267	B1 *	5/2001	Spinney et al 370/235
6,286,052	B1 *	9/2001	McCloghrie et al 709/238
6,289,389	B1 *	9/2001	Kikinis 709/239
6,421,734	B1 *	7/2002	Nessett et al 709/247
6,424,621	B1 *	7/2002	Ramaswamy et al 370/230
6,570,867	B1 *	5/2003	Robinson et al 370/351
6.611.872	B1 *	8/2003	McCanne 709/238
6,611,874	B1 *	8/2003	Denecheau et al 709/239
6,701,363	B1 *	3/2004	Chiu et al 709/224
6,792,461	B1 *	9/2004	Hericourt
6,868,061	B1 *	3/2005	Kilkki et al 370/230.1

* cited by examiner

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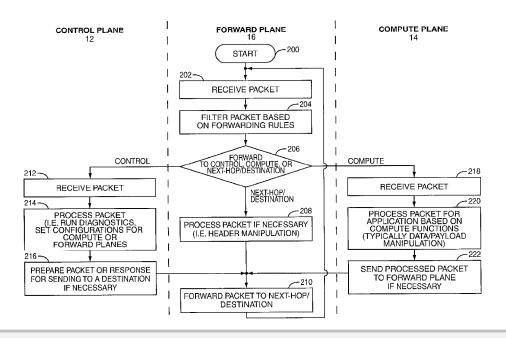
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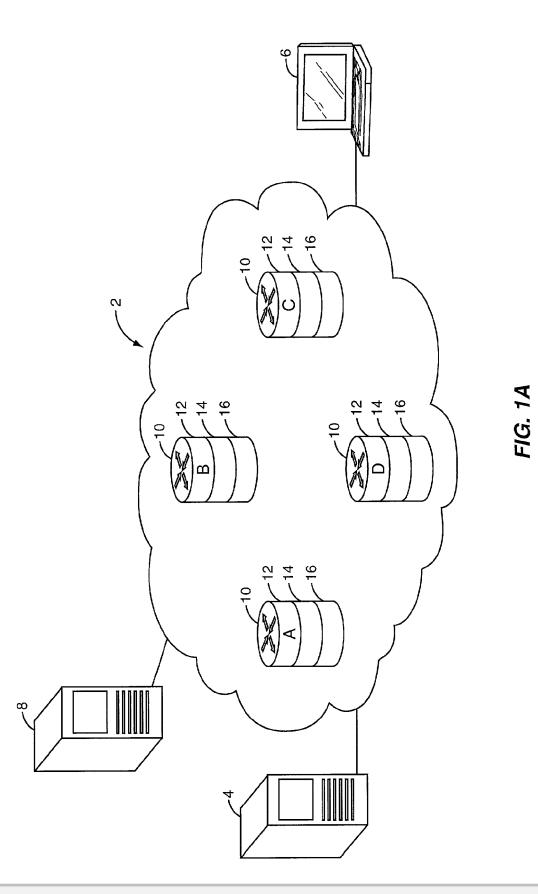
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(57) ABSTRACT

The present invention facilitates routing traffic over a network and distributing application level support among multiple routing devices during routing. Routing nodes are configured to process the content of the traffic to provide the requisite application level support. The traffic is routed, in part, based on the resources available for providing the processing. The processing of the traffic may be distributed throughout the network based on processing capacity of the routing nodes at any given time and given the amount of network congestion.

50 Claims, 9 Drawing Sheets





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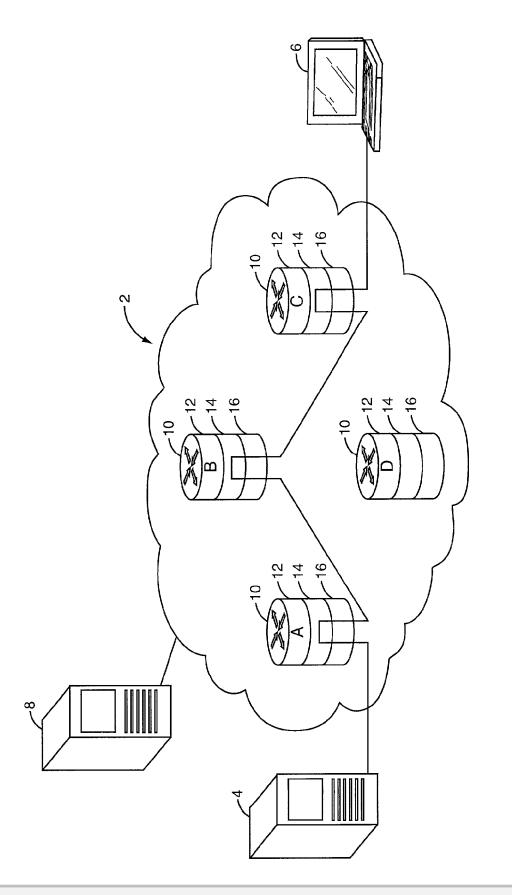
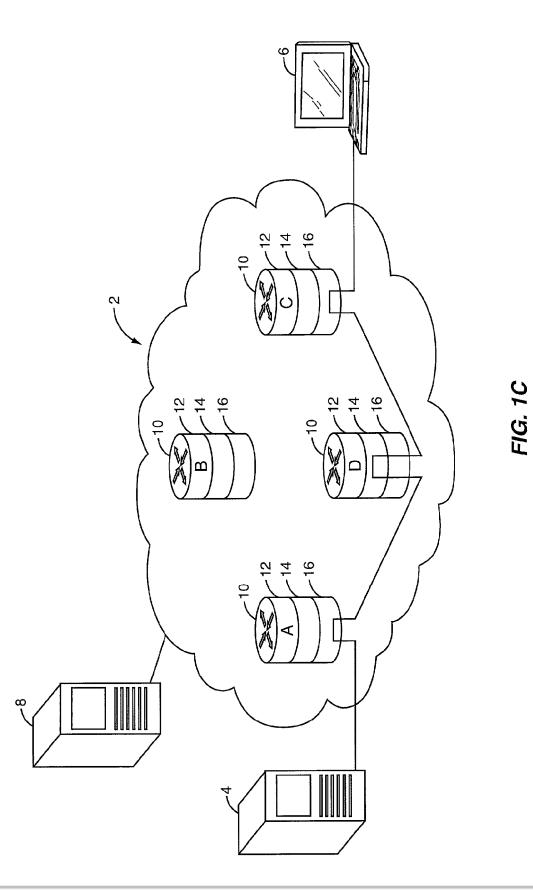


FIG. 1B

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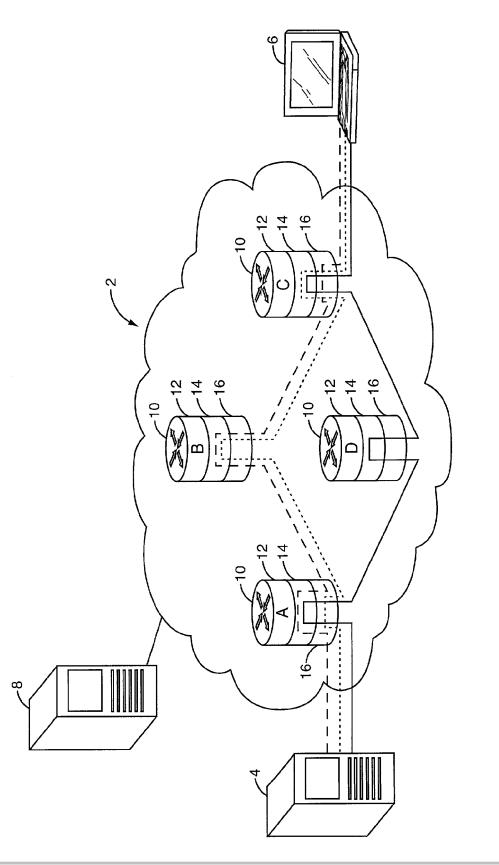


FIG. 1D

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