UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

INVINCIBLE IP LL

Plaintiff

v.

Case No.

HASHICORP, INC.,

Defendant

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff Invincible IP, LLC ("Invincible" or "Plaintiff") files this Complaint for patent infringement against HashiCorp, Inc. ("Defendant"), and alleges as follows:

NATURE OF THE ACTION

1. This is an action for patent infringement arising under 35 U.S.C. \S 1 et seq.

PARTIES

- 2. Invincible is a limited liability company organized and existing under the laws of the State of Texas with its principal place of business in Plano, Texas.
- 3. Upon information and belief, Defendant is a corporation organized and existing under the laws of Delaware.

JURISDICTION AND VENUE

- 4. This Court has original jurisdiction over the subject matter of this action pursuant to 28 U.S.C. §§ 1331 and 1338(a).
- 5. Defendant is subject to personal jurisdiction of this Court based upon it being a Delaware corporation, such that Defendant is essentially at home in the State of Delaware.
- 6. Venue is proper in this District under 28 U.S.C. § 1400(b) because Defendant resides in this judicial district.

IDENTIFICATION OF THE ACCUSED SYSTEMS AND PRODUCTS

- 7. Defendant provides for its customers use HashiCorp Vagrant.
- 8. Defendant provides for its customers use HashiCorp Nomad.

COUNT I (Infringement of U.S. Patent No. 8,938,634)

- 9. Invincible incorporates the above paragraphs as though fully set forth herein.
- 10. Plaintiff is the owner, by assignment, of U.S. Patent No. 8,938,634 ("the '634 Patent"), entitled USER GENERATED DATA AND POWER SAVINGS, which issued on January 20, 2015. A copy of the '634 Patent is attached as Exhibit PX-634.
- 11. The '634 Patent is valid, enforceable, and was duly issued in full compliance with Title 35 of the United States Code.
- 12. Defendant has been and is now infringing one or more claims of the '634 Patent under 35 U.S.C. § 271 by making, using, selling, and offering to sell HashiCorp Vagrant in the United States without authority.

- 13. Claim 1 of the '634 Patent recites:
 - 1. A method to provide power savings in a data center, the method comprising:

identifying user-provided hardware independent power saving codes from multiple virtual machines within the data center;

converting at least a portion of the user-provided hardware independent power saving codes into a device power management message specific to a computing system in the data center, wherein the converting includes identifying the portion of the user-provided hardware—independent power saving codes relevant to the computing system and converting the portion of the user-provided hardware independent power saving codes into the device power management message specific to the computing system in the data center; and

providing the device power management message to the computing system, wherein the computing system is operative to enable or disable one or more devices within the computing system in accordance with the device power management message.

- 14. More particularly, Defendant infringes at least claim 1 of the '634 Patent.
- 15. On information and belief, Defendant makes, uses, sells, and offers to sell HashiCorp Vagrant, which practices a method to provide power savings (e.g., halts power to resource in a host) in a data center.
- 16. On information and belief, the method practiced by HashiCorp Vagrant includes a step of identifying user-provided hardware independent power saving codes (e.g. halt, or destroy) from multiple virtual machines (e.g. VMs) within the data center.
- 17. On information and belief, the method practiced by HashiCorp Vagrant includes a step of converting at least a portion of the user-provided hardware

independent power saving codes (e.g., halt or destroy) into a device power management message specific to a computing system (e.g. Vagrant Host) in the data center, wherein the converting includes identifying the portion of the user-provided hardware independent power saving codes (e.g. halt or destroy.) relevant to the computing system (e.g. Vagrant Host) and converting the portion of the user-provided hardware independent power saving codes (e.g. halt or destroy) into the device power management message specific to the computing system (e.g. Vagrant Host) in the data center.

- 18. On information and belief, HashiCorp Vagrant accepts user provided hardware independent power saving code through halt or destroy and converts it to device power management message specific to Vagrant hosts. The computing system identifies the halt or destroy message of Vagrant instance, for example, and prepares to disable the current physical resources.
- 19. On information and belief, HashiCorp Vagrant practices providing the device power management message (e.g., a message to power down the host or resources) to the computing system (e.g., Vagrant Host), wherein the computing system (e.g., Vagrant Host) is operative to enable or disable one or more devices (e.g., hosts, resources, etc.) within the computing system (e.g., Vagrant Host) in accordance with the device power management message (e.g., message to power down the host, resources, etc.).
 - 20. Plaintiff has been damaged by Defendant's infringing activities.

COUNT II (Infringement of U.S. Patent No. 9,635,134)

- 21. Invincible incorporates the above paragraphs as though fully set forth herein.
- 22. Plaintiff is the owner, by assignment, of U.S. Patent No. 9,635,134 ("the '134 Patent"), entitled RESOURCE MANAGEMENT IN A CLOUD COMPUTING ENVIRONMENT, which issued on April 25, 2017. A copy of the '134 Patent is attached as Exhibit PX-134.
- 23. The '134 Patent is valid, enforceable, and was duly issued in full compliance with Title 35 of the United States Code.
- 24. Defendant has been and is now infringing one or more claims of the '134 Patent under 35 U.S.C. § 271 by making, using, selling, and offering to sell HashiCorp Nomad in the United States without authority.
 - 25. Claim 1 of the '134 Patent recites:
 - 1. A method to manage resources in a cloud computing environment, comprising:

determining a consumption rate of cloud resources by one or more virtual machines (VMs), the determining based on monitoring at least one of processor usage, memory usage, or input/output (I/O) access rates for the one or more virtual machines in the cloud computing environment;

prioritizing the one or more VMs for consumption of the cloud resources using a first resource management scheme based, at least in part, on the determined consumption rate;

determining whether a change in the consumption rate of the cloud resources exceeds a predetermined threshold, the change in the consumption rate including a change in the at least one of processor usage, memory usage, I/O access rates, or a change region size based on changed regions of a graphical display generated by the one or more VMs;

prioritizing the one or more VMs for consumption of the cloud resources using a second resource management scheme based, at least in part, on a maximum capacity for utilization of allowed cloud resources for the cloud computing environment and whether the determined change in the consumption rate of the cloud resources exceeds the predetermined threshold; and

migrating the consumption of the cloud resources to alternate cloud resources located outside of the cloud computing environment for at least one of the one or more VMs based, at least in part, on the one or more VMs prioritized for consumption of the cloud resources using the second resource management scheme.

- 26. More particularly, Defendant infringes at least claim 1 of the '134 Patent.
- 27. Defendant makes, uses, sells, and offers to sell HashiCorp Nomad, which provides a method to manage resources in a cloud computing environment (e.g., HashiCorp Nomad provides monitoring and performance metrics, provides recommendations, and manages resources in the HashiCorp Nomad cloud computing environment).
- 28. On information and belief, HashiCorp Nomad determines a consumption rate (e.g., CPU the client is currently consuming, and active memory usage) of cloud resources (e.g., CPU and memory) by one or more virtual machines (e.g., nodes), the determining based on monitoring at least one of processor usage (e.g., CPU usage), memory usage, or input/output (I/O) access rates for the one or more virtual machines in the cloud computing environment (e.g., the HashiCorp Nomad cloud computing environment).

- 29. On information and belief, HashiCorp Nomad prioritizes the one or more VMs for consumption of the cloud resources (e.g., CPU and memory resources) using a first resource management scheme (e.g., calculation for CPU, memory demand, and usage) based, at least in part, on the determined consumption rate (e.g., CPU and active memory currently used).
- 30. On information and belief, HashiCorp Nomad determines whether a change in the consumption rate of the cloud resources exceeds a predetermined threshold (e.g., a preset threshold level), the change in the consumption rate including a change in the at least one of processor usage, memory usage, I/O access rates, or a change region size based on changed regions of a graphical display generated by the one or more VMs.
- 31. On information and belief, HashiCorp Nomad prioritizes the one or more VMs for consumption of the cloud resources (e.g., prioritizes one or more nodes) using a second resource management scheme (e.g., resource management based on resource limits or quota) based, at least in part, on a maximum capacity for utilization of allowed cloud resources for the cloud computing environment (e.g., the resource limits, quota, etc.) and whether the determined change in the consumption rate of the cloud resources exceeds the predetermined threshold (e.g., whether the change in the consumption rate of the cloud resources exceeds the maximum resources allocated).
- 32. On information and belief, HashiCorp Nomad migrates the consumption of the cloud resources to alternate cloud resources located outside of the cloud

computing environment (e.g., upscaled client nodes at a new destination) for at least one of the one or more VMs based, at least in part, on the one or more VMs prioritized for consumption of the cloud resources using the second resource management scheme (e.g., prioritizing clients that would reduce the CPU usage limit to a permissible level, without exceeding the predetermined quota).

33. Plaintiff has been damaged by Defendant's infringing activities.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff respectfully requests the Court enter judgment against Defendant:

- 1. declaring that Defendant has infringed the '634 Patent;
- 2. awarding Plaintiff its damages suffered as a result of Defendant's infringement of the '634 Patent;
- 3. declaring that Defendant has infringed the '134 Patent;
- 4. awarding Plaintiff its damages suffered as a result of Defendant's infringement of the '134 Patent;
- 5. awarding Plaintiff its costs, attorneys' fees, expenses, and interest; and
- 6. granting Plaintiff such further relief as the Court finds appropriate.

JURY DEMAND

Plaintiff demands trial by jury, Under Fed. R. Civ. P. 38.

Dated: August 26, 2021 Respectfully submitted,

/s/ David W. deBruin
David W. deBruin, Esq. (#4846)
GAWTHROP GREENWOOD, PC
3711 Kennett Pike, Suite 100
Wilmington, DE 19807
302-777-5353
ddebruin@gawthrop.com

Raymond W. Mort, III (*pro hac* to be filed) Texas State Bar No. 00791308 raymort@austinlaw.com

THE MORT LAW FIRM, PLLC 100 Congress Ave, Suite 2000 Austin, Texas 78701 Tel/Fax: (512) 865-7950

ATTORNEYS FOR PLAINTIFF