# UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF TEXAS WACO DIVISION

FOOTHILLS IP LLC,

v.

Plaintiff

Case No. 6:21-cv-450

JURY TRIAL DEMANDED

AARON'S, LLC d/b/a AARON'S SALES & LEASE OWNERSHIP, INC.,

Defendant.

## **COMPLAINT FOR PATENT INFRINGEMENT**

Plaintiff Foothills IP LLC ("Foothills" or "Plaintiff") files this Complaint for patent infringement against Aaron's, LLC d/b/a Aaron's Sales & Lease Ownership, Inc. ("Aaron's" or "Defendant"), and alleges as follows:

### NATURE OF THE ACTION

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

### **PARTIES**

- 2. Foothills is a limited liability company organized and existing under the laws of the State of Colorado.
- 3. Upon information and belief, Aaron's is a corporation organized and existing under the laws of the State of Georgia, with a place of business at 9616 N Lamar Blvd, Austin, Texas 78753 and can be served through its registered agent, on

Corporation Service Company d/b/a CSC-Lawyers Inco at 211 E. 7th Street Suite 620 Austin, TX 78701. Upon information and belief, Defendant uses, sells, and leases products and services throughout the United States, including in this judicial district.

### 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. This Court has personal jurisdiction over Defendant because, among other things, Defendant has committed and/or participated in the commission of patent infringement in violation of 35 U.S.C. § 271 in this judicial district and elsewhere that led to harm and injury to Plaintiff.
- 6. Venue is proper in this District under 28 U.S.C. § 1400(b). Defendant is registered to do business in Texas, and on information and belief, has performed activities (including using the Accused Products) that infringe the Patents. Defendant has a regular and established place of business in this District.

### OVERVIEW OF THE ACCUSED PRODUCS

- 7. Defendant used Accused Products (defined below) in the United States during the time period from April 30, 2015 to July 1, 2017. Accused Products include the '456 Accused Products and the '862 Accused Products. Defendant's use of the Accused Products includes use by its employees and contractors, internal testing and evaluation, and leasing of computer devices (including Accused Products) to third parties, during the above referenced time period and within the United States.
- 8. Whenever any of the Accused Products was used by itself, or by its lessees, Defendant controlled the operation and use of the Accused Product.

## COUNT I (Infringement of U.S. Patent No. 5,815,456)

- 9. Plaintiff incorporates the above paragraphs as though fully set forth herein.
- 10. Plaintiff owns by assignment all rights, title, and interest in U.S. Patent No. 5,815,456 (the "456 Patent"). A copy of the '456 Patent is attached as Exhibit 1. The '456 Patent was duly and legally issued by the United States Patent and Trademark Office on September 29, 1998.
- 11. On information and belief, Defendant purchased and has used (including internal use and leasing to others) certain devices, including the '456 Accused Products (defined below), such devices including without limitation computers, such as laptop computers, desktop computers that include an Accused Memory Controller Component (defined below). Defendant's use of the '456 Accused Products, within the United States and during the time period of April 30 to June 19, 2016 has directly infringed, literally and/or under the doctrine of equivalents, one or more claims of the '456 Patent. Accused Memory Controller Components include at least the following graphics processing unit (GPU) devices: NVIDIA GeForce GTX 1080, GeForce GTX 980 and GeForce GTX 750 Ti products, as well as all iterations, versions and variants of these products having the same relevant functionality, including the same functionality noted herein. NVIDIA GeForce GTX 1080 (used herein as an exemplary Memory Controller Component) includes a plurality of Video RAM (VRAM) modules ("first and second memory banks") having input/output terminals for accessing memory by the processor of the GPU. Accused '456 Products

means all Defendant devices (including all computer devices and products referenced above) that include an Accused Memory Controller Component that have been used (including without limitation all products and devices used by Defendant's employees and contractors, all products and devices used for internal testing, and including all products that were owned or controlled by Defendant and leased to others) by or on behalf of the Defendant after April 30, 2015 and on or before June 19, 2016. '456 Accused Products specifically include, without limitation, the computers leased by Defendant during the above See time period. https://www.aarons.com/electronics/desktop-monitors/. 456 Accused Products include, without limitation, the following listed computers: ASUStek ROG GX800, ROG G501, ROG GL552, ROG G751, Acer Predator 15 and 17, MSI GT80 Titan, and Gigabyte P35X.

- 12. Upon information and belief, Defendant used at least one of the above listed computers during the time period from April 30, 2015 through June 19, 2016.
- 13. The '456 Accused Products satisfy all claim limitations of one or more claims of the '456 Patent. A claim chart comparing exemplary independent claim 21 of the '456 Patent to a representative '456 Accused Product (a Computer that includes an NVIDIA GTX-1080) is attached as Exhibit 3. Each element of claim 21 is found in the representative '456 Accused Product that includes the representative Accused Memory Controller Component, the NVIDIA GTX-1080. See Exhibit 3.
- 14. Referring to Exhibit 3, the charted exemplary Accused Memory Controller Component, which is included in Defendant computers and/or graphics

cards, is representative. The chart should therefore be viewed and understood as illustrating implementation as to not only an exemplary '456 Accused Product, but also each of the '456 Accused Products.

15. By using the '456 Accused Products, in the United States and during the above defined time period, Defendant has injured Plaintiff and is liable for infringement of the '456 Patent pursuant to 35 U.S.C. § 271. As a result of Defendant's infringement of the '456 Patent, Plaintiff is entitled to monetary damages in an amount adequate to compensate for such infringement, but in no event less than a reasonable royalty, together with interest and costs as fixed by the Court.

#### 16. Claim 21 of the '456 Patent recites:

21. A method of operating a memory including first and second memory banks and a plurality of data input/output terminals, comprising the steps of:

accessing the first memory bank through a first subset of the plurality of data input/output terminals; and

substantially simultaneously accessing the second memory bank through a second subset of the plurality of data input/output terminals, and wherein the first memory bank access is controlled by a first read-write signal, and the second memory bank access is controlled by a second read-write signal.

- 17. As explained above, Defendant has infringed at least claim 21 of the '456 Patent.
- 18. The '456 Accused Products include (or incorporate) at least one of an NVIDIA GeForce GTX 1080, a GeForce GTX 980, and a GTX 750 Ti component.

- 19. Defendant has used the '456 Accused Products to perform a method of operating a memory including first and second memory banks and a plurality of data input/output terminals, as illustrated in the claim chart in Exhibit 3.
- 20. The '456 Accused Products have been used by Defendant, during the above referenced time period, to access a first memory bank through a first subset of a plurality of data input/output terminals and substantially simultaneously accessing a second memory bank through a second subset of the data input/output terminals. The first memory bank access was controlled by a first read-write signal and the second memory bank access was controlled by a second read-write signal. *See* Exhibit 3.
- 21. Defendant's use of the '456 Accused Products, within the United States and during the above referenced time period, satisfies each and every element of at least claim 21 of the '456 Patent. Thus, Defendant has infringed at least claim 21 of the '456 Patent, either literally or under the doctrine of equivalents.
  - 22. Plaintiff has been damaged by Defendant's infringing activities.

# COUNT II (Infringement of U.S. Patent No. 6,057,862)

- 23. Plaintiff incorporates the above paragraphs as though fully set forth herein.
- 24. Plaintiff is the owner, by assignment, of U.S. Patent No. 6,057,862 (the "862 Patent"), which issued on May 2, 2000. A copy of the '862 Patent is attached as Exhibit 2.

- 25. The '862 Patent was duly issued in full compliance with Title 35 of the United States Code.
- 26. Defendant has infringed one or more claims of the '862 Patent under 35 U.S.C. § 271 by using the '862 Accused Product in the United States without authority, as described herein.

#### 27. Claim 15 of the '862 Patent recites:

15. A method for organizing a computer system having a common display memory and main memory, comprising:

providing a plurality of memory subsystems within said common display memory and main memory, each memory subsystem having a dedicated memory channel;

providing a memory channel data switch and controller (DSC) unit coupled to each of said memory subsystems through said dedicated memory channels; and

providing a plurality of processor and/or peripheral subsystems including a graphics/drawing and display (GDD) subsystem and a central processing unit (CPU) subsystem controller unit, each of said processor and/or peripheral subsystems coupled to said memory channel data switch and controller unit;

wherein said providing a plurality of processor and/or peripheral subsystems including a graphics/drawing and display (GDD) subsystem and a central processing unit (CPU) subsystem controller unit, each of said processor and/or peripheral subsystems coupled to said memory channel data switch and controller unit.

- 28. Defendant has infringed at least claim 15 of the '862 Patent.
- 29. The '862 Accused Product means all devices (and any products) that include an Accused GPU Component that are used (including without limitation products and devices used by Defendant employees and contractors, products and devices used for internal testing, and including devices and products that are owned or controlled by Defendant and leased to others) by or on behalf of the Defendant during the time period from April 30, 2015 to July 1, 2017. The '862 Accused Products specifically include computers that include NVIDIA GPUs, such as the computers

referenced in Exhibit 4. '862 Accused Products include, without limitation, the following listed computers: HP Omen, Lenovo Legion and Yoga computers, Gigabyte X7DT v6, MSI GS43VR Phantom Pro, GT73VR Titan Pro 4K GeForce GTX1080, Acer Predator 17X and 21X, Asus ROG GX800 and ROG G800 computers.

- 30. Defendant used at least one of the above-referenced computers during the above referenced time period.
- 31. Defendant leased to others at least one of the '862 Accused Products during the above referenced time period.
- 32. Accused GPU Component means NVIDIA DGX-1 and Tesla P100 products, as well as all iterations, versions and variants of these products having the same relevant functionality, including the same functionality noted herein. Referring to Exhibit 4, the charted exemplary Accused GPU Component, which is included in Defendant computers, is representative. The chart should therefore be viewed and understood as illustrating implementation as to not only an exemplary '862 Accused Product, but also each of the '862 Accused Products. *See* the attached claim chart in Exhibit 4.
- 33. The '862 Accused Products, when used during the above referenced time period, provided a plurality of memory subsystems within a common display memory and main memory, each memory subsystem having a dedicated memory channel. See Exhibit 4.
- 34. The '862 Accused Products, when used during the above referenced time period, provided a memory channel data switch and controller (DSC) unit coupled to

each of said memory subsystems through said dedicated memory channels. See Exhibit 4.

- 35. The '862 Accused Product, when used during the above referenced time period, provided a plurality of processor and/or peripheral subsystems including a graphics/drawing and display (GDD) subsystem and a central processing unit (CPU) subsystem controller unit. Each of the processor and/or peripheral subsystems were coupled to the memory channel data switch and controller unit. See Exhibit PX-4.
- 36. Referring to the '862 Accused Products, each processor and/or peripheral subsystem was coupled to the memory channel data switch and the controller unit. See Exhibit 4.
- 37. Defendant's use of the '862 Accused Products, within the United States and during the above referenced time period, satisfies each and every element of at least claim 15 of the '862 Patent. Thus, Defendant has infringed at least claim 15 of the '862 Patent, either literally or under the doctrine of equivalents.
- 38. By using the '862 Accused Products, in the United States and during the above defined time period, Defendant has injured Plaintiff and is liable for infringement of the '862 Patent pursuant to 35 U.S.C. § 271. As a result of Defendant's infringement of the '862 Patent, Plaintiff is entitled to monetary damages in an amount adequate to compensate for such infringement, but in no event less than a reasonable royalty, together with interest and costs as fixed by the Court.
  - 39. Plaintiff has been damaged by Defendant's infringing activities.

## PRAYER FOR RELIEF

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

- declaring that the Defendant has infringed the '456 and the '862
   Patents (the "Patents");
- awarding Plaintiff damages suffered as a result of Defendant's infringement of the Patents;
- 3. awarding Plaintiff its costs, attorneys' fees, expenses, and interest; and
- 4. granting Plaintiff such further relief as the Court finds appropriate.

## **JURY DEMAND**

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

Dated: April 30, 2021 Respectfully submitted,

/s/ Isaac Rabicoff
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ATTORNEYS FOR PLAINTIFF