

Filed: January 31, 2025

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

AMAZON.COM, INC.,
Petitioner,

v.

VIRTAMOVE, CORP.,
Patent Owner.

IPR2025-00563
U.S. Patent No. 7,519,814

**PETITION FOR *INTER PARTES* REVIEW
OF CLAIMS 1, 2, 4, 6, 8-10, AND 13-14 OF U.S. PATENT NO. 7,519,814**

TABLE OF CONTENTS

| | |
|---|----|
| INTRODUCTION ----- | 1 |
| I. BACKGROUND----- | 2 |
| A. Containers Versus Virtual Machines----- | 2 |
| B. Containers Versus Shared Application Environment ----- | 3 |
| C. Containers in the Prior Art ----- | 3 |
| 1. Linux VServer (Gélinas)----- | 4 |
| 2. Solaris Zones (Tucker) ----- | 5 |
| 3. Zap Pods (Osman) ----- | 6 |
| II. THE '814 PATENT----- | 7 |
| A. Overview----- | 7 |
| B. Prosecution History----- | 8 |
| III. STATEMENT OF RELIEF REQUESTED----- | 9 |
| A. Grounds ----- | 9 |
| B. The References Are Prior Art ----- | 10 |
| 1. The Patent's Filing Date ----- | 10 |
| 2. Osman ----- | 12 |
| 3. Tucker ----- | 13 |
| 4. Bandhole ----- | 15 |
| 5. Gélinas----- | 16 |
| IV. LEVEL OF ORDINARY SKILL ----- | 17 |
| V. CLAIM CONSTRUCTION----- | 17 |

| | | |
|-----|---|----|
| A. | “Container” and “System Files” ----- | 18 |
| B. | “Disparate Computing Environments” ----- | 18 |
| VI. | GROUND OF UNPATENTABILITY----- | 20 |
| A. | Ground 1: Claims 1, 2, 4, 6, 8-10, and 13-14 are Unpatentable as Obvious in View of Osman----- | 20 |
| 1. | Claim 1 ----- | 20 |
| a. | Limitation 1[pre][i]: “In a system having a plurality of servers” ----- | 20 |
| b. | Limitation 1[pre][ii]: “with operating systems that differ”----- | 20 |
| c. | Limitation 1[pre][iii]: “operating in disparate computing environments”----- | 21 |
| d. | Limitation 1[pre][iv]: “wherein each server includes a processor and an operating system including a kernel” ----- | 22 |
| e. | Limitation 1[pre][v]: “a set of associated local system files compatible with the processor” ----- | 22 |
| f. | Limitation 1[pre][vi]: “a method of providing at least some of the servers in the system with secure, executable applications related to a service” ----- | 22 |
| g. | Limitation 1[pre][vii]: “wherein the applications are executed in a secure environment”----- | 23 |
| h. | Limitation 1[pre][viii]: “wherein the applications each include an object executable by at least some of the different operating systems for performing a task related to the service”----- | 24 |

- i. Limitation 1[a][i]: “the method comprising: storing in memory accessible to at least some of the servers a plurality of secure containers of application software” -----24
- j. Limitation 1[a][ii]: “each container comprising one or more of the executable applications and a set of associated system files required to execute the one or more applications” -----26
- k. Limitation 1[a][iii]: “for use with a local kernel residing permanently on one of the servers” -----27
- l. Limitation 1[a][iv]: “wherein the set of associated system files are compatible with a local kernel of at least some of the plurality of different operating systems” -----27
- m. Limitation 1[a][v]: “the containers of application software excluding a kernel” -----28
- n. Limitation 1[a][vi]: “wherein some or all of the associated system files within a container stored in memory are utilized in place of the associated local system files that remain resident on the server” -----28
- o. Limitation 1[a][vii]: “wherein said associated system files utilized in place of the associated local system files are copies or modified copies of the associated local system files that remain resident on the server” -----28
- p. Limitation 1[a][viii]: “wherein the application software cannot be shared between the plurality of secure containers of application software” -----29

- q. Limitation 1[a][ix]: “wherein each of the containers has a unique root file system that is different from an operating system’s root file system”-----30
2. Claim 2: “wherein each container has an execution file associated therewith for starting the one or more applications” -----30
3. Claim 4: “pre-identifying applications and system files required for association with the one or more containers prior to said storing step” -----30
4. Claim 6: “assigning a unique associated identity to each of a plurality of the containers, wherein the identity includes at least one of IP address, host name, and MAC address”-----31
5. Claim 8: “wherein the one or more applications and associated system files are retrieved from a computer system having a plurality of secure containers” -----31
6. Claim 9: “wherein server information related to hardware resource usage including at least one of CPU memory, network bandwidth, and disk allocation is associated with at least some of the containers prior to the applications within the containers being executed” -----32
7. Claim 10: “wherein in operation when an application residing within a container is executed, said application has no access to system files or applications in other containers or to system files within the operating system during execution thereof” -----33

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.