

EXHIBIT 3

(12) **United States Patent**
Reumann et al.

(10) **Patent No.:** **US 8,381,209 B2**
(45) **Date of Patent:** **Feb. 19, 2013**

(54) **MOVEABLE ACCESS CONTROL LIST (ACL) MECHANISMS FOR HYPERVISORS AND VIRTUAL MACHINES AND VIRTUAL PORT FIREWALLS**

(75) Inventors: **John Reumann**, Croton on Hudson, NY (US); **Debanjan Saha**, Mohegan Lake, NY (US); **Sambit Sahu**, Hopewell Junction, NY (US); **Dinesh Chandra Verma**, Mount Kisco, NY (US)

(73) Assignee: **International Business Machines Corporation**, Armonk, NY (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 1429 days.

(21) Appl. No.: **11/619,536**

(22) Filed: **Jan. 3, 2007**

(65) **Prior Publication Data**

US 2008/0163207 A1 Jul. 3, 2008

(51) **Int. Cl.**
G06F 9/455 (2006.01)

(52) **U.S. Cl.** 718/1; 709/250; 718/102

(58) **Field of Classification Search** 709/250; 718/1, 102

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,386,552 A	1/1995	Garney	
6,496,847 B1	12/2002	Bugnion et al.	
6,691,146 B1	2/2004	Armstrong et al.	
6,795,966 B1	9/2004	Lim et al.	
2004/0015966 A1	1/2004	MacChiano et al.	
2004/0158720 A1	8/2004	O'Brien	
2006/0136653 A1*	6/2006	Traut et al.	711/6
2006/0143311 A1*	6/2006	Madukkarumukumana et al.	710/1
2006/0236127 A1*	10/2006	Kurien et al.	713/193
2008/0034234 A1*	2/2008	Shimizu et al.	713/320
2008/0244569 A1*	10/2008	Challener et al.	718/1
2009/0025007 A1*	1/2009	Hara et al.	718/105
2009/0119684 A1*	5/2009	Mahalingam et al.	719/324
2009/0129385 A1*	5/2009	Wray et al.	370/392
2009/0249438 A1*	10/2009	Litvin et al.	726/1
2009/0296726 A1*	12/2009	Snively et al.	370/401
2009/0328074 A1*	12/2009	Oshins	719/321

* cited by examiner

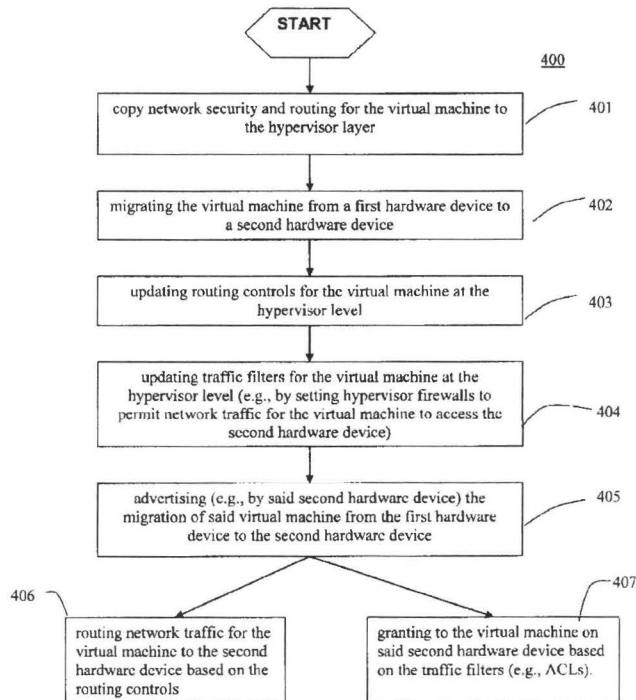
Primary Examiner — Mohamed Wasel

(74) *Attorney, Agent, or Firm* — Eustus D. Nelson, Esq.; McGinn IP Law Group, PLLC

(57) **ABSTRACT**

A method (and system) which provides virtual machine migration with filtered network connectivity and control of network security of a virtual machine by enforcing network security and routing at a hypervisor layer at which the virtual machine partition is executed, and which is independent of guest operating systems.

17 Claims, 18 Drawing Sheets



100

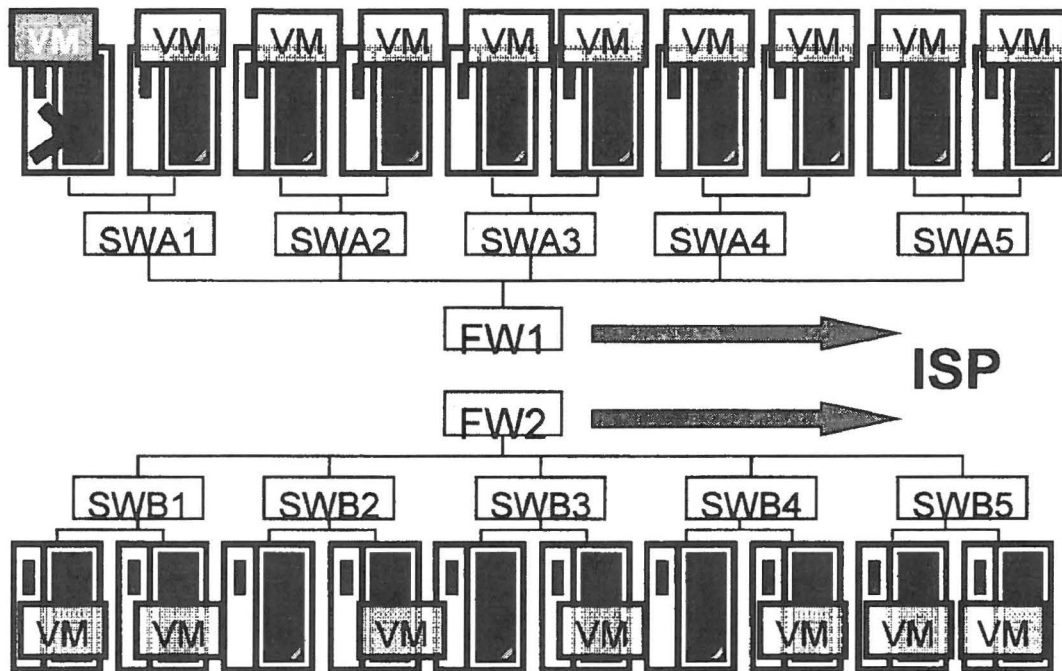


FIGURE 1

200

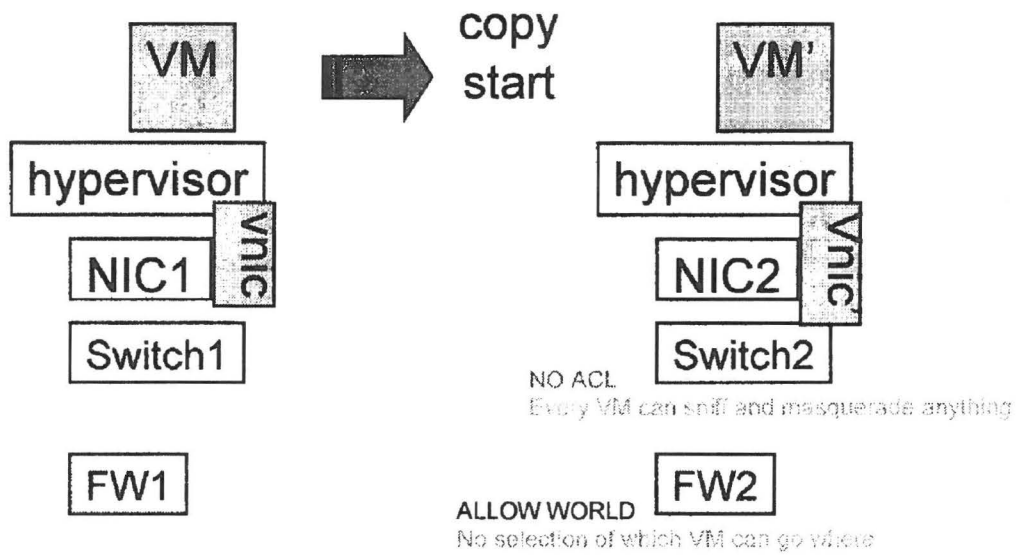


FIGURE 2

300

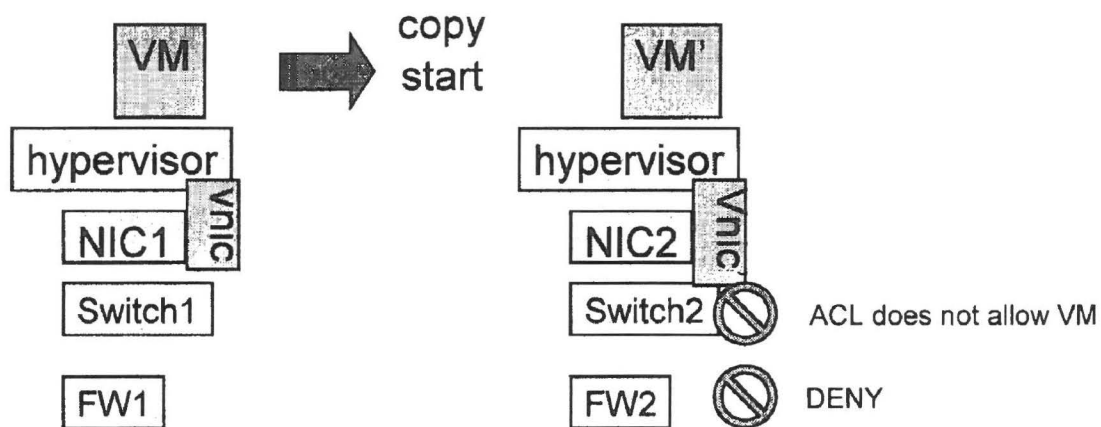


FIGURE 3

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.