United States Patent [19]

Stone

[11] Patent Number: **5,598,410**

[45] Date of Patent: ***Jan. 28, 1997**

[54] **METHOD AND APPARATUS FOR ACCELERATED PACKET PROCESSING**

[75] Inventor: **Geoffrey C. Stone**, Minneapolis, Minn.

[73] Assignee: **Storage Technology Corporation**, Louisville, Colo.

[*] Notice: The term of this patent shall not extend beyond the expiration date of Pat. No. 5,546,390.

[21] Appl. No.: **366,225**

[22] Filed: **Dec. 29, 1994**

[51] Int. Cl.⁶ H04L 12/56; G06F 13/00

[52] U.S. Cl. **370/469**; 395/800; 395/670

[58] Field of Search 370/58.1, 58.2, 370/58.3, 60, 60.1, 61, 79, 82, 83, 85.13, 85.14, 94.1, 94.2, 94.3, 99; 395/200, 325, 375, 650, 800
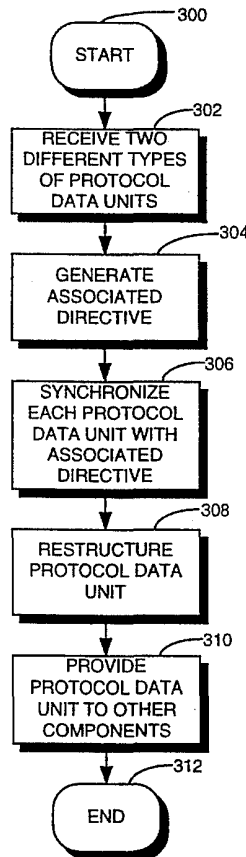
[56] **References Cited**

U.S. PATENT DOCUMENTS

5,134,610	7/1992	Shand et al.	370/60
5,200,953	4/1993	Spatafore et al.	370/85.12
5,249,292	9/1993	Chiappa	395/650
5,278,834	1/1994	Mazzola	370/94.1
5,280,476	1/1994	Kojima et al.	370/60.1
5,307,343	4/1994	Bostica et al.	370/60
5,414,702	5/1995	Kudoh	370/60
5,414,707	5/1995	Johnston et al.	370/79
5,430,709	7/1995	Galloway	370/13

Primary Examiner—Alpus H. Hsu
Attorney, Agent, or Firm—Timothy R. Schulte

[57] **ABSTRACT**

A method and apparatus are provided to transfer protocol data units within a communication network. This transferring is accomplished with a protocol data unit processor that is operated in the communication network. The processor includes a preprocessor which establishes subsequent processing requirements of a particular protocol data unit received from the communication network to generate at least one associated directive for the particular protocol data unit. Subsequently, a synchronizing mechanism synchronizes the particular protocol data unit with the at least one associated directive to generate a synchronized protocol data unit. A restructuring device restructures the synchronized protocol data unit in accordance with the at least one associated directive for the protocol data unit to generate a restructured protocol data unit. In addition, a method of operating the protocol data unit processor in a heterogeneous communication network is provided.
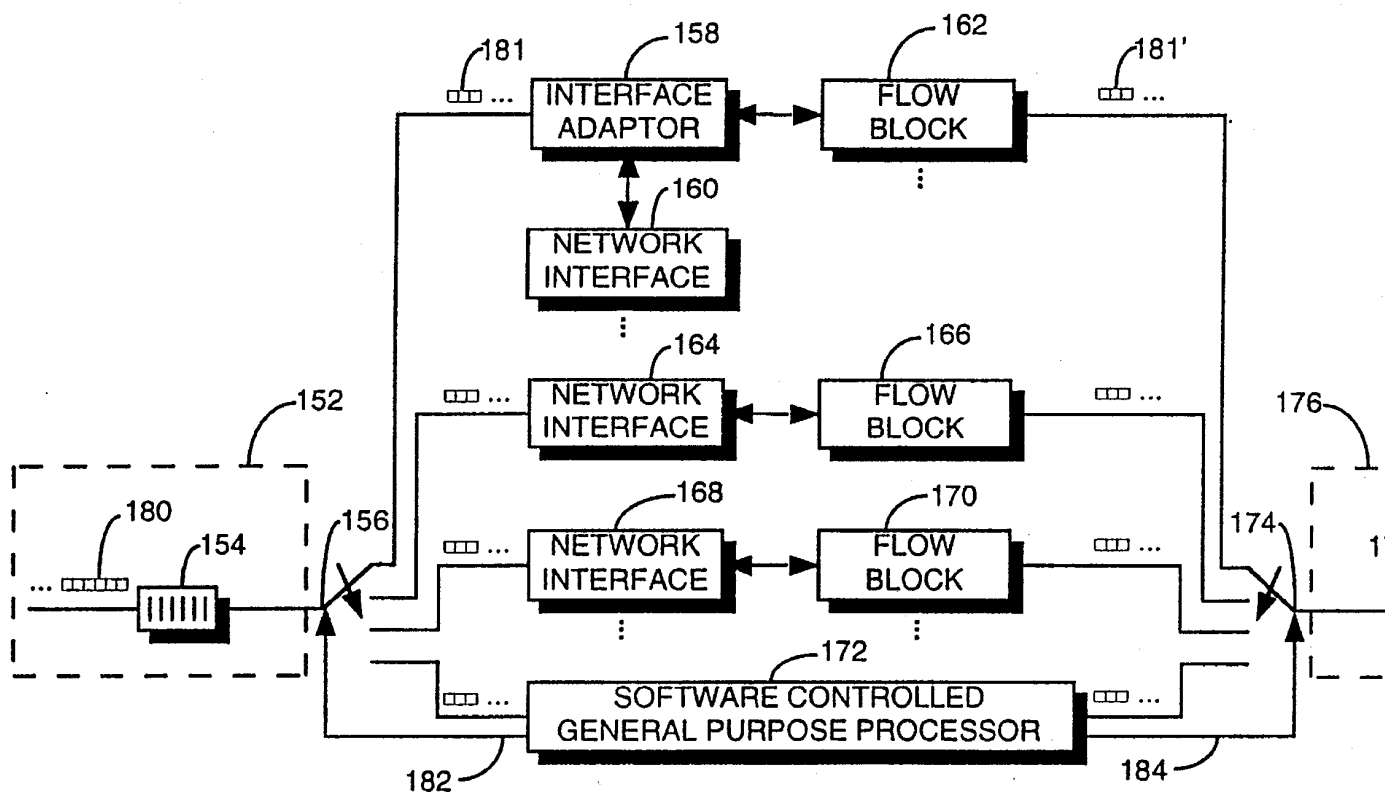
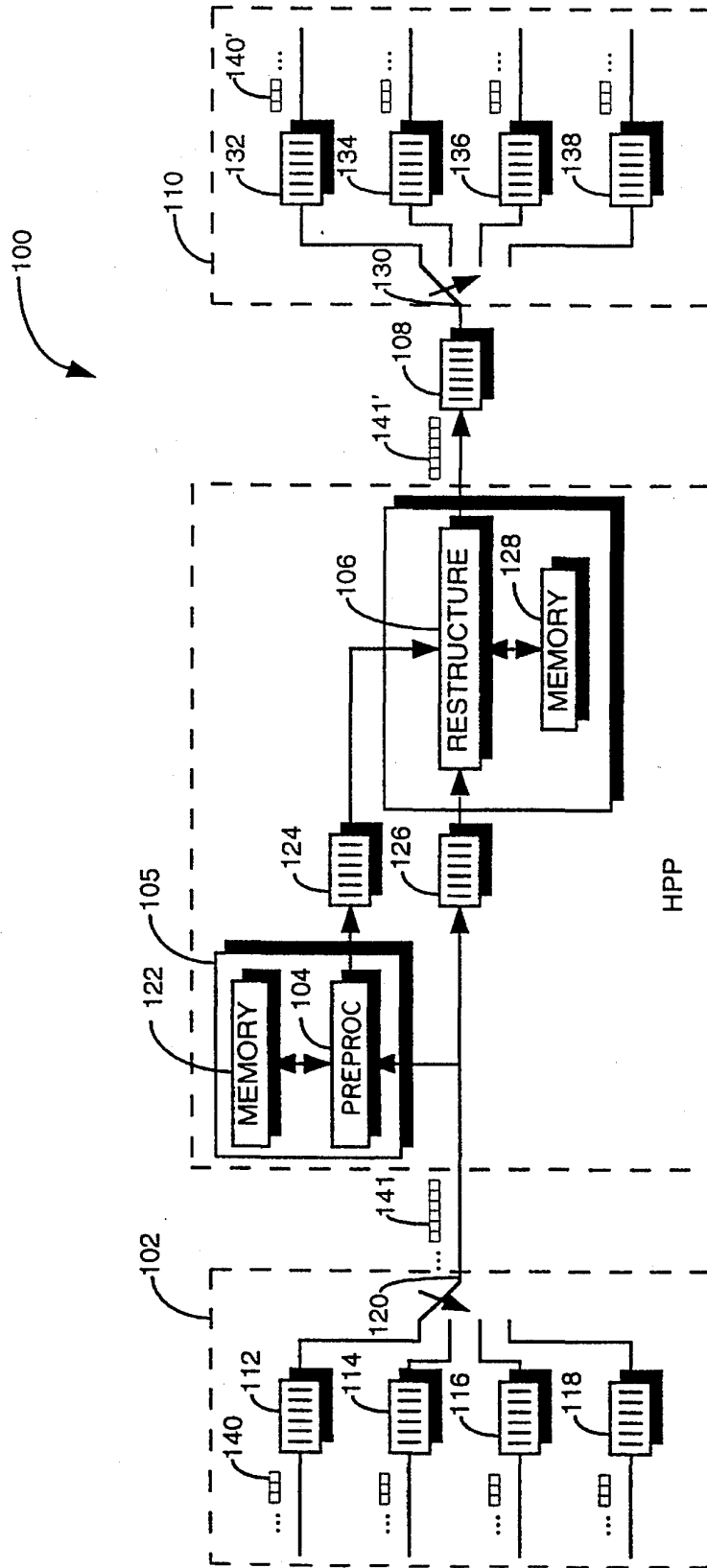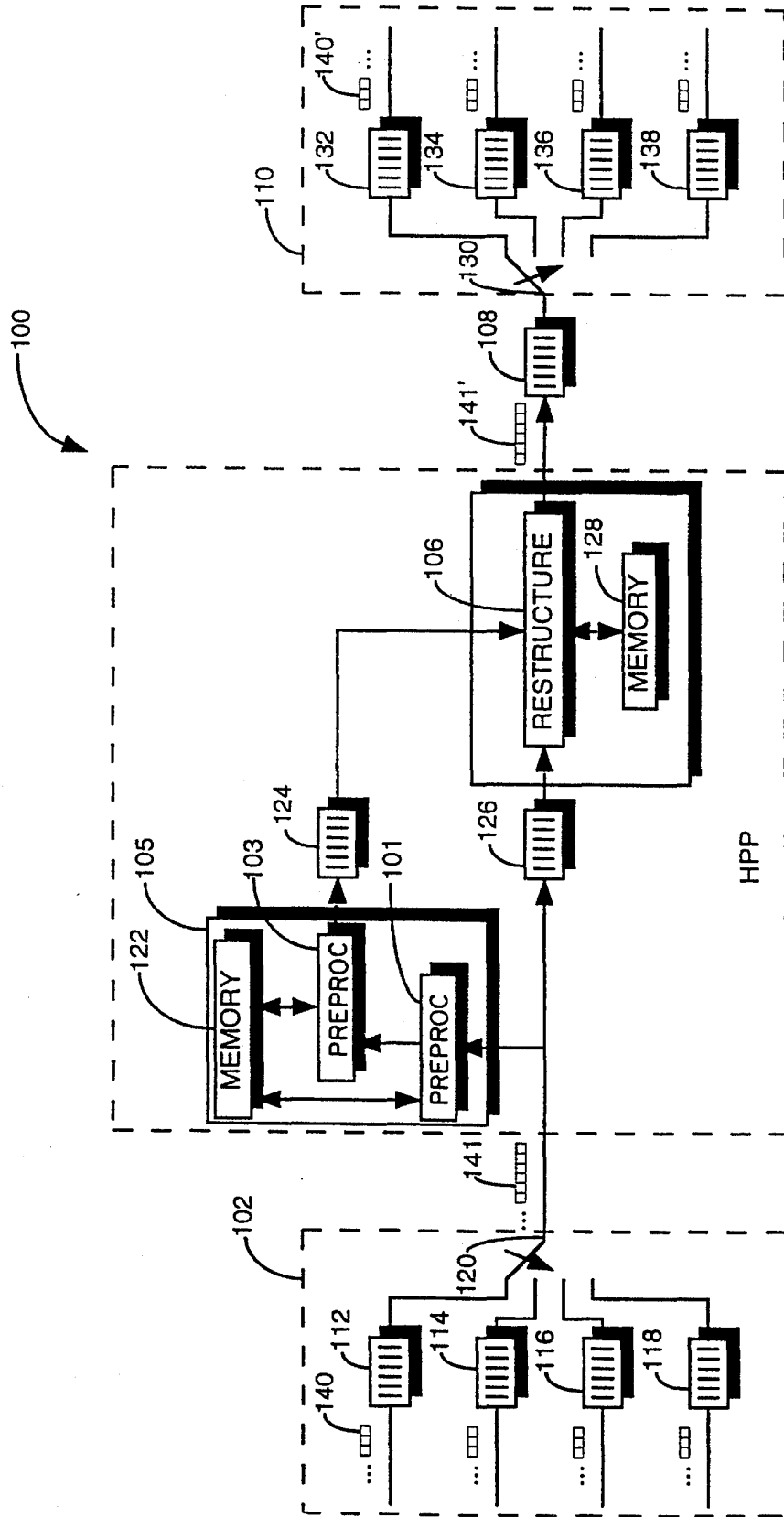**31 Claims, 7 Drawing Sheets**

FIG. 1
-PRIOR ART-

FIG. 2

FIG. 3

FIG. 4

DOCKET ALARM
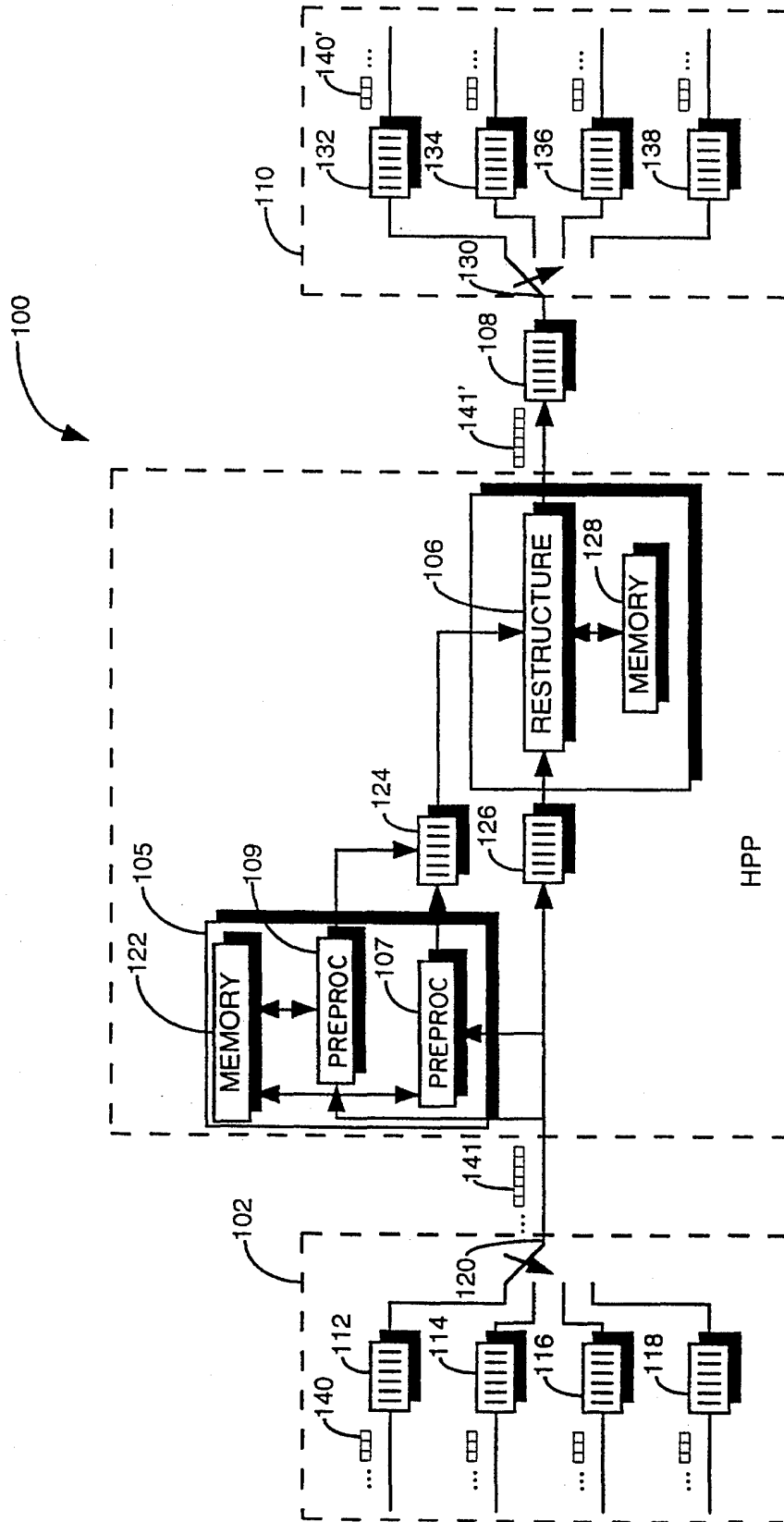
Explore Litigation Insights

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.

fastcase®
Smarter legal research.