

**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE**

IPA TECHNOLOGIES INC.,

Plaintiff,

v.

NVIDIA CORPORATION,

Defendant.

C.A. No. \_\_\_\_\_

**JURY TRIAL DEMANDED**

**COMPLAINT FOR PATENT INFRINGEMENT**

Plaintiff IPA Technologies Inc. (“IPA”) as and for its complaint against nVidia Corporation (“NVIDIA” or “Defendant”) alleges as follows:

**PARTIES**

1. IPA is a Delaware corporation with a principal place of business at 600 Anton Blvd., Suite 1350, Costa Mesa, California 92626.
2. On information and belief, Defendant NVIDIA Corporation is a Delaware corporation with a principal place of business at 2701 San Tomas Expressway, Santa Clara, California 95050. NVIDIA can be served with process via its registered agent, the Corporation Services Company, 2711 Centerville Road, Suite 400, Wilmington, Delaware 19808.

**JURISDICTION AND VENUE**

3. This action arises under the patent laws of the United States, Title 35 of the United States Code. Accordingly, this Court has subject matter jurisdiction under 28 U.S.C. §§ 1331 and 1338(a).

4. This Court has specific and general personal jurisdiction over Defendant pursuant to due process and/or the Delaware Long Arm Statute, due to Defendant's having availed itself of the rights and benefits of Delaware by incorporating under Delaware law and due to Defendant's substantial business in this forum, including: (i) at least a portion of the infringement alleged herein; and (ii) regularly doing or soliciting business, engaging in other persistent courses of conduct, and/or deriving substantial revenue from goods and services provided to individuals in Delaware and in this Judicial District.

5. Venue is proper in this District under 28 U.S.C. §§ 1391 (b)-(c) and 1400(b) because Defendant is subject to personal jurisdiction in this District.

### **BACKGROUND**

6. SRI International, Inc. ("SRI"), the original owner of the patents-in-suit, is an independent, not-for-profit research institute that conducts client-supported research and development for government agencies, commercial businesses, foundations, and other organizations.

7. Among its many areas of research, SRI has engaged in fundamental research and development related to personal digital assistants and speech-based navigation of electronic data sources.

8. SRI's innovative work on personal digital assistants was a key area of development in one of the world's largest artificial intelligence projects, the Cognitive Assistant that Learns and Organizes ("CALO"). The vision for the SRI-led CALO project, which was funded by the U.S. Defense Advanced Research Projects Agency

(“DARPA”), was to create groundbreaking software that could revolutionize how computers support decision-makers.

9. SRI’s work on personal digital assistants and speech-based navigation of electronic data sources, which started before the launch of the CALO project, developed further as part of the project. SRI’s engineers were awarded numerous patents on their groundbreaking personal digital assistant and speech-based navigation inventions.

10. To bring the personal digital assistant and speech-based navigation technology to the marketplace, SRI formed the spin-off company Siri, Inc. in 2007, and granted it a non-exclusive license to the patent portfolio. The technology was demonstrated as an iPhone app at technology conferences and later released as an iPhone 3GS app in February 2010. In April 2010, Apple Inc. acquired Siri, Inc. In 2011, the Siri personal digital assistant was released as an integrated feature of the iPhone 4S.

11. Speech-based navigation of electronic data sources has continued to be implemented as an effective and user-friendly solution for interacting with electronic devices.

12. On May 6, 2016, IPA acquired the SRI speech-based navigation patent portfolio. IPA is a wholly-owned subsidiary of WiLAN, a leading technology innovation and licensing business actively engaged in research, development, and licensing of new technologies.

**BACKGROUND ON ACCUSED PRODUCTS**

13. Defendant’s accused products include and use the Android operating system.

14. The Google Now digital assistant has been included with the Android operating system since at least July 2012. Since at least October 2016, the functionality of the Google Now digital assistant has been included in Google's Voice Actions and use of the term "Google Now" has apparently been discontinued. The terms "Google Now" and "Google Now digital assistant" as used herein include but are not limited to the Voice Actions functionalities relating to the Google Now digital assistant.

15. The Google Now digital assistant uses features of the Android operating system such as voice search and cards for the display of selected information.

16. Voice search allows users to interact with the Google Now digital assistant using natural spoken language.

17. Cards present visual representations of voice search results, and allow further user interaction with the Google Now digital assistant through touch response.

18. Google Now can retrieve and display a variety of types of information such as directions, calendar, weather, flight, sports, and restaurant information.

19. Defendants' infringing products include mobile telephone and tablet products having the Google Now digital assistant, including but not limited to Shield Tablet K1, and related products and/or processes ("NVIDIA Google Now-enabled products").

20. Android is also used for television products in a version of the operating system called Android TV. Android TV includes voice capabilities that involve speech-based navigation of electronic data sources.

21. Defendant's infringing products include television products with Android TV, including but not limited to Shield TV, and related products and/or processes ("NVIDIA Android TV products").

**ASSERTED PATENTS**

22. IPA is the owner by assignment of U.S. Patent No. 6,742,021 (the "'021 Patent"). The '021 Patent is entitled "Navigating Network-Based Electronic Information Using Spoken Input With Multimodal Error Feedback." The '021 Patent issued on May 25, 2004. A true and correct copy of the '021 Patent is attached hereto as Exhibit A.

23. IPA is the owner by assignment of U.S. Patent No. 6,523,061 (the "'061 Patent"). The '061 Patent is entitled "System, Method, and Article of Manufacture For Agent-Based Navigation in a Speech-Based Data Navigation System." The '061 Patent issued on February 18, 2003. A true and correct copy of the '061 Patent is attached hereto as Exhibit B.

24. IPA is the owner by assignment of U.S. Patent No. 6,757,718 (the "'718 Patent"). The '718 Patent is entitled "Mobile Navigation of Network-Based Electronic Information Using Spoken Input." The '718 Patent issued on June 29, 2004. A true and correct copy of the '718 Patent is attached hereto as Exhibit C.

**COUNT I**  
**(Infringement of U.S. Patent No. 6,742,021)**

25. Plaintiff re-alleges and incorporates by reference the allegations in the foregoing paragraphs as if fully set forth herein.

26. Plaintiff is informed and believes, and on that basis alleges, that Defendant has infringed and is currently infringing one or more claims (*e.g.*, claim 1) of the '021 Patent, in violation of 35 U.S.C. § 271.

27. Defendant has infringed and is currently infringing literally and/or under the doctrine of equivalents, by, among other things, making, using, offering for sale, selling, and/or importing within this judicial district and elsewhere in the United States, without license or authority, NVIDIA Google Now-enabled products falling within the scope of one or more claims of the '021 Patent, including claim 1. Exemplary claim 1 is reproduced below:

A method for speech-based navigation of an electronic data source, the electronic data source being located at one or more network servers located remotely from a user, comprising the steps of:

- (a) receiving a spoken request for desired information from the user;
- (b) rendering an interpretation of the spoken request;
- (c) constructing at least part of a navigation query based upon the interpretation;
- (d) soliciting additional input from the user, including user interaction in a non-spoken modality different than the original request without requiring the user to request said non-spoken modality;
- (e) refining the navigation query, based upon the additional input;
- (f) using the refined navigation query to select a portion of the electronic data source; and
- (g) transmitting the selected portion of the electronic data source from the network server to a client device of the user.

28. Defendant's acts of making, using, offering for sale, selling, and/or importing infringing products having the Google Now digital assistant, including but not limited to NVIDIA Google Now-enabled products, satisfy, literally or under the doctrine of equivalents, each and every claim limitation, including but not limited to limitations of

claim 1.<sup>1</sup> For example, the NVIDIA Google Now-enabled products use speech-based navigation of an electronic data source. The NVIDIA Google Now-enabled products receive a spoken request for desired information from the user (such as directions, calendar, weather, flight, sports, and restaurant information), render an interpretation of the spoken request, construct at least part of a navigation query based on the spoken request, solicit additional input from the user, including user interaction in a non-spoken modality different than the original request without requiring the user to request the non-spoken modality, and transmit the selected portion from a network server to the NVIDIA Google Now-enabled products.

29. Defendant has also infringed indirectly and continues to infringe indirectly the '021 Patent by active inducement under 35 U.S.C. § 271(b).

30. On information and belief, Defendant gained knowledge of the '021 Patent no later than the filing of this complaint or shortly thereafter.

31. On information and belief, Defendant has intended, and continues to intend, to induce patent infringement by its users and has had knowledge that the inducing acts would cause infringement or has been willfully blind to the possibility that its inducing acts would cause infringement. For example, Defendant encourages and instructs end users to perform speech-based navigation of an electronic data source using a method as claimed in claim 1 of the '021 Patent through the very nature of the products. On information and belief, Defendant also encourages and instructs end users to perform speech-based navigation of an electronic data source using a method as claimed in claim

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<sup>1</sup> Plaintiff reserves the right to identify additional asserted claims as this litigation proceeds. For example, Plaintiff expressly reserves the right to identify additional asserted claims in its infringement contentions to be served during the discovery process.

1 of the '021 Patent through materials and information made available to users, including product manuals and technical information. *See also, e.g., S'more to It: SHIELD Tablet K1 Gets Android 6.0 Marshmallow, available at <https://blogs.nvidia.com/blog/2015/12/21/android-6-0-marshmallow/> (“User Interface Upgrades – ... You can launch Google Now voice commands from the lock screen.”).* By using the infringing products to perform speech-based navigation of an electronic data source, users directly infringe at least claim 1 of the '021 Patent. By continuing to provide instructions to users on how to use the infringing products to perform speech-based navigation of an electronic data source using a method as claimed in claim 1 of the '021 Patent, and by continuing to encourage such use, Defendant has and continues to specifically intend to induce infringement of the '021 Patent.

32. To the extent that facts learned in discovery show that Defendant's infringement of the '021 Patent is or has been willful, Plaintiff reserves the right to request such a finding at the time of trial.

33. To the extent applicable, the requirements of 35 U.S.C. § 287(a) have been met with respect to the '021 Patent.

34. As a result of Defendant's infringement of the '021 Patent, Plaintiff has suffered monetary damages in an amount adequate to compensate for Defendant's infringement, but in no event less than a reasonable royalty for the use made of the invention by Defendant, together with interest and costs as fixed by the Court, and Plaintiff will continue to suffer damages in the future unless Defendant's infringing activities are enjoined by this Court.

35. Unless a permanent injunction is issued enjoining Defendant and its agents, servants, employees, representatives, affiliates, and all others acting or in active concert therewith from infringing the '021 Patent, Plaintiff will be greatly and irreparably harmed.

**COUNT II**  
**(Infringement of U.S. Patent No. 6,523,061)**

36. Plaintiff re-alleges and incorporates by reference the allegations in the foregoing paragraphs as if fully set forth herein.

37. Plaintiff is informed and believes, and on that basis alleges, that Defendant has infringed and is currently infringing one or more claims (*e.g.*, claim 1) of the '061 Patent, in violation of 35 U.S.C. § 271.

38. Defendant has infringed and is currently infringing literally and/or under the doctrine of equivalents, by, among other things, making, using, offering for sale, selling, and/or importing within this judicial district and elsewhere in the United States, without license or authority, NVIDIA Google Now-enabled products, and NVIDIA Android TV products falling within the scope of one or more claims of the '061 Patent, including claim 1. Exemplary claim 1 is reproduced below:

A method for utilizing agents for speech-based navigation of an electronic data source, comprising the steps of:

- (a) receiving a spoken request for desired information from a user;
- (b) rendering an interpretation of the spoken request;
- (c) constructing a navigation query based upon the interpretation;
- (d) routing the navigation query to at least one agent, wherein the at least one agent utilizes the navigation query to select a portion of the electronic data source; and
- (e) invoking a user interface agent for outputting the selected portion of the electronic

data source to the user, wherein a facilitator manages data flow among multiple agents and maintains a registration of each of said agents' capabilities.

39. Defendant's acts of making, using, offering for sale, selling, and/or importing infringing products having the Google Now digital assistant, including but not limited to NVIDIA Google Now-enabled products, satisfy, literally or under the doctrine of equivalents, each and every claim limitation, including but not limited to limitations of claim 1.<sup>2</sup> For example, Defendant's NVIDIA Google Now-enabled products use speech-based navigation of an electronic data source. The NVIDIA Google Now-enabled products receive a spoken request for desired information from the user (such as directions, calendar, weather, flight, sports, and restaurant information), render an interpretation of the spoken request, construct a navigation query based on the interpretation, route the navigation query to at least one agent that utilizes the navigation query to select a portion of the electronic data source, and invoke a user interface agent for outputting the selected portion of the electronic data source wherein a facilitator manages data flow among multiple agents and maintains a registration of each of the agents' capabilities.

40. Defendant's acts of making, using, offering for sale, selling, and/or importing infringing products having Android TV, including but not limited to NVIDIA Android TV products, satisfy, literally or under the doctrine of equivalents, each and

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<sup>2</sup> Plaintiff reserves the right to identify additional asserted claims as this litigation proceeds. For example, Plaintiff expressly reserves the right to identify additional asserted claims in its infringement contentions to be served during the discovery process.

every claim limitation, including but not limited to limitations of claim 1.<sup>3</sup> For example, Defendant's NVIDIA Android TV products use speech-based navigation of an electronic data source. The NVIDIA Android TV products receive a spoken request for desired information from the user, render an interpretation of the spoken request, construct a navigation query based on the interpretation, route the navigation query to at least one agent that utilizes the navigation query to select a portion of the electronic data source, and invoke a user interface agent for outputting the selected portion of the electronic data source wherein a facilitator manages data flow among multiple agents and maintains a registration of each of the agents' capabilities.

41. Defendant has also infringed indirectly and continues to infringe indirectly the '061 Patent by active inducement under 35 U.S.C. § 271(b).

42. On information and belief, Defendant gained knowledge of the '061 Patent no later than the filing of this complaint or shortly thereafter.

43. On information and belief, Defendant has intended, and continues to intend, to induce patent infringement by its users and has had knowledge that the inducing acts would cause infringement or has been willfully blind to the possibility that its inducing acts would cause infringement. For example, Defendant encourages and instructs end users to perform speech-based navigation of an electronic data source using a method as claimed in claim 1 of the '061 Patent through the very nature of the products. On information and belief, Defendant also encourages and instructs users to use the infringing products to perform speech-based navigation of an electronic data source using

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<sup>3</sup> Plaintiff reserves the right to identify additional asserted claims as this litigation proceeds. For example, Plaintiff expressly reserves the right to identify additional asserted claims in its infringement contentions to be served during the discovery process.

a method as claimed in claim 1 of the '061 Patent through materials and information made available to users, including product manuals and technical information. *See also, e.g.,* The World At Your Command, *available at* <https://www.nvidia.com/en-us/shield/shield-tv/> (“Built-in Google Voice Search makes it easy to get what you want. All you have to do is ask to find the right app, game, or video quickly and with incredible precision. No more typing. Just instant results from Netflix, YouTube, HULU, HBO, VUDU, and more. Say “show me great sports movies” or “award-winning films” and SHIELD delivers. It's voice search—only smarter.”); How to use voice search on SHIELD, *available at* <https://youtu.be/hrDtxiaGvwM> (providing instructions for using Android TV voice search on NVIDIA’s Shield TV). By using the infringing products to perform speech-based navigation of an electronic data source, users directly infringe at least claim 1 of the '061 Patent. By continuing to provide instructions to users on how to use the infringing products to perform speech-based navigation of an electronic data source using a method as claimed in claim 1 of the '061 Patent, and by continuing to encourage such use, Defendant has and continues to specifically intend to induce infringement of the '061 Patent.

44. To the extent that facts learned in discovery show that Defendant’s infringement of the '061 Patent is or has been willful, Plaintiff reserves the right to request such a finding at the time of trial.

45. To the extent applicable, the requirements of 35 U.S.C. § 287(a) have been met with respect to the '061 Patent.

46. As a result of Defendant’s infringement of the '061 Patent, Plaintiff has suffered monetary damages in an amount adequate to compensate for Defendant’s

infringement, but in no event less than a reasonable royalty for the use made of the invention by Defendant, together with interest and costs as fixed by the Court, and Plaintiff will continue to suffer damages in the future unless Defendant's infringing activities are enjoined by this Court.

47. Unless a permanent injunction is issued enjoining Defendant and its agents, servants, employees, representatives, affiliates, and all others acting or in active concert therewith from infringing the '061 Patent, Plaintiff will be greatly and irreparably harmed.

**COUNT III**  
**(Infringement of U.S. Patent No. 6,757,718)**

48. Plaintiff re-alleges and incorporates by reference the allegations in the foregoing paragraphs as if fully set forth herein.

49. Plaintiff is informed and believes, and on that basis alleges, that Defendant has infringed and is currently infringing one or more claims (*e.g.*, claim 1) of the '718 Patent, in violation of 35 U.S.C. § 271.

50. Defendant has infringed and is currently infringing literally and/or under the doctrine of equivalents, by, among other things, making, using, offering for sale, selling, and/or importing within this judicial district and elsewhere in the United States, without license or authority, NVIDIA Android TV products falling within the scope of one or more claims of the '718 Patent, including claim 1. Exemplary claim 1 is reproduced below:

A method for speech-based navigation of an electronic data source located at one or more network servers located remotely from a user, wherein a data link is established between a mobile information appliance of the user and the one or more network servers, comprising the steps of:

- (a) receiving a spoken request for desired information from the user utilizing the mobile information appliance of the user, wherein said mobile information appliance comprises a portable remote control device or a set-top box for a television;
- (b) rendering an interpretation of the spoken request;
- (c) constructing a navigation query based upon the interpretation;
- (d) utilizing the navigation query to select a portion of the electronic data source; and
- (e) transmitting the selected portion of the electronic data source from the network server to the mobile information appliance of the user.

51. Defendant's acts of making, using, offering for sale, selling, and/or importing infringing products having Android TV, including but not limited to NVIDIA Android TV products, satisfy, literally or under the doctrine of equivalents, each and every claim limitation, including but not limited to limitations of claim 1.<sup>4</sup> For example, Defendant's NVIDIA Android TV products use speech-based navigation and include a portable remote control device. The NVIDIA Android TV products receive a spoken request for desired information from the user, render an interpretation of the spoken request, construct a navigation query, utilize the navigation query to select a portion of an electronic data source, and transmit the selected portion from network servers to the NVIDIA Android TV devices.

52. Defendant has also infringed indirectly and continues to infringe indirectly the '718 Patent by active inducement under 35 U.S.C. § 271(b).

53. On information and belief, Defendant gained knowledge of the '718 Patent no later than the filing of this complaint or shortly thereafter.

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<sup>4</sup> Plaintiff reserves the right to identify additional asserted claims as this litigation proceeds. For example, Plaintiff expressly reserves the right to identify additional asserted claims in its infringement contentions to be served during the discovery process.

54. On information and belief, Defendant has intended, and continues to intend, to induce patent infringement by its users and has had knowledge that the inducing acts would cause infringement or has been willfully blind to the possibility that its inducing acts would cause infringement. For example, Defendant encourages end users to perform speech-based navigation of an electronic data source using a method as claimed in claim 1 of the '718 Patent through the very nature of the products. As a further example, Defendant instructs users on how to use the infringing products to perform speech-based navigation of an electronic data source using a method as claimed in claim 1 of the '718 Patent. *See also, e.g.,* The World At Your Command, *available at* <https://www.nvidia.com/en-us/shield/shield-tv/> (“Built-in Google Voice Search makes it easy to get what you want. All you have to do is ask to find the right app, game, or video quickly and with incredible precision. No more typing. Just instant results from Netflix, YouTube, HULU, HBO, VUDU, and more. Say “show me great sports movies” or “award-winning films” and SHIELD delivers. It's voice search—only smarter.”); How to use voice search on SHIELD, *available at* <https://youtu.be/hrDtxiaGvwM> (providing instructions for using Android TV voice search on NVIDIA’s Shield TV). By using the infringing products to perform speech-based navigation of an electronic data source, users directly infringe at least claim 1 of the '718 Patent. By continuing to provide instructions to users on how to use the infringing products to perform speech-based navigation of an electronic data source using a method as claimed in claim 1 of the '718 Patent, and by continuing to encourage such use, Defendant has and continues to specifically intend to induce infringement of the '718 Patent.

55. Defendant has also infringed indirectly and continues to infringe indirectly the '718 Patent by contributory infringement under 35 U.S.C. § 271(c).

56. To the extent that facts learned in discovery show that Defendant's infringement of the '718 Patent is or has been willful, Plaintiff reserves the right to request such a finding at the time of trial.

57. To the extent applicable, the requirements of 35 U.S.C. § 287(a) have been met with respect to the '718 Patent.

58. As a result of Defendant's infringement of the '718 Patent, Plaintiff has suffered monetary damages in an amount adequate to compensate for Defendant's infringement, but in no event less than a reasonable royalty for the use made of the invention by Defendant, together with interest and costs as fixed by the Court, and Plaintiff will continue to suffer damages in the future unless Defendant's infringing activities are enjoined by this Court its agents, servants, employees, representatives, affiliates, and all others acting or in active concert therewith from infringing the '718 Patent, Plaintiff will be greatly and irreparably harmed.

**PRAYER FOR RELIEF**

Plaintiff prays for the following relief:

A. A judgment that Defendant has infringed one or more claims of the '021, '061 and '718 Patents;

B. A permanent injunction enjoining Defendant and its officers, directors, agents, servants, affiliates, employees, divisions, branches, subsidiaries, parents, and all others acting in active concert or participation with Defendant, from infringing the '021, '061 and '718 Patents;

C. An award of damages resulting from Defendant's acts of infringement in accordance with 35 U.S.C. § 284;

D. A judgment and order finding that this is an exceptional case within the meaning of 35 U.S.C. § 285 and awarding to Plaintiff its reasonable attorneys' fees against Defendant.

E. A judgment and order requiring Defendant to provide accountings and to pay supplemental damages to Plaintiff, including, without limitation, prejudgment and post-judgment interest; and

F. Any and all other relief to which Plaintiff may show itself to be entitled.

**JURY TRIAL DEMANDED**

Plaintiff hereby demands a trial by jury of all issues so triable.

Dated: March 17, 2017

BAYARD, P.A.

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