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9 Attorneys for GOOGLE LLC

10 UNITED STATES DISTRICT COURT
11 NORTHERN DISTRICT OF CALIFORNIA

12 GOOGLE LLC,
13 Plaintiff,
14 vs.
15 SONOS, INC.,
16 Defendant.

CASE NO. 3-20-cv-03845-EMC
**FIRST AMENDED COMPLAINT FOR
PATENT INFRINGEMENT**
DEMAND FOR JURY TRIAL

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19 **COMPLAINT FOR PATENT INFRINGEMENT**

20 1. Plaintiff Google LLC (“Google”), by and through its attorneys, and for its
21 Complaint against Sonos, Inc. (“Sonos”), hereby alleges the following:

22 **NATURE OF THE ACTION**

23 2. Google brings this action against Sonos for infringement of U.S. Patent No.
24 7,899,187 (the “187 patent”), U.S. Patent No. 8,583,489 (the “489 patent”), U.S. Patent No.
25 10,140,375 (the “375 patent”), U.S. Patent No. 7,065,206 (the “206 patent”), and U.S. Patent No.
26 10,229,586 (the “586 patent”) (collectively, the “Patents-in-Suit”).
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1 **BACKGROUND**

2 3. Google was founded in 1998, and has a mission to organize the world’s
3 information and make it universally accessible and useful. Over the past two decades, in service
4 of that mission, Google has become one of the world’s most innovative technology companies.

5 4. Google’s revolutionary advances in search, software, mobile computing, wireless
6 networking, content streaming, machine learning, and voice-assisted technologies including
7 speech recognition and advanced audio processing, have changed and improved millions of lives.

8 5. As part of its commitment to innovation, Google has invested significantly in
9 extensive research and development efforts, including its own research, as well as investments in
10 and acquisitions of other cutting-edge technology companies. Google is the current assignee of
11 tens of thousands of patents worldwide.

12 **GOOGLE’S PARTNERSHIP WITH SONOS**

13 6. Google partners with other companies to bring Google’s innovations to millions of
14 shared customers. In particular, Google has long had a continued partnership with Sonos. In these
15 collaborations, Sonos has repeatedly asked Google for assistance, so that Sonos could employ
16 Google technology to improve Sonos’ products.

17 7. In 2013, Sonos asked for Google’s assistance to integrate with Google’s popular
18 Play Music service. Google gave Sonos that assistance, and provided significant engineering
19 resources, technical support, and other resources to integrate Sonos’ products with Google’s Play
20 Music service in 2014.

21 8. In 2016, Sonos again asked for Google’s assistance—this time to integrate with
22 Google’s innovative Assistant software. And again, Google was willing to help. Google gave
23 Sonos significant assistance in designing, implementing, and testing a solution that would bring
24 Google’s voice recognition software to Sonos’ devices. This effort again involved substantial
25 Google engineering resources, including significant months of employee work time, for the initial
26 launch of Google’s Assistant on Sonos’ products in May 2019.

27 9. Google is proud of its more than five-year partnership with Sonos, and has worked
28 constructively with Sonos to make the companies’ products work seamlessly by building special

1 integrations for Sonos. For instance, when Google rolled out the ability to set a Sonos speaker as
2 the default option for Google Assistant, it was the first time Google had done that for any partner
3 company.

4 10. Sonos has made false claims about the companies' shared work and Google's
5 technology in the lawsuits that Sonos filed against Google earlier this year. While Google rarely
6 sues other companies for patent infringement, it must assert its intellectual property rights here.

7 **SONOS' INFRINGEMENT OF GOOGLE'S INTELLECTUAL PROPERTY**

8 11. Sonos is using substantial volumes of Google's technology, including patented
9 Google innovations in search, software, networking, audio processing, and digital media
10 management and streaming, both in Sonos' hardware products and in Sonos' software and service
11 offerings, including the current-generation Sonos controller application (hereafter "S2 App"),
12 prior-generation Sonos controller application (hereafter "S1 Controller App"), and the Sonos
13 Radio service.

14 12. Google has patents on innovative technologies that allow networked digital audio
15 devices to create robust wireless communications networks, access and play copy-protected
16 media, adaptively control echo and ambient noise, and search multiple music libraries
17 simultaneously. Sonos is using, without permission, these Google technologies in Sonos' products
18 to enable multiple commercially-desirable features, for example, to allow for easier configuration
19 of and extensions to multi-speaker networks; to facilitate the management and use of multiple
20 music services with Sonos speakers; to permit playing copy-protected digital media, including
21 Sonos' new Sonos Radio service; and to allow Sonos to use noise suppression and echo
22 cancellation to obtain accurate audio input. Sonos uses these technologies to offer a number of
23 products and services, including, *inter alia*, the Sonos One, One SL, Five, Play:1, Play:3, Play:5,
24 Playbar, Playbase, Beam, Arc, Move, Connect:Amp, Amp, Connect, Sub, and the Sonos S1
25 Controller App and S2 App (collectively, the "Accused Products").

26 13. Sonos is actively infringing Google's intellectual property. Sonos has no license to
27 use Google's patents. Because Sonos refuses to cease its infringement, and is unwilling to
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1 recognize the value of Google’s technology through a license, Google has filed this suit to protect
2 its intellectual property.

3 **THE PARTIES**

4 14. Plaintiff Google LLC is a subsidiary of Alphabet Inc. with its principal place of
5 business located in Mountain View, California 94043.

6 15. Defendant Sonos, Inc. is a Delaware corporation with headquarters at 614 Chapala
7 Street, Santa Barbara, California 93101.

8 **JURISDICTION AND VENUE**

9 16. This is a civil action for patent infringement arising under the patent laws of the
10 United States, Title 35 of the United States Code. This Court has exclusive subject matter
11 jurisdiction over this Complaint pursuant to 28 U.S.C. Sections 1331 and 1338(a).

12 17. This Court has personal jurisdiction over Sonos. Sonos is registered to do business
13 in the State of California (Registration No. C2465272), has its headquarters in the State of
14 California, and has offices in this District. Sonos, directly and through agents, regularly does,
15 solicits, and transacts business in this District and elsewhere in the State of California. Those acts
16 have caused injury to Google, including within this District.

17 18. Venue is proper in this District under 28 U.S.C. Sections 1391 and 1400(b). Sonos
18 has a regular and established place of business in this District—specifically, offices and employees
19 located at 550 Montgomery Street, Suite 750, San Francisco, CA 94111. Sonos lists this
20 San Francisco office on its website (<https://www.sonos.com/en-us/contact>, a true and correct copy
21 of which is attached as Exhibit 1), and the Sonos office at this location is advertised by Sonos as a
22 current place of business (including in the building’s directory in the public lobby). Sonos has
23 also committed acts of infringement in this District by selling, using, importing, and/or offering
24 for sale the Accused Products in this District.

25 **INTRADISTRICT ASSIGNMENT**

26 19. For purposes of intradistrict assignment under Civil Local Rules 3-2(c) and 3-5(b),
27 this Intellectual Property Action will be assigned on a district-wide basis.

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FIRST CAUSE OF ACTION

(Infringement of Patent No. 7,899,187)

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3 20. Google incorporates all of the above paragraphs as though fully set forth herein.

4 21. U.S. Patent No. 7,899,187, titled “Domain-Based Digital-Rights Management
5 System with Easy and Secure Device Enrollment,” was duly and lawfully issued by the United
6 States Patent and Trademark Office on March 1, 2011. A true and correct copy of the ’187 patent
7 is attached to this Complaint as Exhibit 2.

8 22. Google is the owner by assignment of all rights, title, and interest in the ’187
9 patent, including the right to bring this suit for past and future damages and/or injunctive relief.

10 23. The ’187 patent is valid and enforceable.

11 24. Sonos infringes one or more claims of the ’187 patent, including but not limited to
12 claim 10 (the “Asserted ’187 Claims”), directly and/or indirectly via induced infringement and/or
13 by contributory infringement. Sonos infringes the Asserted ’187 Claims by making, using,
14 importing, selling for importation, and/or selling after importation into the United States at least
15 the Sonos One, One SL, Play:1, Play:3, Play:5, Playbar, Playbase, Beam, Move, Connect:Amp,
16 Amp, Connect, Port, and Sub products (the “Accused ’187 Products”) in violation of 35 U.S.C.
17 Sections 271(a)-(b). On information and belief, the Accused ’187 Products satisfy all claim
18 limitations of the Asserted ’187 Claims at the time of their importation into and/or sale in the
19 United States.

20 25. Sonos had actual knowledge of the ’187 patent or was willfully blind to its
21 existence at least as early as October 25, 2016, and no later than the filing of this action.

22 26. Sonos directly infringes the Asserted ’187 Claims by making, using, offering to
23 sell, or selling the Accused ’187 Products in the United States and by importing the Accused ’187
24 Products into the United States in violation of 35 U.S.C. Section 271(a). Sonos infringes at least
25 claim 10 of the ’187 patent for at least the following reasons:

26 27. To the extent the preamble is limiting, the Accused ’187 Products each constitute
27 an apparatus.

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1 28. On information and belief, the Accused '187 Products comprise communication
2 circuitry that is capable of receiving domain information from a device existing within a domain
3 of devices, which share rights associated with a common account, for use in accessing protected
4 digital content within a digital-rights management system. For example, the Accused '187
5 Products can connect directly to other products via an ad hoc or infrastructure WiFi network
6 connection or a wired, Ethernet connection. The Sonos User Guide explains how the Accused
7 '187 Products can be added to a current Sonos "household" that has already been configured using
8 the "Add Product" feature in the "System" settings of a Sonos controller application, *e.g.*, the
9 Sonos S1 Controller App or the Sonos S2 App. Sonos User Guide at 4-5 (Sept. 2019)
10 (<https://www.sonos.com/support/en/pdfs/sonos-user-guide.pdf>), a true and correct copy of which
11 is attached as Exhibit 3. On information and belief, when an Accused '187 Product is introduced
12 into a prior configured network, it is capable of receiving information pertaining to devices
13 previously configured within the "household" domain, such that access to protected music from a
14 common music streaming account can be shared amongst the Accused '187 Products that
15 comprise that domain.

16 29. On information and belief, the Accused '187 Products include storage for storing
17 the domain information. For example, each of the Accused '187 Products include storage (*e.g.*,
18 random access or flash memory) that, on information and belief, stores at least information
19 pertaining to the domain of devices, such as a household identifier.

20 30. On information and belief, the Accused '187 Products comprise logic circuitry for
21 providing the domain information stored therein to a key issuer, which is separate from the
22 domain of devices (*e.g.*, a Sonos "household"). For example, on information and belief, the
23 Accused '187 Products include logic circuitry that is used to provide information pertaining to the
24 domain of devices, such as household identification, to an external server, or key issuer, that is
25 separate from the Sonos household. On information and belief, this information is provided by the
26 Accused '187 Products in order to obtain security information from the key issuer necessary to
27 play back encrypted or encoded digital content transmitted from third-party sources.

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1 31. On information and belief, the Accused '187 Products' provision of domain
2 information to the key issuer causes the key issuer to responsively issue a private key to the
3 Accused '187 Products for use in accessing protected digital content provided thereto, wherein the
4 private key is based on the domain information and is utilized by all devices within the domain of
5 devices. For example, on information and belief, in response to an Accused '187 Product
6 providing information identifying the domain of which it is a part—*e.g.*, its “householdID”—to an
7 external server, the server will respond with a certificate and/or private key that allows the
8 Accused '187 Product to play back encrypted or encoded digital content. On information and
9 belief, this security information is provided based on domain information supplied by the Accused
10 '187 Products. On information and belief, this provided security information is the same security
11 information used by all members of the domain.

12 32. Sonos actively, knowingly, and intentionally induces the infringement of the
13 Asserted '187 Claims by actively encouraging others to make, use, offer to sell, or sell the
14 Accused '187 Products in the United States and/or import the Accused '187 Products into the
15 United States in violation of 35 U.S.C. Section 271(b). Sonos knows (or should know) that its
16 actions will induce users of the Accused '187 Products to directly infringe the Asserted '187
17 Claims. Those users then directly infringe the Asserted '187 Claims. For example, Sonos
18 promotes and advertises the use of the Accused '187 Products, including the Sonos One, One SL,
19 Five, Play:1, Play:3, Play:5, Playbar, Playbase, Beam, Arc, Move, Connect:Amp, Amp, Connect,
20 Port, and Sub products, on its website (<https://www.sonos.com/en-us/home>, a true and correct
21 copy of which is attached as Exhibit 4) and in other promotional materials like user manuals and
22 user guides. Sonos advertises and instructs its customers and potential customers to purchase and
23 set up one or more of the Accused '187 Products to directly infringe the Asserted '187 Claims by
24 creating a household with connected Accused '187 Products to “[I]isten in any or every room” to
25 music or other content by “group[ing] all your speakers to play music in sync.” Sonos Website
26 “Listen Your Way” (<https://www.sonos.com/en-us/listen-your-way>), a true and correct copy of
27 which is attached as Exhibit 5. By instructing its customers and potential customers to create a
28 household and configure the Accused '187 Products to stream DRM-protected third-party content,

1 Sonos induces its customers and potential customers to use at least the invention of Claim 10 of
2 the '187 Patent. Additionally, Sonos instructs its customers and potential customers to use the
3 invention of Claim 10 to allow the Accused '187 Products to play encrypted music from service
4 providers, including but not limited to Sonos' own Sonos Radio music service, within a Sonos
5 "household" configuration. *See, e.g.*, "Listen Your Way" ([https://www.sonos.com/en-us/listen-](https://www.sonos.com/en-us/listen-your-way)
6 [your-way](https://www.sonos.com/en-us/listen-your-way)), Exhibit 5. Sonos also provides customer support on its website where Sonos
7 employees instruct customers to directly infringe the Asserted '187 Claims by joining the Accused
8 '187 Products to a prior configured Sonos household that is configured to play encrypted music
9 using. *See, e.g.*, Sonos Community, Move: Using across multiple Sonos systems, January 12,
10 2020 ([https://en.community.sonos.com/advanced-setups-229000/move-using-across-multiple-](https://en.community.sonos.com/advanced-setups-229000/move-using-across-multiple-sonos-systems-6835368)
11 [sonos-systems-6835368](https://en.community.sonos.com/advanced-setups-229000/move-using-across-multiple-sonos-systems-6835368)), a true and correct copy of which is attached as Exhibit 6.

12 33. Based on Sonos' instructions, users of the Accused '187 Products directly infringe
13 the Asserted '187 patent. *See, e.g., id.*; Sonos Community, Spotify skips to next song or stops
14 playing, other sources work just fine meanwhile ([https://en.community.sonos.com/](https://en.community.sonos.com/troubleshooting-228999/spotify-skips-to-next-song-or-stops-playing-other-sources-work-just-fine-meanwhile-6806367?postid=16342847#post16342847)
15 [troubleshooting-228999/spotify-skips-to-next-song-or-stops-playing-other-sources-work-just-fine-](https://en.community.sonos.com/troubleshooting-228999/spotify-skips-to-next-song-or-stops-playing-other-sources-work-just-fine-meanwhile-6806367?postid=16342847#post16342847)
16 [meanwhile-6806367?postid=16342847#post16342847](https://en.community.sonos.com/troubleshooting-228999/spotify-skips-to-next-song-or-stops-playing-other-sources-work-just-fine-meanwhile-6806367?postid=16342847#post16342847)), a true and correct copy of which is
17 attached as Exhibit 7.

18 34. Sonos contributorily infringes the Asserted '187 Claims by offering to sell or
19 selling within the United States or importing into the United States the Accused '187 Products
20 (where each of the Accused '187 Products is or contains a component of a patented machine,
21 manufacture, combination or composition, or a material or apparatus for use in practicing a
22 patented process, constituting a material part of the invention), knowing the same to be especially
23 made or especially adapted for use in infringing the '187 patent, and not a staple article or
24 commodity of commerce suitable for substantial noninfringing use in violation of 35 U.S.C.
25 Section 271(c).

26 35. Sonos' infringement of the '187 patent has been willful and deliberate because it
27 knew or should have known about the '187 patent and the infringement of that patent at least as
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1 early as October 2016 but acted despite an objectively high likelihood that such acts would result
2 in infringement of the patent.

3 36. As the direct and proximate result of Sonos' conduct, Google has suffered and, if
4 Sonos' conduct is not stopped, will continue to suffer, competitive harm, irreparable injury, and
5 damages in an amount to be proven at trial. Because Google's remedy at law is inadequate,
6 Google seeks, in addition to damages, permanent injunctive relief. Google's business operates in
7 a competitive market and will continue suffering irreparable harm absent injunctive relief.

8 **SECOND CAUSE OF ACTION**

9 **(Infringement of Patent No. 8,583,489)**

10 37. Google incorporates all of the above paragraphs as though fully set forth herein.

11 38. U.S. Patent No. 8,583,489, titled "Generating a Media Content Availability
12 Notification," was duly and lawfully issued by the United States Patent and Trademark Office on
13 November 12, 2013 and assigned to Google Inc. A true and correct copy of the '489 patent is
14 attached to this Complaint as Exhibit 8.

15 39. Google is the owner of all rights, title, and interest in the '489 patent, including the
16 right to bring this suit for past and future damages and/or injunctive relief.

17 40. The '489 patent is valid and enforceable.

18 41. As set forth in the '489 patent, "[i]n today's digital age, media content such as
19 movies, video clips, television shows, music, etc., is becoming available from an ever-increasing
20 number of different content sources. For example, the same movie may be show in a movie
21 theater, broadcast on television, released on physical media (e.g., DVD, Blu-Ray VHS, etc.) made
22 available to certain entities (e.g., institutions, hospitals, airlines, etc.), or placed on an online
23 source for download or streaming." Ex. 8 at 1:17-24. The '489 patent also references that "[t]he
24 timing of when media content is available from the different content sources can also differ. For
25 example, a movie may only be shown in a movie theater for a limited period of time, followed by
26 a period of time in which it is available via on-demand television or online streaming, before being
27 released for download or on a physical media format." *Id.* at 1:24-30. "This increase in the
28 number of different content sources, combined with the number of different content sources,

1 combined with the increase in disparate release schedules for media contention, often leads to
2 confusion among consumers.” *Id.* at 1:30-34.

3 42. The ‘489 patent provides a number of solutions to this problem, improving Internet
4 usage and associated search functionality by, among other things, providing the ability to identify
5 desired online media content availability without repeated user involvement and streamline its
6 delivery in a preferred manner even from protected sources. For example, the claimed inventions
7 include receiving, at a computer or processing circuit, a selection of media content and content
8 delivery preferences via a user interface, including a selection of a plurality of unique online
9 content sources (amongst the voluminous, different sources of content available throughout the
10 Internet as a whole) and user account data for those sources. *Id.* at 1:40-44. These multiple,
11 disparate content sources can relate to both network-attached media (e.g., online streaming media)
12 and physical or non-network media (specifically, information describing offline media sources),
13 which are aggregated by a server in response to the received media content selection. *Id.* at 4:5-
14 32, 4:49-61. Account data further refines content availability to identify online media to which a
15 user has authorized access. *Id.* at 4:27-32. Using these content sources, and associated account
16 data, the inventions request over a network (such as the Internet), content availability data based,
17 at least in part, on the selected media contention and user account data. *Id.* at 1:45-49. If media is
18 available from any identified unique online content source, or becomes available at a later date,
19 the invention provides for the generation of a notification to be delivered to the user’s electronic
20 device informing them of the unique online content source and user account for which the media is
21 available. *Id.* at 1:58-2:11. This invention, as illustrated in claims 8 and 15, offers a problem that
22 is uniquely associated with the Internet and other large networks—*i.e.*, the ability to easily and
23 efficiently access voluminous amounts of data that is geographically distributed, at different times,
24 in different formats, with differing access restrictions.

25 43. Various aspects of claimed inventions of the ‘489 patent also support prioritizing
26 content sources to be accessed when a piece of media content is available from multiple sources,
27 helping to further improve the accuracy and efficiency of the information provided via
28 notification, as illustrated, for example, in claims 9. *See id.* at 6:25-49. According to various

1 aspects of the claimed inventions, parameters for prioritizing content sources can include the price
2 for accessing the selected media content, as illustrated in, for example, claims 10, 11, 16 and 17.
3 Additionally, various aspects of the invention further support searching for and identifying related
4 content for the selection of media content, which differs from that media content selected by the
5 user, identifying content available data from a plurality of unique online sources for this related
6 content, and providing a notification that this related content is able to at least one user account
7 associated with at least one of the plurality of unique online content sources, as illustrated in, for
8 example, claim 12. *Id.* at 9:59-10:11, 13:27-46.

9 44. During prosecution, the inventors of the '489 patent clarified that the invention was
10 directed to a specific method and apparatus for providing content availability information for
11 content media distributed throughout a computing network, such as the Internet, to users. In doing
12 so, the inventors distinguished over prior art that failed to notify a user that selected media content
13 had become available, and was instead limited to merely delivering media content to subscribers
14 distributed across a number of geographic locations. *See* Amendment and Reply Under 37 C.F.R.
15 1.111, dated March 29, 2013, at 9. The inventors further distinguished prior art that provided
16 media content to a user for free or at a reduced price if that user first watches on or more
17 advertisements, as this art did not provide, for example, a user's ability to specify a price threshold
18 below which the user would desire to obtain that media content. *Id.* at 13.

19 45. Sonos infringes one or more claims of the '489 patent, including but not limited to
20 claim 15 (the "Asserted '489 Claims"), directly and/or indirectly via induced infringement and/or
21 by contributory infringement. Sonos infringes the Asserted '489 Claims by making, using,
22 importing, selling for importation, and/or selling after importation into the United States at least
23 the Sonos S1 Controller App and S2 App for storage in non-transitory memory (the "Accused
24 '489 Products") in violation of 35 U.S.C. Sections 271(a)-(b). On information and belief, the
25 Accused '489 Products when stored in non-transitory memory satisfy all claim limitations of the
26 Asserted '489 Claims at the time of their use in the United States.

27 46. Sonos had actual knowledge of the '489 patent or was willfully blind to its
28 existence at least as early as October 25, 2016, and no later than the filing of this action.

1 47. Sonos directly infringes the Asserted '489 Claims by making, using, offering to
2 sell, or selling the Accused '489 Products in the United States in violation of 35 U.S.C. Section
3 271(a). Sonos infringes at least claim 15 of the '489 patent for at least the following reasons:

4 48. To the extent the preamble is limiting, the Accused '489 Products are designed to
5 be installed on, and are in fact installed on (by Sonos directly, and by Sonos customers based on
6 instructions and directions received from Sonos), devices with one or more non-transitory
7 computer-readable media having instructions therein, the instructions being executable by one or
8 more processors.

9 49. On information and belief, the Accused '489 Products include instructions that are
10 executable by one or more processors to execute a method comprising receiving, at the one or
11 more processors, a selection of media content and content delivery preferences, wherein the
12 content delivery preferences comprise a selection of a plurality of unique online content sources
13 specified by a user interface and user account data for each of the plurality of unique online
14 content sources. For example, on information and belief, the Accused '489 Products include
15 instructions executable by one or more processors to add music services to Sonos and to search
16 those services for specific media content using a universal search feature. On information and
17 belief, the Accused '489 Products specify "Music & Content" services on a user interface using
18 user account data for each respective unique online content source. *See, e.g.*, Sonos Support "Add
19 a music service to Sonos" (https://support.sonos.com/s/article/2757?language=en_US), a true and
20 correct copy of which is attached as Exhibit 9; Sonos Website "Listen Your Way"
21 (<https://www.sonos.com/en-us/listen-your-way>), Exhibit 5. On information and belief, the
22 Accused '489 Products also include instructions that are executable to receive a search query to
23 search selected Music & Content services for a selection of media content via the universal search
24 feature, and may present a subset of the online content sources that can fulfill the universal search
25 query for content.

26 50. On information and belief, the Accused '489 Products comprise instructions that
27 are executable by one or more processors to execute a method comprising requesting, over a
28 network, content availability data from the plurality of unique online content sources based at least

1 in part on the selection of media content and the user account data, wherein the content availability
2 data indicates whether the selection of media content is available to a user account in the user
3 account data. For example, on information and belief, the Accused '489 Products request content
4 availability data from unique online content sources in response to a search inquiry in the
5 universal search feature seeking a selection of media content. On information and belief, content
6 availability data are based at least in part on the selection of media content, the user account data,
7 and specified "Music & Content" services. On information and belief, the content availability data
8 indicates which services have the selection of media content available to the user account in the
9 user account data.

10 51. On information and belief, the Accused '489 Products comprise instructions that
11 are executable by one or more processors to execute a method comprising receiving, at the one or
12 more processors, the content availability data. For example, on information and belief, the
13 Accused '489 Products receive the content availability data and display on a user interface unique
14 online content sources that fulfill the universal search inquiry.

15 52. On information and belief, the Accused '489 Products comprise instructions that
16 are executable by one or more processors to execute a method comprising using the content
17 availability data to generate a notification for an electronic device, wherein the notification
18 indicates that the selection of media content is available to at least one user account in the user
19 account data from at least one of the plurality of unique online content sources. For example, on
20 information and belief, the Accused '489 Products use the content availability data to generate a
21 notification indicating that media content sought via the universal search feature is available to at
22 least one user account in the user account data from at least one of the plurality of unique online
23 content sources.

24 53. Sonos actively, knowingly, and intentionally induces the infringement of the
25 Asserted '489 Claims by actively encouraging others to make, use, offer to sell, or sell the
26 Accused '489 Products in the United States and/or import the Accused '489 Products into the
27 United States in violation of 35 U.S.C. Section 271(b). Sonos knows (or should know) that its
28 actions will induce users of the Accused '489 Products to directly infringe the Asserted '489

1 Claims. For example, Sonos promotes and advertises the use of the Accused '489 Products,
2 including Sonos' software application for iOS, Android, and desktops, in conjunction with Sonos'
3 products like the Sonos One, One SL, Play:1, Play:3, Play:5, Playbar, Playbase, Beam, Move,
4 Connect:Amp, Amp, Connect, Port, and Sub products, on its website ([https://www.sonos.com/en-](https://www.sonos.com/en-us/home)
5 [us/home](https://www.sonos.com/en-us/home), Exhibit 4) and in other promotional materials, such as user manuals and user guides.
6 Sonos advertises and instructs its customers and potential customers to set up and control one or
7 more of Sonos' products, like the Sonos One, One SL, Five, Play:1, Play:3, Play:5, Playbar,
8 Playbase, Beam, Arc, Move, Connect:Amp, Amp, Connect, Port, and Sub products, using the
9 Accused '489 Products, including Sonos' software application for iOS and Android. Sonos
10 further advertises to and instructs its customers' use of the Accused '489 Products to search
11 different content sources (including Sonos' music service and other third party services) and
12 provide the selected content to one or more of Sonos' products. *See, e.g.*, Sonos Blog
13 (<https://blog.sonos.com/en/sonos-spotify-better-stronger/>), a true and correct copy of which is
14 attached as Exhibit 10. By instructing its customers and potential customers to add additional
15 content providers to the account associated with the Sonos products, Sonos induces its customers
16 and potential customers to use the Accused '489 Products to receive content delivery preferences
17 like a selection of a plurality of unique online content sources specified by a user interface and
18 user account data for each of the plurality of unique online content sources, with knowledge that
19 the same results in infringement of the Asserted '489 Claims. *See, e.g.*, Sonos Support "Add a
20 music service to Sonos" (https://support.sonos.com/s/article/2757?language=en_US), Exhibit 9.
21 Additionally, Sonos instructs its customers and potential customers to use the universal search in
22 the Accused '489 Products to search for content across multiple connected music content
23 providers. *See, e.g.*, Sonos Blog (<https://blog.sonos.com/en/sonos-spotify-better-stronger/>),
24 Exhibit 10 ("How do you bump A\$AP Rocky, Alabama Shakes, or Ryan Adams Radio in your
25 living room? Simply, go to universal search on the app and type in the artist that you want listen
26 to. In the Spotify search results, click on the artist and select the first square on the next screen for
27 artist radio."). Based on these instructions by Sonos, users of the Accused '489 Products directly
28

1 infringe the Asserted '489 Claims. *See, e.g., id.*; Sonos Blog (<https://blog.sonos.com/en/listen-on-sonos-five-new-music-services/>), a true and correct copy of which is attached as Exhibit 11.

3 54. Sonos contributorily infringes the Asserted '489 Claims by offering to sell or
4 selling within the United States or importing into the United States the Accused '489 Products
5 (where each of the Accused '489 Products is or contains a component of a patented machine,
6 manufacture, combination or composition, or a material or apparatus for use in practicing a
7 patented process, constituting a material part of the invention), knowing the same to be especially
8 made or especially adapted for use in infringing the '489 patent, and not a staple article or
9 commodity of commerce suitable for substantial noninfringing use in violation of 35 U.S.C.
10 Section 271(c).

11 55. Sonos' infringement of the '489 patent has been willful and deliberate because it
12 knew or should have known about the '489 patent and the infringement of that patent at least as
13 early as October 2016 but acted despite an objectively high likelihood that such acts would result
14 in infringement of the patent.

15 56. As the direct and proximate result of Sonos' conduct, Google has suffered and, if
16 Sonos' conduct is not stopped, will continue to suffer, competitive harm, irreparable injury, and
17 damages in an amount to be proven at trial. Because Google's remedy at law is inadequate,
18 Google seeks, in addition to damages, permanent injunctive relief. Google's business operates in
19 a competitive market and will continue suffering irreparable harm absent injunctive relief.

20 **THIRD CAUSE OF ACTION**

21 **(Infringement of Patent No. 10,140,375)**

22 57. Google incorporates all of the above paragraphs as though fully set forth herein.

23 58. U.S. Patent No. 10,140,375, titled "Personalized Network Searching," was duly and
24 lawfully issued by the United States Patent and Trademark Office on November 27, 2018 and
25 assigned to Google. A true and correct copy of the '375 patent is attached to this Complaint as
26 Exhibit 12.

27 59. Google is the owner of all rights, title, and interest in the '375 patent, including the
28 right to bring this suit for past and future damages and/or injunctive relief.

1 60. The '375 patent is valid and enforceable.

2 61. Sonos infringes one or more claims of the '375 patent, including but not limited to
3 claim 1 (the "Asserted '375 Claims"), directly and/or indirectly via induced infringement and/or
4 by contributory infringement. Sonos infringes the Asserted '375 Claims by making, using,
5 importing, selling for importation, and/or selling after importation into the United States at least
6 the Sonos S1 Controller App or S2 App running on user computers, smartphones, or tablets (the
7 "Accused '375 Products") in violation of 35 U.S.C. Sections 271(a)-(b). On information and
8 belief, the Accused '375 Products satisfy all claim limitations of the Asserted '375 Claims at the
9 time of their importation into and/or sale in the United States.

10 62. Sonos had actual knowledge of the '375 patent or was willfully blind to its
11 existence at least as early as November 12, 2018, and no later than the filing of this action.

12 63. Sonos directly infringes the Asserted '375 Claims by making, using, offering to
13 sell, or selling the Accused '375 Products in the United States and by importing the Accused '375
14 Products into the United States in violation of 35 U.S.C. Section 271(a). Sonos infringes at least
15 claim 1 of the '375 patent for at least the following reasons:

16 64. To the extent the preamble is limiting, the Accused '375 Products are configured to
17 include computer-implemented methods performed by at least one processor to synchronize
18 bookmarks among devices. For example, on information and belief, the Sonos S1 Controller App
19 and S2 App are application programs, which may be stored into the memory of a smartphone,
20 laptop, or computer device such that a first instance of the Sonos Controller application is capable
21 of being executed by the device by using a processor. On information and belief, the computer-
22 implemented method of claim 1 is performed by Sonos for at least internal development, testing
23 and development purposes.

24 65. On information and belief, the Accused '375 Products are configured to identify a
25 user. For example, on information and belief, the Sonos S1 Controller App and S2 App are
26 application programs that requires a user log-in that identifies the user.

27 66. On information and belief, the Accused '375 Products are configured to receive
28 user input from the user through an interface of a client device, the user input indicating a

1 modification to a set of favorite items for the user. For example, on information and belief, the
2 Sonos S1 Controller App or S2 App receives user input indicating a modification to a favorite
3 item, such as designating a music track as a “favorite,” using the interface of the application that is
4 running on a smartphone, laptop, or computer device.

5 67. On information and belief, the Accused ’375 Products are configured to, in
6 response to receiving the user input, modify the set of favorite items stored for the user in a client-
7 side storage of the client device, the modification to the set of favorite items initiating a
8 synchronization process to synchronize the set of favorite items modified responsive to the user
9 input with a server-side storage system configured to synchronize favorite items for the user with
10 one or more other client devices, the server-side storage system remote from the client-side
11 storage. For example, on information and belief, a first instance of the Sonos S1 Controller App
12 or S2 App allows for user input to modify certain user parameters, such as “favorite” tracks
13 associated with the user, which are stored in a client-side storage of the client device in which the
14 respective App is running. Further, this first instance of the Sonos S1 Controller App or S2 App
15 utilizes a Sonos Music API for communication and authentication with a streaming music provider
16 server, such that the modifications to user parameters in the client side storage initiates a process
17 of synchronizing such modifications with user parameters stored in the server-side storage of the
18 server. These user parameters are then synchronized across other client devices distributed within
19 a Sonos household associated with the user.

20 68. On information and belief, the Accused ’375 Products are configured to present
21 through a single interface of the client device, in response to a query from the user, a combined
22 search results set generated via one or more search sub-processes, the combined search results set
23 including at least two of: one or more favorite items from the set of favorite items synchronized
24 for the user; one or more search results from a first global index; or one or more search results
25 from a second global index. For example, on information and belief, the Sonos Controller
26 application includes a graphical user interface with a single search functionality for searching
27 across multiple connected music content providers. This search functionality may, for example,
28 return music tracks responsive to a search string entered by the user, provide a set of matching

1 results generated from a combination of each of (i) a search of the synchronized list of the user's
2 "favorite" tracks; (ii) a search of a global library from a first music streaming service; and/or (iii) a
3 search of a global library from a second music streaming service.

4 69. Sonos actively, knowingly, and intentionally induces the infringement of the
5 Asserted '375 Claims by actively encouraging others to make, use, offer to sell, or sell the
6 Accused '375 Products in the United States and/or import the Accused '375 Products into the
7 United States in violation of 35 U.S.C. Section 271(b). Sonos knows (or should know) that its
8 actions will induce users of the Accused '375 Products to directly infringe the Asserted '375
9 Claims. Those users then directly infringe the Asserted '375 Claims. For example, Sonos
10 promotes and advertises the use of the Accused '375 Products, including Sonos' software
11 application for iOS, Android, and desktops, that are used with Sonos' products like the Sonos One,
12 One SL, Five, Play:1, Play:3, Play:5, Playbar, Playbase, Beam, Arc, Move, Connect:Amp, Amp,
13 Connect, Port, and Sub products to directly infringe the Asserted '375 patent on its website
14 (<https://www.sonos.com/en-us/home>, Exhibit 4) and in other promotional materials like user
15 manuals and user guides. Sonos advertises to and instructs its customers and potential customers
16 to set up and control one or more of Sonos' products, like the Sonos One, One SL, Five, Play:1,
17 Play:3, Play:5, Playbar, Playbase, Beam, Arc, Move, Connect:Amp, Amp, Connect, Port, and Sub
18 products, by using the Accused '375 Products, including Sonos' software application for iOS,
19 Android, and desktops. Sonos further advertises to and instructs its customers' use of the Asserted
20 '375 Claims by registering a Sonos product to access music content providers and select
21 "favorites" of content provided by these providers. *See, e.g.*, Sonos Website "Listen Your Way"
22 (<https://www.sonos.com/en-us/listen-your-way>), Exhibit 5; Sonos Website "Easy to Use"
23 (<https://www.sonos.com/en-us/easy-to-use>), a true and correct copy of which is attached as
24 Exhibit 13.

25 70. By instructing its customers and potential customers to use the Accused '375
26 Products to control the Sonos products, including playing music content and tagging favorites or
27 selecting favorite items, Sonos induces its customers and potential customers to use the Accused
28 '375 Products to control music content services and play music content on the Sonos products by

1 selecting favorite items, editing a playlist, and synchronizing favorite songs. *See, e.g.*, Sonos
2 Website “Easy to Use” (<https://www.sonos.com/en-us/easy-to-use>), Exhibit 13; Sonos Website
3 “Add a music service to Sonos” (https://support.sonos.com/s/article/2757?language=en_US),
4 Exhibit 9; Sonos Website “Spotify and Sonos”
5 (https://support.sonos.com/s/article/1153?language=en_US), a true and correct copy of which is
6 attached as Exhibit 14; Sonos Website “Napster and Sonos”
7 (https://support.sonos.com/s/article/1579?language=en_US), a true and correct copy of which is
8 attached as Exhibit 15; Sonos Website “Remove a music service account from Sonos”
9 (https://support.sonos.com/s/article/2853?language=en_US), a true and correct copy of which is
10 attached as Exhibit 25; Sonos Website “Add favorite to My Sonos”
11 (https://support.sonos.com/s/article/3547?language=en_US), a true and correct copy of which is
12 attached as Exhibit 26. Based on these instructions by Sonos, users of the Accused ’375 Products
13 directly infringe the Asserted ’375 Claims. *See, e.g.*, Sonos Website “Easy to Use”
14 (<https://www.sonos.com/en-us/easy-to-use>), Exhibit 13; Sonos Website “Add a music service to
15 Sonos” (https://support.sonos.com/s/article/2757?language=en_US), Exhibit 9; Sonos Website
16 “Spotify and Sonos” (https://support.sonos.com/s/article/1153?language=en_US), Exhibit 14;
17 Sonos Website “Napster and Sonos” (https://support.sonos.com/s/article/1579?language=en_US),
18 Exhibit 15; Sonos Website “Remove a music service account from Sonos”
19 (https://support.sonos.com/s/article/2853?language=en_US), Exhibit 25; Sonos Website “Add
20 favorite to My Sonos” (https://support.sonos.com/s/article/3547?language=en_US), Exhibit 26.

21 71. Sonos contributorily infringes the Asserted ’375 Claims by offering to sell or
22 selling within the United States or importing into the United States the Accused ’375 Products
23 (where each of the Accused ’375 Products is or contains a component of a patented machine,
24 manufacture, combination or composition, or a material or apparatus for use in practicing a
25 patented process, constituting a material part of the invention), knowing the same to be especially
26 made or especially adapted for use in infringing the ’375 patent, and not a staple article or
27 commodity of commerce suitable for substantial noninfringing use in violation of 35 U.S.C.
28 Section 271(c).

1 80. Sonos directly infringes the Asserted '206 Claims by making, using, offering to
2 sell, or selling the Accused '206 Products in the United States and by importing the Accused '206
3 Products into the United States in violation of 35 U.S.C. Section 271(a). Sonos infringes at least
4 claim 9 of the '206 patent for at least the following reasons:

5 81. To the extent the preamble is limiting, the Accused '206 Products each constitute
6 an electronic device.

7 82. On information and belief, the Accused '206 Products each comprise an audio
8 input configured to receive a received signal. For example, upon information and belief, the
9 Accused '206 Products each have a far field microphone array and associated audio processing
10 circuitry to receive and capture sounds such as a user's voice.

11 83. On information and belief, the Accused '206 Products each comprise an audio
12 output configured to output an output signal. For example, upon information and belief, the
13 Accused '206 Products each have multiple speakers and associated circuitry for outputting audio.

14 84. On information and belief, the Accused '206 Products each comprise a transceiver
15 configured to transmit a transmitted signal. For example, upon information and belief, the
16 Accused '206 Products each have wired and wireless networking capabilities, and that
17 functionality is implemented in processors and related circuitry that includes a transceiver (or
18 transceivers) to send and receive data.

19 85. On information and belief, the Accused '206 Products each comprise an adaptive
20 echo and noise control system coupled to the audio input, the audio output, and the transceiver, the
21 adaptive echo and noise control system. For example, upon information and belief, the Accused
22 '206 Products each use echo cancellation and noise suppression to facilitate voice capture, and that
23 echo cancellation and noise suppression functionality is implemented in hardware and/or software
24 operating on one or more processors that are coupled to the audio input circuitry, audio output
25 circuitry, and the transceiver.

26 86. On information and belief, the Accused '206 Products each comprise an adaptive
27 echo and noise control system including an echo canceller. For example, upon information and
28

1 belief, the Accused '206 Products each use echo cancellation functionality implemented in
2 hardware and/or software operating on one or more processors to facilitate voice capture.

3 87. On information and belief, the Accused '206 Products each comprise an adaptive
4 echo and noise control system including a noise suppressor. For example, upon information and
5 belief, the Accused '206 Products each use noise suppression functionality implemented in
6 hardware and/or software operating on one or more processors to facilitate voice capture.

7 88. On information and belief, the adaptive echo and noise control system of the
8 Accused '206 Products is configured to adaptively determine an order of echo cancellation and
9 noise suppression based on an amount of noise in the received signal to generate a desired signal.
10 For example, upon information and belief, the Accused '206 Products each use echo cancellation
11 noise suppression functionality to facilitate voice capture, and the products adaptively determine
12 whether to use echo cancellation and noise suppression, and the order in which to perform those
13 functions, based on various factors and conditions, including the amount of noise in the received
14 signal.

15 89. On information and belief, the adaptive echo and noise control system of the
16 Accused '206 Products is further configured to send the desired signal to the transceiver. For
17 example, upon information and belief, after noise control and echo cancellation is applied to the
18 captured audio signals, the conditioned audio signal is ultimately sent to the Ethernet or Wi-Fi
19 module of the Accused '206 Products for transmission to a third party service for voice command
20 interpretation.

21 90. Sonos actively, knowingly, and intentionally induces the infringement of the
22 Asserted '206 Claims by actively encouraging others to make, use, offer to sell, or sell the
23 Accused '206 Products in the United States and/or import the Accused '206 Products into the
24 United States in violation of 35 U.S.C. Section 271(b). Sonos knows (or should know) that its
25 actions will induce users of the Accused '206 Products to directly infringe the Asserted '206
26 Claims. Those users then directly infringe the Asserted '206 Claims, and Sonos instructs those
27 users to perform all required elements of the '206 claims using the Sonos device, before any third-
28 party voice control service receives the user's voice input. For example, Sonos promotes and

1 advertises on its website (<https://www.sonos.com/>) the use of voice control with the Accused '206
2 Products. In addition, Sonos instructs customers and potential customers on how to set up and use
3 voice control with the Accused '206 Products via support articles and instructional videos on its
4 website. *See, e.g.*, “Add voice services to Sonos”
5 (https://support.sonos.com/s/article/3550?language=en_US), a true and correct copy of which is
6 attached as Exhibit 17; *see also* “Control Sonos with Amazon Alexa”
7 (https://support.sonos.com/s/article/3514?language=en_US), a true and correct copy of which is
8 attached as Exhibit 18 (instructing users to employ voice control for music playback, including
9 “play,” “pause,” “stop,” “skip,” “louder,” “quieter”). Based on Sonos’ instructions, users of the
10 Accused '206 Products directly infringe the Asserted '206 Claims. When a customer or potential
11 customer uses his or her voice to operate the Accused '206 Products, the user causes an audio
12 input (*e.g.*, microphone) to “receive a received signal” (*e.g.*, customer’s voice), which then causes
13 an audio output (*e.g.*, speaker) of these products “to output an output signal” (*e.g.*, play music).
14 When the Accused '206 Products receive a signal via an audio input, they perform “adaptive noise
15 suppression” on the input signal. *See* Sonos Website, “Sonos unveils smart speaker with support
16 for multiple voice services,” Oct. 4, 2017 ([https://www.sonos.com/en-us/newsroom/sonos-unveils-](https://www.sonos.com/en-us/newsroom/sonos-unveils-smart-speaker-with-support-for-multiple-voice-services)
17 [smart-speaker-with-support-for-multiple-voice-services](https://www.sonos.com/en-us/newsroom/sonos-unveils-smart-speaker-with-support-for-multiple-voice-services)), a true and correct copy of which is
18 attached as Exhibit 19; *see also* Sonos Website, “Meet Sonos Beam – The world’s most versatile
19 smart speaker for both TV and Music,” June 6, 2018 ([https://www.sonos.com/en-](https://www.sonos.com/en-us/newsroom/meet-sonos-beam)
20 [us/newsroom/meet-sonos-beam](https://www.sonos.com/en-us/newsroom/meet-sonos-beam)), a true and correct copy of which is attached as Exhibit 20.
21 Furthermore, the Accused '206 Products also employ “echo cancellation technology” on a user’s
22 captured voice so that they can “still hear [the voice] over the music.” *See* Sonos Community,
23 Introducing the New Sonos One, Oct. 3, 2017 ([https://en.community.sonos.com/announcements-](https://en.community.sonos.com/announcements-228985/introducing-the-new-sonos-one-6791304)
24 [228985/introducing-the-new-sonos-one-6791304](https://en.community.sonos.com/announcements-228985/introducing-the-new-sonos-one-6791304)), a true and correct copy of which is attached as
25 Exhibit 21. After the user’s voice input has been processed pursuant to the inventions of the '206
26 patent, it is then transmitted via a transceiver to a voice assistant.

27 91. Sonos contributorily infringes the Asserted '206 Claims by offering to sell or
28 selling within the United States, or importing into the United States, the Accused '206 Products

1 (where each of the Accused '206 Products is or contains a component of a patented machine,
2 manufacture, combination or composition, or a material or apparatus for use in practicing a
3 patented process, constituting a material part of the invention), knowing the same to be especially
4 made or especially adapted for use in infringing the '206 patent, and not a staple article or
5 commodity of commerce suitable for substantial noninfringing use in violation of 35 U.S.C.
6 Section 271(c).

7 92. Sonos' continued infringement of the '206 patent is willful and deliberate because
8 it knows of the '206 patent and the infringement of that patent no later than the filing of this
9 action, but continues to act despite an objectively high likelihood that such acts will result in
10 infringement of the patent.

11 93. As the direct and proximate result of Sonos' conduct, Google has suffered and, if
12 Sonos' conduct is not stopped, will continue to suffer, competitive harm, irreparable injury, and
13 damages in an amount to be proven at trial. Because Google's remedy at law is inadequate,
14 Google seeks, in addition to damages, permanent injunctive relief. Google's business operates in
15 a competitive market and will continue suffering irreparable harm absent injunctive relief.

16 **FIFTH CAUSE OF ACTION**

17 **(Infringement of Patent No. 10,229,586)**

18 94. Google incorporates all of the above paragraphs as though fully set forth herein.

19 95. U.S. Patent No. 10,229,586, titled "Relaying Communications in a Wireless Sensor
20 System," was duly and lawfully issued by the United States Patent and Trademark Office on
21 March 12, 2019 and assigned to Google. A true and correct copy of the '586 patent is attached to
22 this Complaint as Exhibit 22.

23 96. Google is the owner of all rights, title, and interest in the '586 patent, including the
24 right to bring this suit for past and future damages and/or injunctive relief.

25 97. The '586 patent is valid and enforceable.

26 98. Sonos infringes one or more claims of the '586 patent, including but not limited to
27 claim 1 (the "Asserted '586 Claims"), directly and/or indirectly via induced infringement and/or
28 by contributory infringement. Sonos infringes the Asserted '586 Claims by making, using,

1 importing, selling for importation, and/or selling after importation into the United States at least
2 the Sonos One, One SL, Play:1, Play:3, Play:5, Playbar, Playbase, Beam, Move, Connect:Amp,
3 Amp, Connect, Port, and Sub products (the “Accused ’586 Products”) in violation of 35 U.S.C.
4 Sections 271(a)-(b). On information and belief, the Accused ’586 Products satisfy all claim
5 limitations of the Asserted ’586 Claims at the time of their importation into and/or sale in the
6 United States.

7 99. Sonos had knowledge of the ’586 patent by no later than the filing of this action.

8 100. Sonos directly infringes the Asserted ’586 Claims by making, using, offering to
9 sell, or selling the Accused ’586 Products in the United States and by importing the Accused ’586
10 Products into the United States in violation of 35 U.S.C. Section 271(a). Sonos infringes at least
11 claim 1 of the ’586 patent for at least the following reasons:

12 101. To the extent the preamble is limiting, the Accused ’586 Products each constitute
13 an audio-enabled wireless device configured for bidirectional wireless communication in a
14 wireless mesh network. For example, upon information and belief, the Accused ’586 Products
15 each include an audio-enabled wireless device that can connect to a WiFi network or to other
16 Sonos products, including one connected via Ethernet port directly to a router.

17 102. On information and belief, the Accused ’586 Products each comprise a controller
18 operatively coupled to a wireless transceiver, an audio output element, and a reset element. For
19 example, upon information and belief, the Accused ’586 Products each comprise a
20 microprocessor, memory, and other hardware components typically found in computers,
21 smartphones, and related hardware. On information and belief, the Accused ’586 Products each
22 comprise a wireless transceiver enabling wireless connection to WiFi and other Sonos products
23 propagating a mesh network (*e.g.*, SonosNet). On information and belief, the Accused ’586
24 Products each comprise an audio output element, such as, for example, a speaker and/or amplifier
25 configured to output music. On information and belief, the Accused ’586 Products each comprise
26 a reset element (*e.g.*, join button) that allow for a reset of the Accused ’586 Products to factory
27 settings.

28

1 103. On information and belief, the Accused '586 Products each comprise a controller
2 configured to receive a communication packet, such as a data packet, using the wireless
3 transceiver, the communication packet including a preamble portion, an identification code
4 portion, a data payload portion, and an integrity portion. On information and belief, the Accused
5 '586 Products each transmit and receive data packets within, for example, a "group" of speakers
6 formed within a given household. These data packets are transmitted using, for example,
7 application level protocols, such as HTTP, HTTPS, MMS, RTSP, and NTP, operating over
8 transport and network protocols, such as TCP/IP. These data packets include multiple portions,
9 such as a preamble portion, an identification code portion, a data payload portion, and an integrity
10 portion. On information and belief, the Accused '586 Products transmit and receive the
11 communication packet using a wireless mesh network, such as Sonos' SonosNet, and use the
12 identification code portion to designate different Sonos products that are, for example, part of the
13 "group" formed within the "household."

14 104. On information and belief, the Accused '586 Products each comprise a controller
15 configured to compare at least the identification code portion of the received communication
16 packet to a table of identifiers stored in the audio-enabled wireless device. For example, upon
17 information and belief, the Accused '586 Products create a mesh network by using identifiers that
18 only allow for "secure, AES-encrypted" connections between Sonos products in a "household."
19 On information and belief, an Accused '586 Product receiving a communication packet, as
20 described above, compares one or more identifiers of the packet transmitted by the sending Sonos
21 product to a table of identifiers for the "household." The packet whose identification code portion
22 is compared to the table of identifiers is the same packet that is received by the controller of the
23 Accused '586 Products.

24 105. On information and belief, the Accused '586 Products each comprise a controller
25 configured to, based on the comparison of the identification code portion of the received
26 communication packet to an entry in the table of identifiers stored in the audio-enabled wireless
27 device, determine to relay the communication packet to another audio-enabled wireless device.
28 For example, upon information and belief, the Accused '586 Products use transport and network

1 protocols, such as TCP/IP, to transmit and receive packets compliant with application layer
2 protocols, such as HTTP, HTTPS, MMS, RTSP, and NTP, that include one or more identifiers, as
3 described above. Based upon a comparison of the one or more identifiers contained within the
4 data packet to the table of identifiers for the Sonos products in the “household,” a receiving device
5 determines whether the packet should be transmitted to another Sonos product in the
6 “household”—for example, a Sonos product that is part of a group formed within the “household.”
7 The packet that the Accused ’586 Products determine to relay to other devices in the network is
8 the same packet that is received by the controller of the Accused ’586 Products.

9 106. On information and belief, the Accused ’586 Products each comprise a controller
10 configured to relay the communication packet to the other audio-enabled wireless device. For
11 example, upon information and belief, the Accused ’586 Products each have a controller that
12 communicates with, or relays data to, other Sonos products within the “household,” or a group
13 formed within the “household,” via the mesh network, as described in the preceding paragraphs.

14 107. Sonos actively, knowingly, and intentionally induces the infringement of the
15 Asserted ’586 Claims by actively encouraging others to make, use, offer to sell, or sell the
16 Accused ’586 Products in the United States and/or import the Accused ’586 Products into the
17 United States in violation of 35 U.S.C. Section 271(b). Sonos knows (or should know) that its
18 actions will induce users of the Accused ’586 Products to directly infringe the Asserted ’586
19 Claims. Those users then directly infringe the Asserted ’586 Claims. For example, Sonos
20 promotes and advertises the use of the Accused ’586 Products, including the Sonos One, One SL,
21 Five, Play:1, Play:3, Play:5, Playbar, Playbase, Beam, Arc, Move, Connect:Amp, Amp, Connect,
22 Port and Sub products, to directly infringe the Asserted ’586 Claims on its website
23 (<https://www.sonos.com/en-us/home>, Exhibit 4) and in other promotional materials like user
24 manuals and user guides. Sonos advertises to and instructs its customers and potential customers
25 to purchase and set up one or more of the Accused ’586 Products to directly infringe the Asserted
26 ’586 Claims by creating a household with connected Accused ’586 Products to “[l]isten in any or
27 every room” to music or other content by “group[ing] all your speakers to play music in sync.”
28 Sonos Website “Listen Your Way” (<https://www.sonos.com/en-us/listen-your-way>), Exhibit 5.

1 Sonos also instructs its customers and potential customers to connect the Accused '586 Products
2 in a mesh network called SonosNetTM. *See, e.g.*, Sonos System Overview at 7-10 (Oct. 20, 2014)
3 (<https://musicpartners.sonos.com/sites/default/files/Sonos%20System%20Overview.pdf>), a true
4 and correct copy of which is attached as Exhibit 23; Sonos User Guide at 3, 6, 88 (Sept. 2019)
5 (<https://www.sonos.com/support/en/pdfs/sonos-user-guide.pdf>), Exhibit 3.

6 108. By instructing its customers and potential customers, for example, to create
7 groupings of the Accused '586 Products in a household mesh network, Sonos induces its
8 customers and potential customers to transmit data between the Accused '586 Products within the
9 mesh network by playing music or other content on the Accused '586 Products. Sonos Website
10 "Listen Your Way" (<https://www.sonos.com/en-us/listen-your-way>), Exhibit 5. Sonos also
11 provides customer support on its website where Sonos employees instruct customers to directly
12 infringe the Asserted '586 Claims by joining the Accused '586 Products in a group to play music.
13 Sonos Support Website, "Group and ungroup rooms", (support.sonos.com/s/article/3391), a true
14 and correct copy of which is attached as Exhibit 24. Sonos also provides customer support
15 regarding how its devices are associated with specific "Sonos ID" codes that correspond to
16 specific wireless networks. *See, e.g.*, Sonos Community, Move: Using across multiple Sonos
17 systems, January 12, 2020 ([https://en.community.sonos.com/advanced-setups-229000/move-](https://en.community.sonos.com/advanced-setups-229000/move-using-across-multiple-sonos-systems-6835368)
18 [using-across-multiple-sonos-systems-6835368](https://en.community.sonos.com/advanced-setups-229000/move-using-across-multiple-sonos-systems-6835368)), Exhibit 6. Based on these instructions by Sonos,
19 users of the Accused '586 Products directly infringe the Asserted '586 Claims.

20 109. Sonos contributorily infringes the Asserted '586 Claims by offering to sell or
21 selling within the United States or importing into the United States the Accused '586 Products
22 (where each of the Accused '586 Products is or contains a component of a patented machine,
23 manufacture, combination or composition, or a material or apparatus for use in practicing a
24 patented process, constituting a material part of the invention), knowing the same to be especially
25 made or especially adapted for infringing the '586 patent, and not a staple article or commodity of
26 commerce suitable for substantial noninfringing use in violation of 35 U.S.C. Section 271(c).

27 110. Sonos' continued infringement of the '586 patent is willful and deliberate because
28 it knows of the '586 patent and the infringement of that patent no later than the filing of this

1 action, but continues to act despite an objectively high likelihood that such acts will result in
2 infringement of the patent.

3 111. As the direct and proximate result of Sonos' conduct, Google has suffered and, if
4 Sonos' conduct is not stopped, will continue to suffer, competitive harm, irreparable injury, and
5 damages in an amount to be proven at trial. Because Google's remedy at law is inadequate,
6 Google seeks, in addition to damages, permanent injunctive relief. Google's business operates in
7 a competitive market and will continue suffering irreparable harm absent injunctive relief.

8 **PRAYER FOR RELIEF**

9 WHEREFORE, Google respectfully requests the following relief:

- 10 A. Judgment in Google's favor and against Sonos on all causes of action alleged
11 herein;
- 12 B. Damages in an amount to be further proven at trial, including trebling of all
13 damages awarded with respect to infringement of the U.S. Patent Nos. 7,899,187,
14 8,583,489, 10,140,375, 7,065,206, and 10,229,586;
- 15 C. An injunction prohibiting further infringement of the Asserted Patents by Sonos;
- 16 D. Judgment that this is an exceptional case;
- 17 E. Costs of suit incurred herein;
- 18 F. Prejudgment interest;
- 19 G. Attorneys' fees and costs; and
- 20 H. Such other and further relief as the Court may deem to be just and proper.

21
22 DATED: August 26, 2020

QUINN EMANUEL URQUHART &
SULLIVAN, LLP

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24
25 By /s/ Charles K. Verhoeven
26 Charles K. Verhoeven
27 Attorneys for GOOGLE LLC
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DEMAND FOR JURY TRIAL

Pursuant to Rule 38(b) of the Federal Rules of Civil Procedure, Google respectfully demands a trial by jury on all issues triable by jury.

DATED: August 26, 2020

QUINN EMANUEL URQUHART &
SULLIVAN, LLP

By /s/ Charles K. Verhoeven
Charles K. Verhoeven
Attorneys for GOOGLE LLC