Cisco Systems, Inc. and Juniper Networks, Inc.
v.
Orckit Corporation

Patent Owner Demonstratives
IPR2023-00554
U.S. Patent No. 10,652,111
July 9, 2024

ames Carmichael
Steve McBride
Mitch Yang
Carmichael IP, PLLC

Michael Ng
George Stamatopoulos
Kobre & Kim LLP

.The ’111 Patent

.The Challenged Claims Are Patentable

The ’111 Patent

nited States Patent
arsheshet et al.

(10) Patent No.: US 10,652,111 B2
(45) Date of Patent: May 12, 2020

ETHOD AND SYSTEM FOR DEEP PACKET NSPECTION IN SOFTWARE DEFINED ETWORKS

pplicant: ORCKIT IP, LLC, Newton, MA (US)

ventors: Yossi Barsheshet, Ashdod (IL); Simhon Doctori, Gan-Yavne (IL); Ronen Solomon, Ranat-Gan (IL)

ssignee: ORCKIT IP, LLC, Dover, DE (US)

otice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 306 days.

ppl. No.: 15/126,288

CT Filed: Apr. 21, 2015

CT No.: PCT/US2015/026869

371 (c)(1),
) Date: Sep. 15, 2016

CT Pub. No.: WO2015/164370

CT Pub. Date: Oct. 29, 2015

Prior Publication Data

S 2017/0099196 A1 Apr. 6, 2017

Related U.S. Application Data

rovisional application No. 61/982,358, filed on Apr. 2, 2014.

t. Cl.
04L 12/26 (2006.01)
04L 12/64 (2006.01)
(Continued)

.S. Cl.
PC H04L 43/028 (2013.01); H04L 12/6418 (2013.01); H04L 43/026 (2013.01);
(Continued)

(58) Field of Classification Search
CPC . H04L 43/026; H04L 12/6418; H04L 43/028; H04L 49/70; H04L 69/161
(Continued)

(56) References Cited

U.S. PATENT DOCUMENTS

2010/0208590 A1* 8/2010 Dolganow H04L 43/026 370/235
2010/0212006 A1 8/2010 Dolganow et al.
(Continued)

FOREIGN PATENT DOCUMENTS

EP 2672668 A1 12/2013

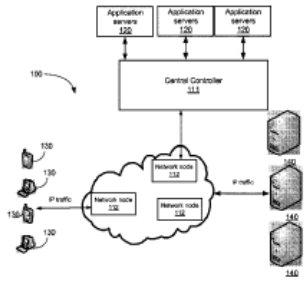
OTHER PUBLICATIONS

Supplementary Search Report of EP 15783292 dated Nov. 7, 2017.
(Continued)

Primary Examiner — Jae Y Lee
Assistant Examiner — Jean F Voltaire
(74) *Attorney, Agent, or Firm* — May Patents Ltd. c/o Dorit Shem-Tov

(57) ABSTRACT

A method for deep packet inspection (DPI) in a software defined network (SDN). The method includes configuring a plurality of network nodes operable in the SDN with at least one probe instruction; receiving from a network node a first packet of a flow, the first packet matches the at least one probe instruction and includes a first sequence number; receiving from a network node a second packet of the flow, the second packet matches the at least one probe instruction and includes a second sequence number, the second packet is a response of the first packet; computing a mask value respective of at least the first and second sequence numbers indicating which bytes to be mirrored from subsequent packets belonging to the same flow; generating at least one
(Continued)



(10) Patent No.: US 10,652,111 B2
(45) Date of Patent: May 12, 2020

(57) ABSTRACT

A method for deep packet inspection (DPI) in a software defined network (SDN). The method includes configuring a plurality of network nodes operable in the SDN with at least one probe instruction; receiving from a network node a first packet of a flow, the first packet matches the at least one probe instruction and includes a first sequence number; receiving from a network node a second packet of the flow, the second packet matches the at least one probe instruction and includes a second sequence number, the second packet is a response of the first packet; computing a mask value respective of at least the first and second sequence numbers indicating which bytes to be mirrored from subsequent packets belonging to the same flow; generating at least one

Ex. 1001 [’111 Patent], p. 1

The ’111 Patent

1. A method for use with a packet network including a network node for transporting packets between first and second entities under control of a controller that is external to the network node, the method comprising:

sending, by the controller to the network node over the packet network, an instruction and a packet-applicable criterion;

receiving, by the network node from the controller, the instruction and the criterion; receiving, by the network node from the first entity over the packet network, a packet addressed to the second entity;

checking, by the network node, if the packet satisfies the criterion;

responsive to the packet not satisfying the criterion, sending, by the network node over the packet network, the packet to the second entity; and

responsive to the packet satisfying the criterion, sending the packet, by the network node over the packet network, to an entity that is included in the instruction and is other than the second entity.

Ex. 1001, Cl. 1.

The ’111 Patent

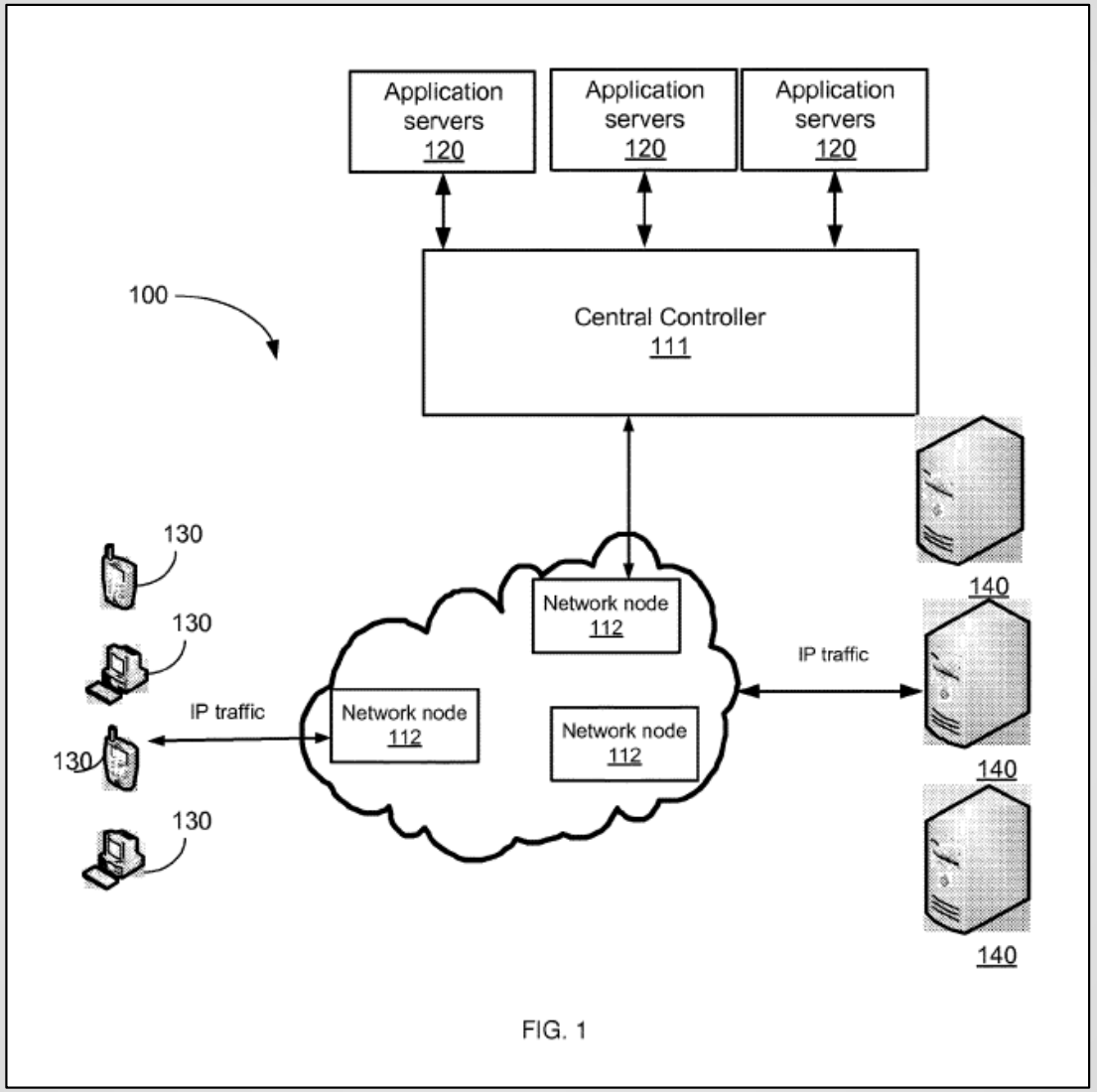


FIG. 1

Ex. 1001, Fig. 1

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.