

US006122277A

United States Patent [19]

Garmire et al.

[56]

4,908,828

5,088,091

5,109,384

5,117,420

5,181,017 5,216,675

5,241,625

6,122,277 [11] **Patent Number:**

Date of Patent: Sep. 19, 2000 [45]

PARALLEL COMPUTER NETWORK BROADCASTING AND ACKNOWLEDGEMENT		
Inventors: Derrick Garmire; Donald G. Grice, both of Kingston, N.Y.; Tim Zhang, Spring, Tex.		
Assignee: International Business Machines Corporation, Armonk, N.Y.		
Appl. No.: 08/920,348		
Filed: Aug. 19, 1997		
Int. Cl. ⁷		

References Cited

U.S. PATENT DOCUMENTS

4,707,827 11/1987 Bione et al. 370/405

5,056,085 10/1991 Vu 370/400

3/1990 Tikalsky 714/822

4/1992 Tseung 714/748

1/1993 Frey, Jr. et al. 709/239

6/1993 Melliar-Smith et al. 714/748

8/1993 Epard et al. 345/502

5,379,295	1/1995	Yonehara 370/400
5,404,565	4/1995	Gould et al 709/237
5,410,300	4/1995	Gould et al 340/825.79
5,469,433	11/1995	McAuley 370/474
5,478,662	12/1995	Strasser
5,673,252	9/1997	Johnson et al 370/449
5,764,895	6/1998	Chung 709/250
5,857,075	1/1999	Chung 709/223
6,049,533	4/2000	Norman et al 370/328

9/1993 Ofek et al. 370/235

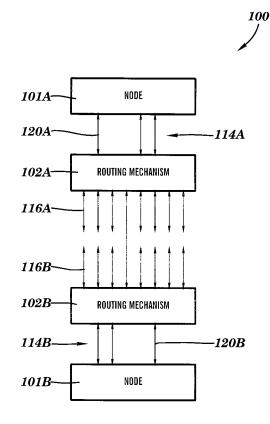
Primary Examiner—Hassan Kizou Assistant Examiner—John Pezzlo

Attorney, Agent, or Firm-Floyd A. Gonzalez, Esq.; Heslin & Rothenberg, P.C.

[57] **ABSTRACT**

Received portion of message is stored persistently and transmitted without awaiting receipt of another portion of the message and without generating a new message. The storing and transmitting can occur substantially simultaneously and be performed by one or more hardware elements. Originator of the message can choose whether to indicate indication of broadcasting of the message. First hardware element can determine local acknowledgement for message and second hardware element can determine determinative signal of the local acknowledgement and at least one of: one or more collected intended recipient acknowledgements for the message; and one or more collected determinative signals of intended recipient acknowledgements for the message.

13 Claims, 5 Drawing Sheets







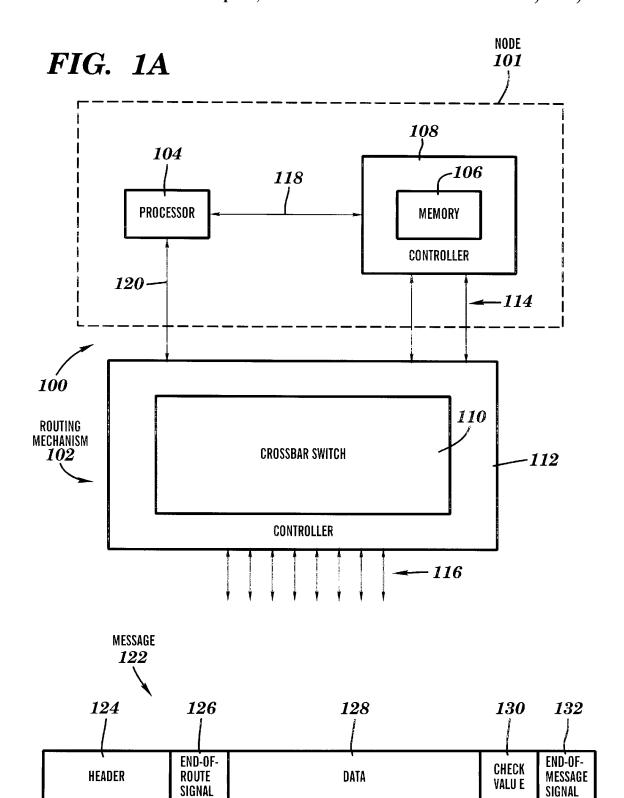
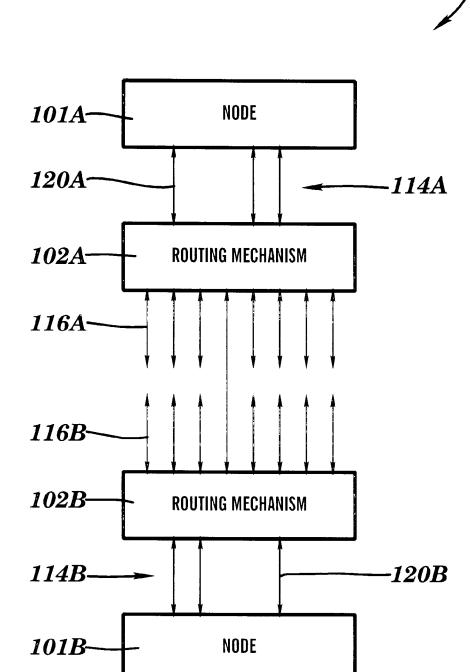


FIG. 2

100



Sep. 19, 2000

FIG. 1B

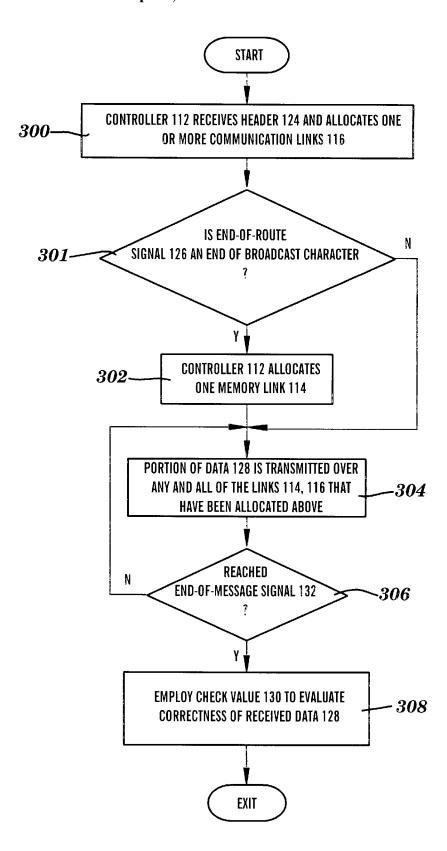


FIG. 3

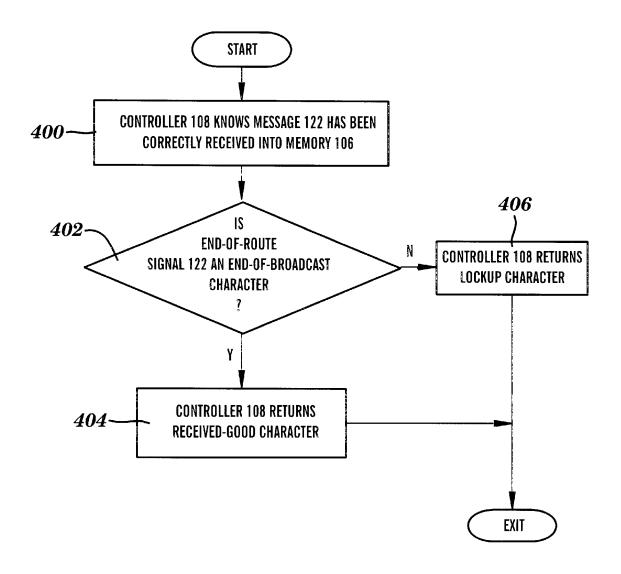


FIG. 4

DOCKET A L A R M

Explore Litigation Insights



Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time** alerts and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.

