

US007336618B2

(12) United States Patent Bennett

(54) METHOD FOR MONITORING PERFORMANCE OF NETWORK USING IP MEASUREMENT PROTOCOL PACKETS

(75) Inventor: Jon Claude Russell Bennett, Sudbury,

MA (US)

(73) Assignee: General Instrument Corporation,

Horsham, PA (US)

(*) Notice: Subject to any disclaimer, the term of this

patent is extended or adjusted under 35

U.S.C. 154(b) by 848 days.

(21) Appl. No.: 10/648,552

(22) Filed: Aug. 25, 2003

(65) Prior Publication Data

US 2004/0095926 A1 May 20, 2004

Related U.S. Application Data

(60) Provisional application No. 60/421,303, filed on Oct. 25, 2002.

(51) Int. Cl.

H04L 12/26 (2006.01) H04L 12/28 (2006.01)

(10) Patent No.: US 7

US 7,336,618 B2

(45) Date of Patent:

Feb. 26, 2008

(56) References Cited

U.S. PATENT DOCUMENTS

| 6,978,223 | B2* | 12/2005 | Milliken | 702/182 |
|--------------|-----|---------|--------------|---------|
| 2004/0062267 | A1* | 4/2004 | Minami et al | 370/463 |
| 2005/0089016 | A1* | 4/2005 | Zhang et al | 370/351 |

OTHER PUBLICATIONS

McGregor, IPMP draft-mcgregor-ipmp-00.txt, Feb. 2002.*

* cited by examiner

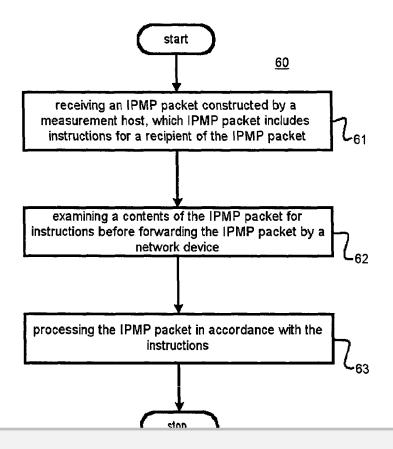
Primary Examiner—Huy D. Vu Assistant Examiner—Clemence Han

(74) Attorney, Agent, or Firm-Larry T. Cullen

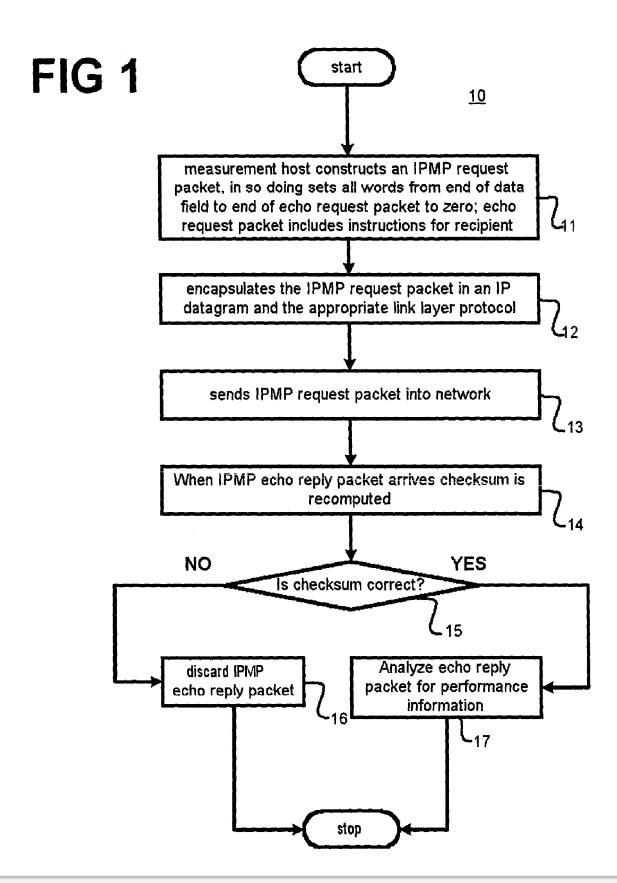
(57) ABSTRACT

The practice and need for active network measurement is well established, however, current tools are not well suited to this task, mostly because the protocols which they employ have not been designed for measurement of the modem Internet. The IP Measurement Protocol (IPMP) is based on packet-probes, and is designed to allow routers to participate in measurements by the insertion of path information as the probe passes between a pair of hosts.

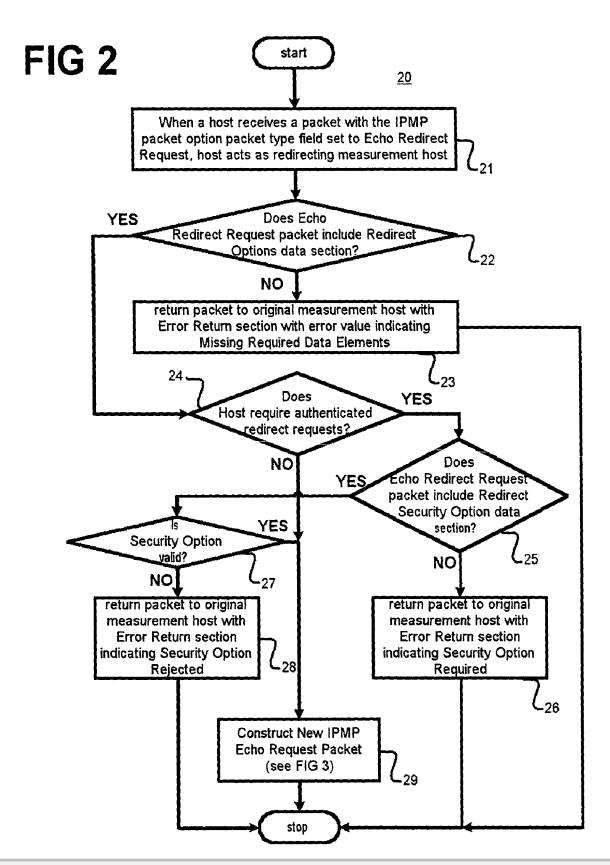
20 Claims, 12 Drawing Sheets





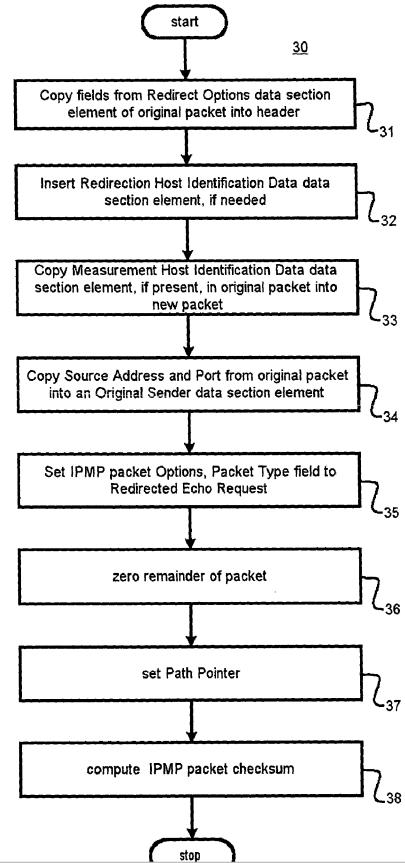




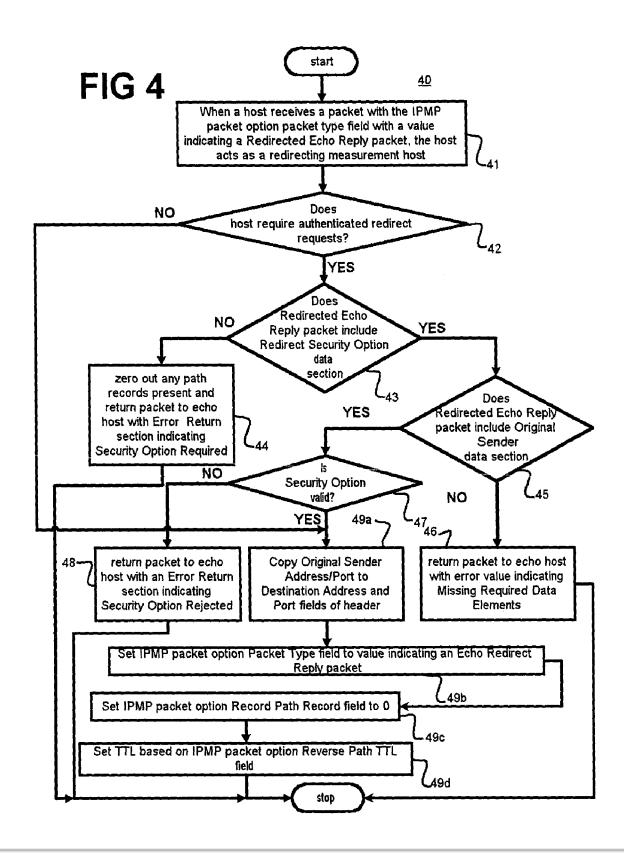














DOCKET A L A R M

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.

