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15						
16	UNITED STATES DISTRICT COURT CENTRAL DISTRICT OF CALIFORNIA					
17						
18	PINN, INC.,	Lead Case No. 8:19-cv-1805-DOC-JDE				
19	Plaintiff,	SECOND AMENDED COMPLAINT				
20	V.	FOR PATENT INFRINGEMENT AGAINST GOOGLE LLC				
21	APPLE INC., Defendant.	DEMAND FOR JURY TRIAL				
22						
23		District Judge: David O. Carter Magistrate Judge: John D. Early				
24	DININ INC	Technical Special Master: David Keyzer				
25	PINN, INC., Plaintiff,					
26	v.					
27	GOOGLE LLC,	CASE NO. 8:19-cv-1840-DOC-JDE				
28	Defendant.	CONSOLIDATED CASE				

PINN, INC.,
Plaintiff,
v.

SAMSUNG ELECTRONICS
AMERICA, INC.,
Defendant.
Pinn, Inc. files this Second
infringement of U.S. Patent Nos.

CASE NO. 8:19-cv-1856-DOC-JDE CONSOLIDATED CASE

Pinn, Inc. files this Second Amended Complaint against Google LLC for infringement of U.S. Patent Nos. 9,807,491 (the "'491 Patent"), 10,455,066 (the "'066 Patent"), and 10,609,198 (the "'198 Patent").

PARTIES

- 1. Pinn, Inc. is a California Corporation with its headquarters and principal place of business at 2522 Chambers Rd., Suite 100, Tustin, CA 92780.
- 2. Defendant Google LLC is Delaware limited liability company with its principal place of business in Mountain View, California. Defendant is registered to do business in California.
 - 3. Google has appeared and may be served through its counsel of record.

JURISDICTION AND VENUE

- 4. Pinn brings this action for patent infringement under the patent laws of the United States, including 35 U.S.C. §§ 154, 271, 281, and 283-285. This Court has subject-matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a).
- 5. Google is subject to the general and specific personal jurisdiction of this Court based upon its regularly conducted business in the State of California and in this judicial district, including conduct giving rise to this action.
- 6. Google has committed, and continues to commit, acts of direct and indirect infringement in California, within this district, and throughout the United States, by, among other things, making, using, selling, or offering for sale in the United States, and/or importing into the United States, wireless earbud devices and systems that embody one or more of the inventions claimed in the '491, '066, and '198 Patents.

- 7. Google maintains regular and established places of business in this district where it promotes, sells, offers for sale, uses, provides technical support for, develops, and demonstrates products that infringe the '491, '066, and '198 Patents.
- 8. Google sells infringing devices and systems and provides customer service and technical support to retailers, customers, and other end users in this district.
- 9. Google's contacts with this forum are sufficient such that the exercise of jurisdiction over Defendant comports with traditional notions of fair play and substantial justice.
 - 10. Venue is proper in this judicial district pursuant to 28 U.S.C. §§ 1400(b).
 - 11. Google maintains an office at 340 Main St., Venice, CA 90291.
- 12. For example, in other patent infringement matters, Google has admitted that they offer certain products and/or services that can be accessed by users in California and in this judicial district. Google admitted venue is proper in this judicial district in *Realtime Adaptive Streaming LLC v. Google LLC and Youtube, LLC*, Case No. 2:18-cv-03629-GW-JC (C.D. Cal.) (*see* Dkt. 38, ¶ 7).

THE PINN PATENTS

- 13. Google has infringed and continues to infringe one or more claims of Pinn's '491, '066, and '198 Patents. The '491, '066, and '198 Patents may be referred to as the Patents in Suit or collectively as the Asserted Patents.
- 14. Generally speaking, the Asserted Patents claim methods, apparatuses, and systems relating to a personal wireless media station having a wireless earbud and main body, wherein the wireless earbud is capable of pairing with a device, such as a smartphone, to receive and play audio data, and is capable of connecting to an electric circuit in the main body, for wired communication with the main body when plugged into a connection hole of the main body.
- 15. Pinn is the assignee of all right, title, and interest in and to each of the Asserted Patents and has the exclusive right to assert all causes of action arising under,

or that may arise under, the Asserted Patents, including the right to pursue and recover any and all monetary and equitable remedies for infringement.

The '491 Patent: "Electronic Device with Wireless Earbud"

- 16. On October 31, 2017, the United States Patent and Trademark Office ("USPTO") issued the '491 Patent following a full examination of U.S. Pat. App. Ser. No. 15/625,935, which was filed June 16, 2017, and claims priority to PCT App. No. PCT/US2016/025936 (filed April 4, 2016) and U.S. Prov. App. No. 62/142,978 (filed April 3, 2015).
 - 17. Exhibit A is a true and correct copy of the '491 Patent.
- 18. The '491 Patent describes a personal wireless media station that includes a main body and wireless earbud.
- 19. In reference to one disclosed embodiment, the '491 Patent describes an apparatus comprising a main body, a wireless earbud configured for plugging into a connection hole of the main body to form a single integrated body, a user input button, at least one processor, and at least one memory.
 - 20. Claim 1 of the '491 Patent recites:
 - 1. An apparatus comprising:

a main body comprising a connection hole, a user input button, at least one processor and at least one memory; and

a wireless earbud configured for plugging into the connection hole of the main body to form a single integrated body with the main body,

wherein the wireless earbud has wireless communication capability for wirelessly pairing with a smartphone and is configured to receive audio data from the smartphone and to play audio using the audio data from the smartphone when wirelessly paired with the smartphone,

wherein in addition to wireless communication capability for wireless pairing with the smartphone, the wireless earbud comprises an earbud connector for

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connecting with an electric circuit of the main body for wired communication capability with the main body when plugged into the connection hole,

wherein, when wireless earbud is plugged into the connection hole, the wireless earbud is configured to perform wired two-way data communication with the main body,

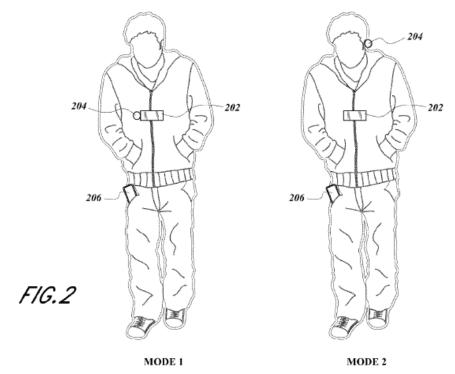
wherein the at least one processor of the main body is configured to execute computer program instructions stored in the at least one memory

> for initiating the wireless pairing with the smartphone in response to pressing of the user input button provided on the main body,

> for initiating battery charging of the wireless earbud in response to the wireless earbud's plugging into the connection hole, and

> for turning off the wireless pairing with the smartphone when the wireless earbud is being charged.

21. Figure 2 illustrates certain exemplary uses of an embodiment of the '491 Patent:



22. The technologies and innovations recited in the claims of the '491 Patent, including Claim 1, provide inventive concepts and do not claim an abstract idea. The

- individual elements of the '491 Patent claims, including claim 1, were not well-understood, routine, or conventional to persons of skill in the art at the time of the invention. Instead, the claims of the '491 Patent are directed to unconventional, inventive concepts that implement technical solutions to solve various problems, including problems unique to wireless earbud pairing, and that enhance the operation and functionality of wireless earbuds. As one example, the '491 Patent provides a technical solution that eliminates the need to have unobstructed access to a smartphone's inputs and outputs and facilitates pairing between the smartphone and the wireless earbud. See, e.g., '491 Patent at 1:14-26.
- 23. Technological solutions taught by the '491 Patent provide advantages over, and improvements to, the state of the art at the time. For example, the teachings of the '491 Patent improve the performance of a wireless earbud system by simplifying the pairing process and by providing a mechanism for charging wireless earbuds when away from a traditional power source.
- 24. The inventions and the limitations recited in the claims of the '491 Patent, whether alone or in combination with other limitations, embody a number of inventive concepts. For example, claim 1 of the '491 Patent describes a consumer product or system featuring distributed intelligence and an earbud that communicates wirelessly with a smartphone and communicates via wired two-way communication with the main body. The main body is configured to initiate wireless pairing with a smartphone when a user presses the input button on the main body. When plugged into the connection holes, the wireless earbuds are configured such that the earbud batteries are charged by the main body and perform two-way data communication with the main body. *See*, *e.g.*, '491 Patent at 1:45-49.

The '066 Patent: "Mobile System with Wireless Earbud"

25. On October 22, 2019, the USPTO issued the '066 Patent following a full examination of U.S. Pat. App. Ser. No. 15/563,937, which was filed October 2, 2017, and claims priority to PCT App. No. PCT/US2016/025936 (filed April 4, 2016) and

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- U.S. Prov. App. Nos. 62/199,943 (filed July 31, 2015) and 62/142,978 (filed April 3, 2015).
 - 26. The USPTO published the '937 App. on May 10, 2018.
- 27. Since May 10, 2018, papers in the '937 App. file have been available to the public.
- 28. On August 28, 2019, the USPTO allowed claims 23-60 of the '937 App. (sometimes referred to as the "'937 App. Published Claims").
 - 29. The August 28, 2019 Notice of Allowance is publicly available.
 - 30. On September 3, 2019, Pinn paid the issue fee.
- 31. U.S. Pat. No. 10,455,066 issued from the '937 App. with claims substantially identical to the '937 App. Published Claims listed in Exhibit B.
 - 32. Exhibit C is a true and correct copy of the '066 Patent.
- 33. Original claim 23 of the '937 App. (final claim 1 in the '066 Patent) recites:

A mobile system comprising:

- a base station comprising a connection hole, a user input button, at least one processor, at least one memory, and circuitry; and
- a wireless earbud configured for plugging into the connection hole of the base station to form an integrated body with the base station,

wherein the system is capable of wirelessly pairing with a smartphone for the wireless earbud to receive audio data originated from the smartphone,

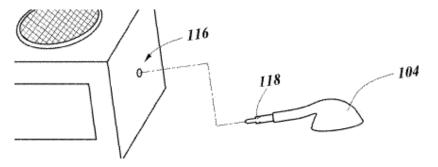
wherein, in response to pressing of the user input button, the at least one processor is configured to execute computer program instructions stored in the at least one memory to initiate processing for the wireless pairing with the smartphone such that the wireless earbud receives audio data originated from the smartphone and plays audio using the audio data from the smartphone,

wherein, in response to plugging the wireless earbud into the connection hole, the at least one processor is configured to execute computer program instructions

stored in the at least one memory to initiate charging of a battery of the wireless earbud,

wherein, when the wireless earbud is plugged into the connection hole of the base station, the wireless earbud is configured to electrically connect with the circuitry of the base station and further configured to performing wired data communication with the base station.

- 34. The particular combination of elements in claim 23 of the '937 App. was not well-understood, routine, or conventional to persons of skill in the art at the time of the invention. Instead, the '066 Patent, including claim 1, is directed to unconventional, inventive concepts disclosed in the specification.
- 35. Whether alone or in combination with other limitations, the claimed inventions and limitations recited in the '066 Patent embody a number of inventive concepts. Claim 1, for example, describes, among other things, a mobile system having distributed intelligence. The system enables wireless pairing of an earbud and smartphone in response to pressing a user input button and includes a base station featuring a connection hole into which an earbud is plugged for charging and wired data communication.
- 36. For example, in one embodiment described in claim 21 of the '066 Patent, "the at least one processor is configured to execute computer program instructions stored in the at least one memory to turn off the wireless pairing while the wireless earbud is being charged."
- 37. As illustrated in Figure 1 (excerpted below), the earbud connector of the wireless earbud is mateable with the main body connector of the main body. The



specification further describes: "The wireless earbud and the main body form a single integrated body when the earbud connector and the main body connector are connected with each other."

The '198 Patent:

"Personal Media System Including Base Station and Wireless Earbud"

- 38. Mr. Kim filed U.S. Pat. App. No. 15/694,736 (the "'736 App.") on September 1, 2017, as a continuation of U.S. Pat. App. Ser. No. 15/625,935 (filed June 16, 2017), which is a continuation of PCT App. No. PCT/US2016/025936 (filed April 4, 2016), claiming priority to U.S. Prov. App. No. 62/142,978.
 - 39. The USPTO published the '736 App. on December 28, 2017.
- 40. Since December 28, 2017, all papers in the '736 App. file have been available to the public.
- 41. On June 19, 2019, the USPTO allowed claims 1-29 of the '736 App. (sometimes referred to as the "'736 App. Published Claims," as shown in Exhibit E). On January 4, 2020, after a request for continued examination, the USPTO again provided its "Reasons for Allowance" with respect to the '736 App. On January 29, 2020, Pinn received a Notice of Allowance for the '736 App. On February 12, 2020, Pinn paid the issue fee. On March 11, 2020, the USPTO mailed an "Issue Notification," which, for the first time, assigned a patent number to the '736 App. and specified an issue date of March 31, 2020.
- 42. On March 31, 2020, the '198 Patent issued with claims substantially identical to the '736 App. Published Claims previously disclosed to Google. Exhibit D is also a true and correct copy of the '198 Patent.
 - 43. Claim 1 of the '198 Patent recites:

A mobile system comprising:

a mobile base station comprising a connection hole, a user input button, at least one processor, at least one memory, a circuitry; and a wireless earbud configured for plugging into the connection hole of the

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27 28 mobile bases station to form an integrated body with the mobile base station,

wherein, while the wireless earbud in plugged in the connection hole of the mobile base station, the wireless earbud is configured to electrically connect with the circuitry of the mobile base station and further configured to perform wired data communication with the mobile base station, wherein, while the wireless earbud is plugged in the connection hole of the mobile base station, the circuitry of the mobile base station is configured to obtain characteristics of the wireless earbud and send the characteristics to the at least one processor,

wherein, while the wireless earbud is plugged in the connection hole of the mobile base station, the at least one processor is configured to execute computer program instructions stored in the at least one memory to initiate charging of a battery of the wireless earbud,

wherein the wireless earbud has communication for wireless pairing with a smartphone to perform data communication with the smartphone,

wherein the mobile system is configured to generate sound when a mobile application installed on the smartphone is searching for the mobile system while the wireless earbud is paired with the smartphone,

wherein, in response to pressing of the user input button of the mobile base station, the at least one processor is configured to execute computer program instructions stored in the at least one memory to initiate processing for the wireless pairing,

wherein the wireless earbud is not capable of wirelessly sending data to the mobile base station.

See Ex. C, Claim 1.

- 44. The particular combination of elements as recited in claim 1 of the '198 Patent was not well-understood, routine, or conventional to persons of skill in the art at the time of the invention. Instead, the claimed subject matter is directed to unconventional, inventive concepts disclosed in the specification.
- 45. Whether alone or in combination with other limitations, the claimed inventions and limitations recited in the '198 Patent embody a number of inventive

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concepts. Claim 1, for example, describes, among other things, a mobile system featuring distributed intelligence. The system enables wireless pairing of an earbud and smartphone to perform data communication with the smartphone and enables emission of sound when a mobile application installed on the smartphone is searching for the mobile system while the earbud is paired.

- 46. The specification of the '198 Patent describes at least one embodiment that features an application for finding a personal wireless media station within the station's communication ranges and for monitoring and controlling various features of the personal wireless media station, such as battery level.
- In at least one embodiment of the device finder, Pinn Finder beeps and 47. blinks when the mobile app is searching for the Pinn device.
- 48. Pinn previously provided notice of the '198 Patent, including the claims of the '198 Patent. Pinn's notice made clear that Pinn would amend its complaint to allege infringement of the patent that issued from the '736 App., i.e., the '198 Patent.

PINN, INC.



- Pinn was founded by Seung Jin ("Sean") Kim in 2015, with a vision 49. toward designing and developing wearable technology that enhances the smartphone experience and eliminates frustrating phone problems like trying to locate and retrieve your phone quickly to answer an incoming call.
 - 50. Pinn is headquartered, and Mr. Kim resides, in Irvine, California.
- 51. Pinn's product inventory, company files, and documents relating to the Patents in Suit and claims in this lawsuit are located in Irvine.
 - Sean Kim received a bachelor's degree in Music Composition and 52.

Orchestra Conduction from Seoul National University in 2003. In addition to being an accomplished composer, Mr. Kim is an entrepreneur and inventor.

- 53. While serving as an IP and business consultant to Deca International Corporation, Mr. Kim developed and helped Deca commercialize a variety of GPS-based golf rangefinders, voice-based products, and laser-based rangefinders.
- 54. After Deca, Mr. Kim worked with AQ Corporation, a mobile nearfield communication company. He assisted AQ in developing its intellectual property assets and helped direct AQ's research and development efforts. While at AQ, Mr. Kim worked on the design of an interactive, event-specific digital signage platform for use on mobile devices, called Anniver.
- 55. Recognizing the need for a personal media system with simplified operation and structure, Mr. Kim conceived of the Pinn device in 2014 and founded Pinn Inc. the following year to develop a first-generation wearable product that would provide consumers with an easier way to use their smartphones, by simplifying and enhancing the wireless capabilities and operation of the device. Mr. Kim recognized that a system having distributed intelligence and processing, along with an integrated modular design, would improve ease of use and functionality.
- 56. The USPTO recognized Mr. Kim's innovations by granting the first of his Pinn patents, the '491 Patent, in 2017.
- 57. Pinn proved Mr. Kim's concept in October 2015 and successfully launched the Pinn product soon after. Pinn became available to the public in 2017.



- 58. Pinn includes a wireless earbud that is docked and integrated into the Pinn clip or main body.
 - 59. Pinn wirelessly connects to a user's smartphone via Bluetooth.



GOOGLE'S PIXEL BUDS WITH CHARGING CASE

- 60. Google introduced the Google Pixel Buds in October 2017.
- 61. Google advertised results from testing conducted on Pixel Buds in September 2017.

62. Google Pixel Buds are sold with a case, as shown below.



63. Google publishes the following description of the Pixel Buds:

What are Google Pixel Buds?

Meet the Google Pixel Buds. Designed for high-quality audio as they fit comfortably in your ear.

Google Pixel Buds

Google Pixel Buds are a pair of wireless earbuds that allow you to listen to media, answer calls, talk to your Assistant, translate languages, and express yourself through sleek design and intuitive controls.

Pixel Buds work best in a variety of settings including your daily commute, gym sessions, weekend walks, or even at home.



Buy Now

64. Pixel Buds connect wirelessly to a compatible smartphone via Bluetooth.

65. The Google Pixel Buds case features "magnetized pockets" for storing and charging the Pixel Bud earbuds.

How to charge your Google Pixel Buds

Match the L & R indicators of the Pixel Buds to the charging case magnetized pockets.

Once they're in, press down to make sure the charging pins are firmly in place. After placing your earbuds in their pockets, secure the cord by wrapping it around the rim of the charging case so you can carry Pixel Buds while they are charging.



66. The magnetized pockets formed in the Pixel Bud case are configured to hold the earbuds firmly in place.



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- 67. The earbuds and case form a single integrated body when the earbuds are placed in their pockets.
- Google Pixel Buds have wireless capability for pairing with a 68. smartphone.
- Google published the following description of the Google Pixel Buds on 69. the Google website available at https://store.google.com/product/google_pixel_buds:

Connecting is simple.

To pair within seconds, open the Pixel Buds charging case near your Pixel or a phone running Android Nougat or newer.4



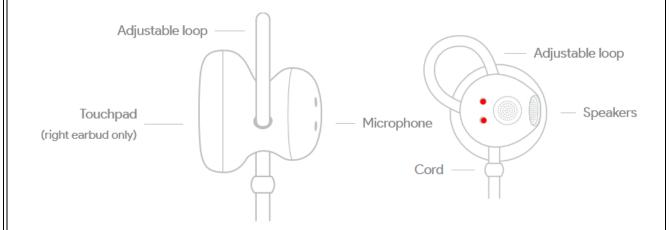
Google Pixel Buds are configured to receive audio data from a wirelessly 70. paired smartphone.

71. The image below shows a smartphone screen display indicating successful pairing with the Google Pixel Buds:



- 72. Each Google Pixel Buds earbud has two charging pins that electrically connect with contacts in the magnetized pockets of the case.
- 73. The image below shows two electrical contacts in each magnetized pocket:





- 75. The Safety, Warranty & Regulatory Guide for Google Pixel Buds that is published by Google states: "The contacts in the charging case contain nickel and those contacts come in contact with the earbuds."
- 76. The Safety, Warranty & Regulatory Guide for Google Pixel Buds provides the following statement describing the charging pin contacts on each wireless earbud:

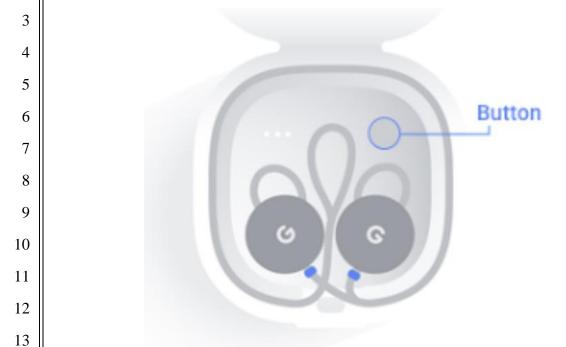
Materials

Google Pixel Buds are made from plastics, polymers and stainless steel. The charging pin contacts are gold plated copper alloy. The pockets within the charging case which hold the earbuds may be made from a material which contains brominated flame retardants.

https://support.google.com/googlepixelbuds/answer/7549807?hl=en.

- 77. In normal charging operation, each Pixel Buds earbud connects to an electric circuit in the main body of the case.
- 78. When the Pixel Buds earbuds are place in the case, a wired connection is made via the charging pins and the charging pin contacts in each magnetized pocket.
- 79. When the Pixel Buds earbuds are placed in the magnetized pockets of the case, a wired connection between the case and the earbuds enables two-way data communication between the case and the earbuds.

80. The Pixel Buds case features a user input button shown below:



- 81. In normal charging operation, the Pixel Buds earbuds receive a charging signal via wired connection between the case and earbuds.
 - 82. Google published the following description of the case:

The Google Pixel Buds Charging Case

The charging case for the Google Pixel Buds is a sleek and lightweight way to carry your earbuds when you're not using them.

Note: Charge safely. Before charging, please make sure that you read and follow the safety information about charging Google Pixel Buds at https://g.co/pixelbuds/SafetyInfo or in the 'Be Safe' guide included with your Google Pixel Buds.

Your charging case allows you to pair your Pixel Buds with your phone, check the battery levels of both your case and Pixel Buds and recharge your Pixel Buds when they're low on power. Along with up to five hours of listening time that you'll get from a single charge on your Pixel Buds, the charging case holds multiple additional charges. If the charging case is also fully charged, altogether, you'll receive up to 24 hours of listening time.

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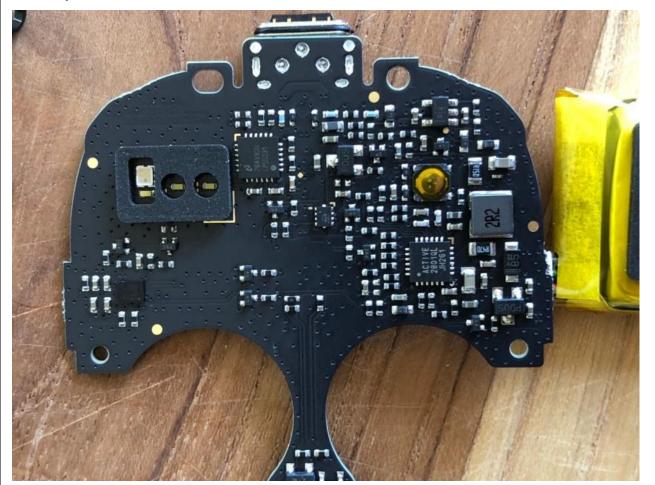
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83. The Google Pixel Buds case comprises at least one processor and memory.



At least one processor of the Pixel Buds case main body (e.g., the Active-84. Semi ACT2801 chip shown in the picture above) is configured to execute instructions for initiating battery charging of the wireless earbuds in response to the earbuds being placed in their pockets.

How to charge your Google Pixel Buds

Match the L & R indicators of the Pixel Buds to the charging case magnetized pockets.

Once they're in, press down to make sure the charging pins are firmly in place. After placing your earbuds in their pockets, secure the cord by wrapping it around the rim of the charging case so you can carry Pixel Buds while they are charging.

85. A green LED light appears, indicating that the Pixel Buds are charging.

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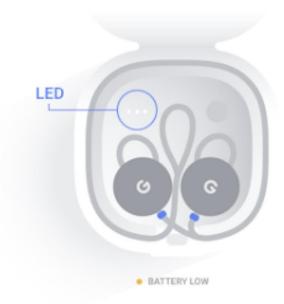
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A green LED light will appear, indicating that your Pixel Buds are charging.



- At least one processor in the Pixel Buds case main body is configured to 86. execute instructions for initiating Bluetooth pairing in response to pressing the user input button.
- Google published the following instructions for wirelessly pairing the 87. Google Pixel Buds with a smartphone:

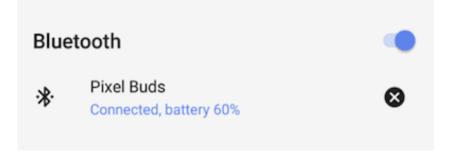
Step 2. Manually pair Google Pixel Buds

- 1. On your mobile device's Bluetooth menu, tap on the Google Pixel Buds headphones to pair them with your
- 2. Hold the case button for 3 seconds; if you see one white LED pulsing , your device is ready to pair.
- 3. Look for a pop-up notification on your phone that will take you through the rest of setup.
- 4. On certain Android devices, you may need to look for your Google Pixel Buds in the Bluetooth setting menu and add them as a new device.
- 88. At least one processor of the Pixel Buds case main body is configured to execute instructions for turning off Bluetooth pairing during charging.
- 89. Instructions executed by the processor(s) in the charging case are stored in memory located in the main body of the charging case.

90. Google's Pixel Buds are configured to provide battery status to a smartphone for display on a mobile application of the smartphone.

How to check the battery level of your Pixel Buds

Bluetooth settings (Requires a Pixel 2 or Pixel 2 XL phone)



Headphones settings in Google Assistant

1. Press and hold the center button on your phone to invoke your Google Assistant



2. Tap on Headphones Settings



- 91. Google publishes how-to instructions and encourages users to check battery level and pair Google Pixel Buds with a compatible smartphone.
- 92. Google Pixel Buds earbuds are incapable of wirelessly communicating with the case.
- 93. When the Google Pixel Buds earbuds are wirelessly paired with a compatible smartphone (e.g., Google Pixel 2), a mobile application of the smartphone may be used to control various functions such as volume adjustment.

Basic Voice Commands

- · "Play some pop music"
- "Louder / Quieter"
- Increase / Decrease Volume"
- "Next"
- "Stop / Start"
- "Tell me the latest news"

- 94. When the Google Pixel Buds are wirelessly paired with a compatible smartphone (e.g., Google Pixel 2), the system comprising the wireless earbuds and smartphone is configured to enable control of functions by a mobile application on the smartphone (e.g., Google Assistant).
- 95. Google publishes the following instructions for using Pixel Buds with the Google Assistant mobile application:

Request Media

Touch & hold the right earbud while you talk to request media.

Example: "Play rock music"



If you haven't chosen a preferred media service, your Google Assistant will ask you to select a service the first time you request music and then it will begin playing your media. For more information on selecting a preferred music service, go here. Subscriptions and fees may apply.

Music service supported by the Google Assistant include:

- Google Play Music
- Spotify
- YouTube
- YouTube Music

Radio services supported by the Google Assistant include:

- iHeartRadio
- TuneIn

Basic Voice Commands

- "Play some pop music"
- "Louder / Quieter"
- Increase / Decrease Volume"
- "Next"

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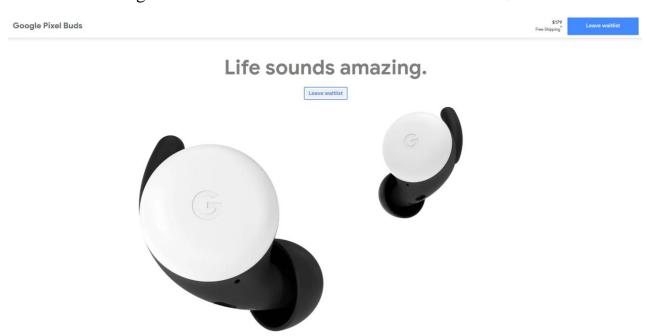
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- "Stop / Start"
- "Tell me the latest news"
- 96. Google sells Pixel Buds wireless earbuds with a charging case base station that includes connection holes for plugging in the earbuds, a user input button for initiating pairing and other functions, processors, memory, and circuitry for charging and controlling Bluetooth communication and two-way data communication

between the earbuds and charging case.

- 97. Google has used, tested, developed, and introduced its new Pixel Buds 2 product that will be available to consumers in Spring 2020.
 - 98. Google advertises the Pixel Buds 2 on its website for \$179:



99. The Pixel Buds 2 feature a charging case that includes connection holes for plugging in the earbuds, a user input button for initiating pairing and other functions, processors, memory, and circuitry for charging and controlling Bluetooth communication and two-way data communication between the earbuds and charging case.



100. Pinn's Preliminary Infringement Contentions and any amendments thereto identify Google's Accused Products and the Asserted Claims infringed by Google.

NOTICE

- 101. In October of 2016, on behalf of Pinn, Mr. Kim contacted Google by email and provided information about Pinn, its technology, and the inventions claimed in the Patents in Suit.
- 102. In emails to Ryan Beauchamp (Google Product Manager), Brian Rakowski (Vice President of Product Management), M G Siegler (General Partner, Google Ventures), Sarah Xie (Manager, Mobile Apps Partnership), and Hector Balasch (Sr. Strategic Partner Manager), Mr. Kim provided details about Pinn, Inc., a link to Pinn's website, and documentation about the Pinn technology.
- 103. Mr. Kim provided a list of Pinn's intellectual property assets at the time and specifically identified the pending application from which the '491 Patent issued:

Pinn Inc. US Patent Application (Utility) – 62/142,978 US Patent Application (Utility) – 62/199,943 PCT Application (Utility – Merged above 2 applications) – PCT/US2016/025936 US Patent Application (Design) – 29/534,923 US Patent Application (Utility) – 62/318,146 Trademark Application = 86/761,666 (Issued) A New US Patent Application (Utility) is preparing for filing on November, 2016 Pinn Inc. www.mypinn.com

104. Google has been aware of Pinn's '491 Patent since at least the date it was cited during prosecution of Google's later-filed patent applications. Google filed U.S.

Application No. PCT/US2016/025936.

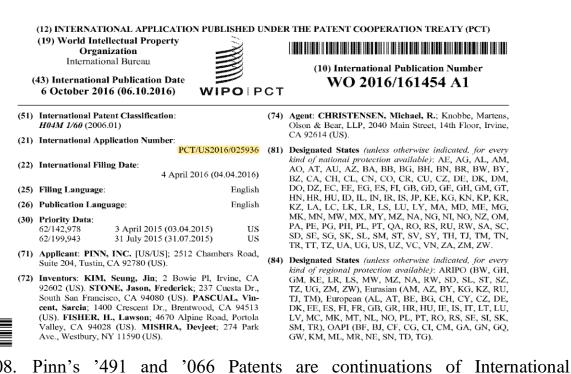
Application Ser. No. 16/237,947, on January 2, 2019, which relates to certain features of the Google Pixel Buds.

105. After receiving Mr. Kim's e-mails and before the USPTO published Google's '947 Application, Google identified Pinn's foreign patent application by listing publication no. 2016/161454 on an invention disclosure statement submitted to the Patent Examiner on April 12, 2019.

106. The excerpt below is from the invention disclosure statement submitted to the USPTO in connection with Google's own patent application:

			FOREIG	GN PAT	ENT DOCUM	IENTS	Remove	
Examiner Initial*	Cite No	Foreign Document Number ³	Country Code ² i	Kind Code ⁴	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T5
	1	2016161454	wo	A1	2016-10-06	Pinn, Inc		
If you wish	h to a	dd additional Foreign F	atent Document	citation	information p	lease click the Add butto	n Add	

107. The image below is from Pinn's international patent application that Google identified to the USPTO:



- 109. Google had knowledge of International Application No. PCT/US2016/025936 at least as early as April 12, 2019.
- 110. Adam Champy is named as a co-inventor on Google's '947 Patent Application that references Pinn's patent application. He also is Product Manager for Google Pixel Buds.
 - 111. Pinn has complied with 35 U.S.C. § 287.

COUNT 1: DIRECT INFRINGEMENT OF U.S. PATENT NO. 9,807,491

- 112. Pinn realleges and incorporates by reference the allegations set forth in the preceding paragraphs as if set forth here in full.
- 113. As the owner of the '491 Patent, Pinn holds all substantial rights in and to the '491 Patent, including the right to exclude others from practicing its patented inventions, the right to enforce the '491 Patent, and the right to sue and recover damages for infringement of, the '491 Patent.
- 114. Google has no authority or license to practice the inventions claimed in the '491 Patent.
- 115. The '491 Patent is valid and enforceable and was duly issued in full compliance with Title 35 of the United States Code after a full and fair examination by the USPTO.
- 116. Google has infringed and continues to infringe the claims charted in Pinn's Preliminary Infringement Contentions for the '491 Patent (claims 1, 9, and 10) by, among other things, making, using, selling, and offering for sale in the United States, and/or importing into the United States without license or authority products, devices, or systems, including Google Pixel Buds 1 and 2 (the "Accused Products") that fall within the scope of one or more claims of the '491 Patent in violation of at least 35 U.S.C. § 271(a).
- 117. Google's infringing conduct has been, and continues to be, willful, intentional, and carried out with actual knowledge of the '491 Patent.
 - 118. Since receiving notice of the '491 Patent, Google has continued to

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perform acts of infringement and has taken no steps to modify the Accused Products to avoid infringement or to instruct end users and customers how to use the Accused Products in a way that avoids infringement.

- 119. As a result of Google's past infringing conduct, Google is liable to Pinn in an amount that adequately compensates it for Google's infringement, which, by law, can be no less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.
- 120. As a result of Google's ongoing infringing conduct described in this Count, Pinn will continue to be damaged unless Google is enjoined from further infringement.

COUNT 2: INDIRECT INFRINGEMENT OF U.S. PATENT NO. 9,807,491

- 121. Plaintiff realleges and incorporates by reference the factual allegations set forth in the preceding paragraphs as if set forth here in full.
- 122. Google is liable for indirect infringement of claims 1, 9, and 10 of the '491 Patent by knowingly encouraging, aiding, and directing others (e.g., end users and customers) to use and operate the Accused Products in an infringing manner and to perform the claimed methods of the '491 Patent.
- 123. Google has actual knowledge of Pinn's '491 Patent and has been and is on notice of the '491 Patent, the Accused Products that infringe the '491 Patent, and the manner in which such products infringe.
- 124. Google encourages, directs, aids, and abets the use, assembly, configuration, and installation of the Accused Products.
- 125. Google provides to end users and customers products and components having no substantial non-infringing uses and intends them to be combined with a smartphone or other system components to infringe the '491 Patent.
- 126. Google specifically intends the Accused Products to be used and operated to infringe one or more claims of the '491 Patent.
 - 127. By providing manuals, advertising, instructional documentation and

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27 28 videos, and technical support, Google encourages and instructs end users and customers to use and operate the Accused Products in an infringing manner.

- 128. For example, despite having knowledge of the '491 Patent, Google has provided, and continues to provide, instructional materials, such as user guides, owner manuals, and online resources (e.g., https://support.google.com/googlepixelbuds) that teach and encourage customers and other end users to use the Accused Products in an infringing manner. Google actively induces infringement of the '491 Patent.
- The Accused Products include hardware components and software instructions that operate in concert to perform specific, intended functions that constitute material parts of the inventions claimed in the '491 Patent and are not staple articles of commerce suitable for substantial non-infringing use.
- 130. For example, the Accused Products include circuitry configured to operate in combination with software instructions to perform specific functions, such as pairing, playing audio data received from a smartphone, and initiating charging of wireless earbuds, as claimed in the '491 Patent. Such hardware and software have no substantial non-infringing use.
- 131. Google's infringing conduct has been and continues to be willful, intentional, and carried out with actual knowledge of the '491 Patent.
- 132. Since receiving notice of the '491 Patent, Google has continued to perform acts of indirect infringement and has taken no steps to modify the Accused Products or to instruct end users or customers how to use the Accused Products in a way to avoid infringement.
- 133. As a result of Google's past infringing conduct, Google is liable to Pinn in an amount that adequately compensates it for Google's infringement, which by law can be no less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.
- 134. As a result of Google's ongoing infringing conduct described in this Count, Pinn will continue to be damaged unless Google is enjoined from further

infringement.

COUNT 3: DIRECT INFRINGEMENT OF U.S. PATENT NO. 10,455,066

- 135. Pinn realleges and incorporates by reference the factual allegations set forth in the preceding paragraphs as if set forth here in full.
- 136. Pinn is the owner, by assignment, of the '066 Patent and holds all substantial rights in and to the '066 Patent including the right to enforce any patent that may issue therefrom and the right to pursue and recover all infringement damages that may flow from infringement of any such patent.
 - 137. The Patent Office published the '937 App. on May 10, 2018.
- 138. The Patent Office allowed Claims 23-60 of the '937 App. on August 28, 2019.
- 139. Claims 23-60 issued as '066 Claims 1-38 in a form substantially identical to those shown in Exhibit B.
- 140. The '066 Patent issued in full compliance with Title 35 of the United States Code and is valid and enforceable.
- 141. Google has practiced and is currently practicing the claims charted in Pinn's Preliminary Infringement Contentions for the '066 Patent (claims 1, 4, 6, 8, 9, 10, 14, 21, 26, 28, 30, 34, 36, and 38) by, among other things, making, using, selling, and offering for sale in the United States, and/or importing in to the United States, products, devices, or systems including the Accused Products, that fall within the scope of these claims.
- 142. Google has no authority or license to practice the inventions claimed in the '066 Patent.
- 143. As a result of its infringing conduct, Google is liable to Pinn in an amount that adequately compensates Plaintiff for Google's conduct, including damages in an amount no less than a reasonable royalty, together with interest and costs as fixed by this Court.
 - 144. As a result of Google's ongoing infringing conduct described in this

Count, Pinn will continue to be damaged unless Google is enjoined from further infringement.

COUNT 4: INDIRECT INFRINGEMENT OF U.S. PATENT NO. 10,455,066

- 145. Plaintiff realleges and incorporates by reference the factual allegations set forth in the preceding paragraphs as if set forth here in full.
- 146. Google is liable for indirect infringement of the claims charted in Pinn's Preliminary Infringement Contentions for the '066 Patent (claims 1, 4, 6, 8, 9, 10, 14, 21, 26, 28, 30, 34, 36, and 38) by knowingly encouraging, aiding, and directing others (e.g., end users and customers) to use and operate the Accused Products in an infringing manner and to perform the claimed methods of the '066 Patent.
- 147. Google has actual knowledge of Pinn's '066 Patent and has been and is on notice of the '066 Patent, the Accused Products that infringe the '066 Patent, and the manner in which such products infringe.
- 148. Google encourages, directs, aids, and abets the use, assembly, configuration, and installation of the Accused Products.
- 149. Google provides to end users and customers products and components having no substantial non-infringing uses and intends them to be combined with a smartphone or other system components to infringe the '066 Patent.
- 150. Google specifically intends for the Accused Products to be used and operated to infringe one or more claims of the '066 Patent.
- 151. By providing manuals, advertising, instructional documentation and videos, and technical support, Google encourages and instructs end users and customers to use and operate the Accused Products in an infringing manner.
- 152. For example, despite having knowledge of the '066 Patent, Google has provided, and continues to provide, instructional materials, such as user guides, owner manuals, and online resources (e.g., https://support.google.com/googlepixelbuds) that teach and encourage customers and other end users to use the Accused Products in an infringing manner. Google actively induces infringement of the '066 Patent.

- 153. The Accused Products include hardware components and software instructions that operate in concert to perform specific, intended functions that constitute material parts of the inventions claimed in the '066 Patent and are not staple articles of commerce suitable for substantial non-infringing use.
- 154. For example, the Accused Products include circuitry configured to operate in combination with software instructions to perform specific functions, such as pairing, playing audio data received from a smartphone, and initiating charging of wireless earbuds, as claimed in the '066 Patent. Such hardware and software have no substantial non-infringing use.
- 155. Google's infringing conduct has been and continues to be willful, intentional, and carried out with actual knowledge of the '066 Patent.
- 156. Since receiving notice of the '066 Patent, Google has continued to perform acts of indirect infringement and has taken no steps to modify the Accused Products or to instruct end users or customers how to use the Accused Products in a way to avoid infringement.
- 157. As a result of Google's past infringing conduct, Google is liable to Pinn in an amount that adequately compensates it for Google's infringement, which by law can be no less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.
- 158. As a result of Google's ongoing infringing conduct described in this Count, Pinn will continue to be damaged unless Google is enjoined from further infringement.

COUNT 5: DIRECT INFRINGEMENT OF U.S. PAT. NO. 10,609,198

- 159. Pinn realleges and incorporates by reference the factual allegations set forth in the preceding paragraphs as if set forth here in full.
- 160. As the owner of the '198 Patent, Pinn holds all substantial rights in and to the '198 Patent, including the right to exclude others from practicing its patented inventions, the right to enforce the '198 Patent, and the right to sue and recover

damages for infringement of the '198 Patent, including past damages.

- 161. The Patent Office published the '736 App. on December 28, 2017.
- 162. The Patent Office allowed claims 1-29 of the '736 App. on June 19, 2019.
 - 163. The '198 Patent issued on March 31, 2020.
- 164. Claims 1-29 of the '736 App. issued in a form substantially identical to those shown in Exhibit E. *See also* Exhibit D, '198 Patent.
- 165. Google has no authority or license to practice the inventions claimed in the '198 Patent.
- 166. The '198 Patent is valid, enforceable, and was duly issued in full compliance with Title 35 of the United States Code after a full and fair examination by the USPTO.
- 167. Google has infringed and continues to infringe the claims charted in Pinn's Preliminary Infringement Contentions for the '198 Patent (claims 1, 3, 5, 9, 12, 15, 17, 19, 21, 25, 27 and 29) by, among other things, making, using, selling, and offering for sale in the United States, and/or importing in to the United States, products, devices, or systems, including the Accused Products, that fall within the scope of the claims in Pinn's Preliminary Infringement Contentions, in violation of at least 35 U.S.C. § 271(a).
- 168. Since receiving notice of the '198 Patent, Google has continued to perform acts of indirect infringement and has taken no steps to modify the Accused Products or to instruct end users or customers how to use the Accused Products in a way to avoid infringement.
- 169. As a result of Google's past infringing conduct, Google is liable to Pinn in an amount that adequately compensates it for Google's infringement, which, by law, can be no less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.
 - 170. As a result of Google's ongoing infringing conduct described in this

Count, Pinn will continue to be damaged unless Google is enjoined from further infringement.

COUNT 6: INDIRECT INFRINGEMENT OF U.S. PATENT NO. 10,609,198

171. Plaintiff realleges and incorporates by reference the factual allegations

- 171. Plaintiff realleges and incorporates by reference the factual allegations set forth in the preceding paragraphs as if set forth here in full.
- 172. Google is liable for indirect infringement of the claims charted in Pinn's Preliminary Infringement Contentions for the '198 Patent (claims 1, 3, 5, 9, 12, 15, 17, 19, 21, 25, 27 and 29) since at least as early as February 20, 2020, the date the patent issued, or the publication date of the claims that issued from the '736 App., if not earlier, because it knowingly encourages, aids, and directs others (e.g., end users and customers) to use and operate the Accused Products in an infringing manner and to perform the claimed methods of the '198 Patent.
- 173. Since that time, Google has specifically intended, and continues to specifically intend, for persons who acquire and use the Accused Products, including Google's customers (e.g., individual users, etc.), to use such devices and systems in a manner that infringes the '198 Patent. This is evident when Google encourages and instructs customers and other end users in the use and operation of the Accused Products, via advertisement, technical material, instructional material, instructional videos, or otherwise.
 - 174. The USPTO published the '736 App. on December 28, 2017.
 - 175. On June 19, 2019, the USPTO allowed claims 1-29 of the '736 App.
- 176. Google has actual knowledge of Pinn's '198 Patent claims and has been and is on notice of the '198 Patent claims, the Accused Products that infringe the claimed subject matter of the '198 Patent, and the manner in which such products infringe.
- 177. Google encourages, directs, aids, and abets the use, assembly, configuration, and installation of the Accused Products, which have no substantial non-infringing uses.

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- 178. Google specifically intends for the Accused Products to be used and operated to infringe one or more claims of the '198 Patent.
- 179. By providing manuals, advertising, instructional documentation and videos, and technical support, Google encourages and instructs end users and customers to use and operate the Accused Products in an infringing manner.
- 180. For example, despite having knowledge of the '198 Patent, Google has provided, and continues to provide, instructional materials, such as user guides, owner manuals, and online resources (e.g., https://store.google.com/us/product/pixel_buds) along with other instructional materials and documentation provided or made available by Google to customers after purchase, that teach and encourage customers and other end users to use the Accused Products in an infringing manner. Google actively induces infringement of the '198 Patent.
- 181. The Accused Products include hardware components and software instructions that operate in concert to perform specific, intended functions that constitute material parts of the inventions claimed in the '198 Patent and are not staple articles of commerce suitable for substantial non-infringing use.
- 182. Such hardware and software include a charging case comprising a connection hole, input button, processors, memory and circuitry, and a wireless earbud configured for plugging into the connection hole of the charging base to form an integrated body with the charging case.
- 183. For example, the Accused Products include circuitry configured to operate in combination with software instructions to perform specific functions, such as pairing, playing audio data received from a smartphone, performing wired data communication between the earbuds and base, and initiating charging of wireless earbuds, claimed in the '198 Patent. Such hardware and software have no substantial non-infringing uses.
- 184. Since receiving notice of the '198 Patent, Google has continued to perform acts of indirect infringement and has taken no steps to modify the Accused

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Products or instruct end users or customers how to use the Accused Products in a way to avoid infringement.

185. As a result of Google's past infringing conduct, Google is liable to Pinn in an amount that adequately compensates it for Google's infringement, which by law can be no less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

186. As a result of Google's ongoing infringing conduct described in this Count, Pinn will continue to be damaged unless Google is enjoined from further infringement.

NOTICE OF REQUIREMENT OF LITIGATION HOLD

187. Google is hereby notified that it is legally obligated to locate, preserve, and maintain all records, notes, drawings, documents, data, communications, materials, electronic recordings, audio/video/photographic recordings, and digital files, including edited and unedited or "raw" source material, and other information and tangible things that Google knows, or reasonably should know, may be relevant to actual or potential claims, counterclaims, defenses, and/or damages by any party or potential party in this lawsuit, whether created or residing in hard copy form or in the form of electronically stored information (hereafter, "Potential Evidence"). As used above, the phrase "electronically stored information" includes, without limitation: computer files (and file fragments), e-mail (both sent and received, whether internally or externally), information concerning e-mail (including but not limited to logs of email history and usage, header information, and deleted but recoverable e-mails), text files (including drafts, revisions, and active or deleted word processing documents), instant messages, audio recordings and files, video footage and files, audio files, photographic footage and files, spreadsheets, databases, calendars, telephone logs, contact manager information, internet usage files, and all other information created, received, or maintained on any and all electronic and/or digital forms, sources and media, including, without limitation, any and all hard disks, removable media,

peripheral computer or electronic storage devices, laptop computers, mobile phones, personal data assistant devices, Blackberry devices, iPhones, Pixels, video cameras and still cameras, and any and all other locations where electronic data is stored. These sources may also include any personal electronic, digital, and storage devices of any and all of Defendant's agents, resellers, or employees, if Defendant's electronically stored information resides there.

188. Google is hereby further notified and forewarned that any alteration, destruction, negligent loss, or unavailability, by act or omission, of any Potential Evidence may result in damages or a legal presumption by the Court and/or jury that the Potential Evidence is not favorable to Defendant's claims and/or defenses. To avoid such a result, Defendant's preservation duties include, but are not limited to, the requirement that Defendant immediately notify its agents and employees to halt and/or supervise the auto-delete functions of Defendant's electronic systems and refrain from deleting Potential Evidence, either manually or through a policy of periodic deletion.

PRAYER FOR RELIEF

Pinn prays for the following relief:

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- (i) Judgment that Google has directly infringed the Asserted Patents;
- (ii) Judgment that Google has indirectly infringed the Asserted Patents;
- (iii) Judgment that the Asserted Patents are valid and enforceable;
- (iv) An award of damages adequate to compensate Pinn for Google's direct and indirect infringement up to and including the date such judgment is entered, to the full extent damages are available under 35 U.S.C. §§ 154(d), 284, or otherwise, along with prejudgment and post-judgment interest at the highest allowable rates;
- (v) An award of enhanced and/or treble damages, pursuant to 35 U.S.C. § 284;
- (vi) Judgment that this case is exceptional, along with a corresponding award of reasonable attorney fees, pursuant to 35 U.S.C. § 285;

1	(vii) Costs and disbursements, pursuant to Fed. R. Civ. P. 54(d), 28 U.S.C. §					
2	1920, 35 U.S.C. § 284, or otherwise;					
3	(viii) An accounting;					
4	(ix) A permanent injunction, or, alternatively (if the Court declines to grant					
5	injunctive relief), and to the extent calculable, damages adequate to compensate Pinn					
6	for Google's ongoing or future infringement; and					
7	(x) Such other and further relief, whether at law or in equity, as the Court					
8	deems just and proper.					
9	DEMAND FOR JURY TRIAL					
10	Pinn demands trial by jury for all issues so triable pursuant to Fed. R. Civ. P.					
11	38(b) and Civil L.R. 3-6(a).					
12	Dated: April 17, 2020 By: /s/ Cabrach J. Connor					
13	Ryan E. Hatch California Bar No. 235577					
14	California Bar No. 235577					
15	Law Office of Ryan E. Hatch, P.C. 13323 Washington Blvd., Suite 100					
16	ryan@ryanehatch.com Law Office of Ryan E. Hatch, P.C. 13323 Washington Blvd., Suite 100 Los Angeles, CA 90066 Telephone: 310-279-5076					
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20	301 Commerce Street, Suite 3500 Fort Worth, Texas 76102					
21	Telephone: (817) 878-0500 Facsimile: (817) 878-0501					
22	Cabrach J. Connor (admitted pro hac vice)					
23	Texas Bar No. 24036390 cab@connorkudlaclee.com					
24	CONNOR KUDLAC LEE PLLC 609 Castle Ridge Road, Suite 450					
25	Austin, Texas 78746 Telephone: (512) 777-1254					
26	Facsimile: (888) 387-1134					
27	Attorneys for Plaintiff Pinn, Inc.					
28						