IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

IPA TECHNOLOGIES INC., Plaintiff, v. HTC CORPORATION, Defendant.	C.A. No. 16-01171-RGA **JURY TRIAL DEMANDED**

SECOND AMENDED COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff IPA Technologies Inc. ("IPA") as and for its complaint against HTC Corporation ("HTC") 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, HTC is a Taiwanese corporation with its principal place of business at 23 Xinghau Road, Taoyuan City, Taoyuan 330, Taiwan, R.O.C. HTC can be served with process pursuant to the Delaware Long Arm Statute, 10 *Del. C.* § 3104.

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 HTC pursuant to due process and/or the Delaware Long Arm Statute, due to HTC's substantial

business in this forum, including: (i) at least a portion of the infringement alleged herein; (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, and (iii) placing infringing products into the stream of commerce via an established distribution channel with the knowledge and/or understanding that such products are being and will continue to be sold in the State of Delaware, including in this District.

5. Venue is proper in this District under 28 U.S.C. §§ 1391 (b)-(c) and 1400(b) because HTC 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 DEFENDANT

13. HTC and all its subsidiaries are principally engaged in the design, manufacture and marketing of PDA phones, smartphones and handheld devices, as well as the provision of related technologies and after-sales services.[1]

[1] *See, e.g.*, HTC 2015 Annual Report at 155.

14. HTC is the "controlling company" of all the wholly-owned subsidiaries it operates around the world, including in the United States.[2]

15. Financial performances of HTC's wholly-owned subsidiaries are presented in financial reports of the parent company, HTC.[3]

16. The controlling company, HTC, is the primary R&D and manufacturing base and provider of technical resources.[4]

17. HTC's subsidiary companies HTC America Innovation Inc. and One & Company Design Inc. engage in design, research and development of application software.[5]

18. HTC's subsidiary company HTC America engages in the sale of smart handheld devices and electronic components.[6]

19. HTC sells the accused products, described below, to its wholly-owned subsidiary HTC America, with the understanding and expectation that HTC America will sell those products in the United States.[7]

20. Litigation records also show that HTC Corporation and HTC America are closely related companies. HTC Corporation and HTC America were plaintiffs in at least three declaratory judgment actions seeking the declaration of invalidity and/or noninfringement of a patents pertaining to cellular telephone technology.[8]

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[2] *See, e.g.*, *id.*
[3] *See, e.g.*, *id.* at 161.
[4] *See, e.g.*, *id.* at 155.
[5] *See, e.g.*, *id.*
[6] *See, e.g.*, *id.*
[7] *See, e.g.*, *id.* at 34, 48-49, 139, 145, 155; HTC 2016 Annual Report at 30, 42-45, 142.
[8] *See, e.g.*, Complaint for Declaratory Judgment, *HTC Corp. v. Tech. Props.*, No. 5:08-cv-00882-PSG, 2014 U.S. Dist. LEXIS 99971 (N.D. Cal. July 21, 2014); *see also HTC Corp. v. IPCom GMBH & Co., KG*, 285 F.R.D. 130 (D.D.C. 2012) and Complaint for

21. HTC and its subsidiaries coordinate their activities to infringe IPA's patents.

BACKGROUND ON ACCUSED PRODUCTS

22. HTC's accused products include and use the Android operating system with HTC Sense, which is a software suite developed by HTC. 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.

23. 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.[9]

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

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

Declaratory Judgment and Demand for Jury Trial, *HTC Corporation et al v. Luzzatto*, No: 1:09-cv-00118 ESH (D.D.C. filed Jan. 21, 2009).

[9] Plaintiff reserves the right to identify additional HTC products and features developed by HTC as this litigation proceeds. For example, HTC recently announced the HTC Sense Companion app, without disclosing details of the capabilities or the operation of the app. *See, e.g.*, http://www.droid-life.com/2017/03/13/htc-sense-companion-app-now-available/ ("They also mention that when 'paired with built-in voice recognition,' it'll be even more awesome. At this point, I have to assume they are talking about Google's Assistant or voice control, because I just installed Sense Companion on my U Ultra and there is absolutely zero voice interaction here.").

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

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

28. HTC's infringing products include mobile telephone and tablet products having the Google Now digital assistant, including but not limited to its One, Droid, First, One Mini, Desire, One Max, Desire 626, Desire 626s, Desire 512, One A9, Desire 828, One M8, One Remix, Desire 510, Desire 516, Desire 612, Desire Eye, 10, M9, M9+, One X+, Butterfly, Butterfly S, Desire 816G, Desire 620G, Desire 620, HTC U Ultra, and HTC U Play mobile telephones, and its Nexus 9 tablets, and related products and/or processes ("HTC Google Now-enabled products").

ASSERTED PATENTS

29. 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.

30. 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.

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

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

32. Plaintiff is informed and believes, and on that basis alleges, that HTC 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.

33. HTC 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, HTC Google Now-enabled products falling within the scope of one or more claims of the ’021 Patent, including claim 1.[10]

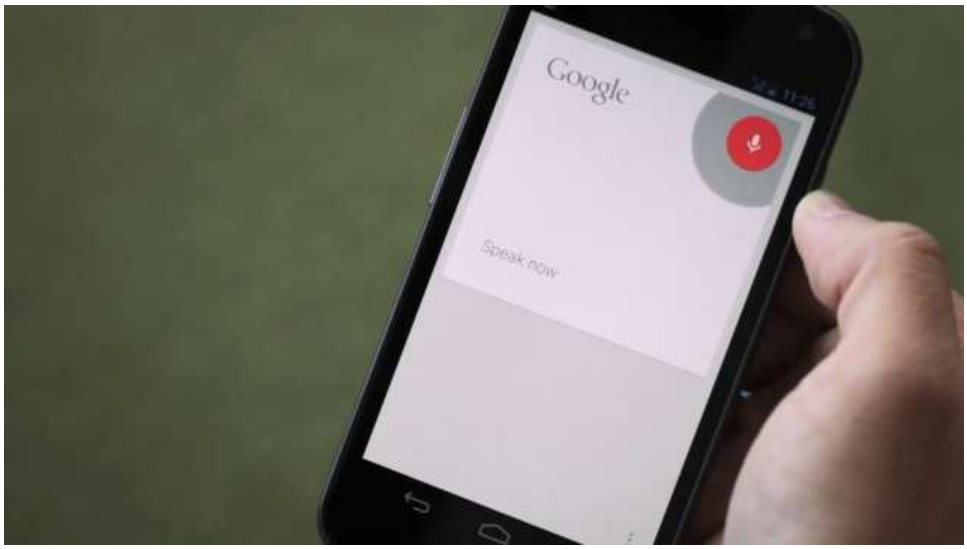
34. On information and belief, the HTC Google Now-enabled products perform a method for speech-based navigation of an electronic data source, the electronic data source being located at one or more network servers located remotely from a user. For example, Hugo Barra, Android’s director of product management, explained in an interview that “Google Now touches every back-end of Google, every different web service that’s been developed over the last ten years or so is part of this service.”[11] Consistent with this statement, the figure below was published in a companion article to the interview, showing that Google Now accesses resources and information which may be locally stored on the device (*e.g.*, Android operating system), privately on remote servers (*e.g.*, Gmail), publicly accessible websites and databases (*e.g.*, News, weather,

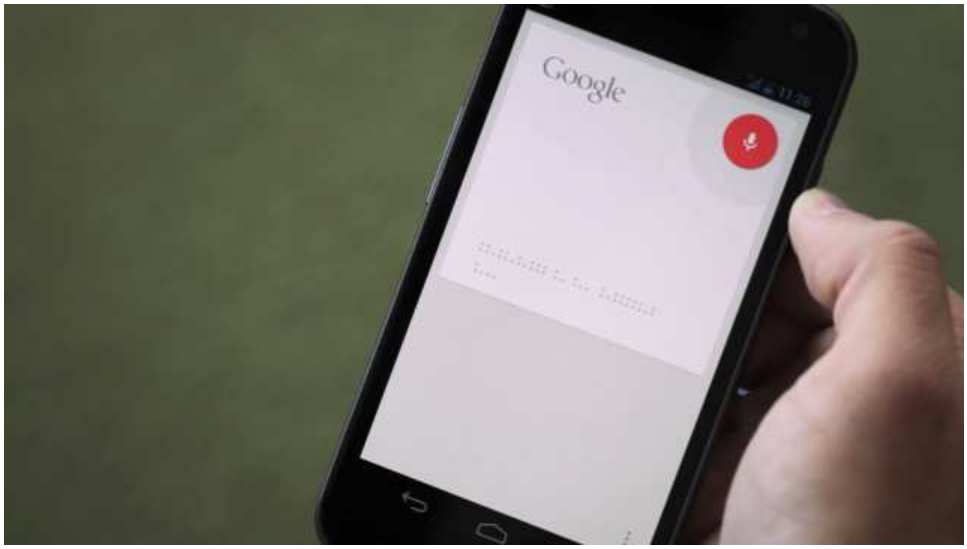
[10] Plaintiff reserves the right to identify additional asserted claims as this litigation proceeds. For example, Plaintiff expressly reserves the right to identify additional asserted claims in its infringement contentions to be served during the discovery process.
[11] The Verge, *Google Now and the predictive future of search* (Oct. 29, 2012), https://www.youtube.com/watch?v=ZXtudZl5mzM.

and stock quotes) and as well as information stored on other services and apps (*e.g.*, Google Maps, YouTube).[12]

35. On information and belief, the HTC Google Now-enabled products perform the step of receiving a spoken request for desired information from the user. For example, a segment of the interview video featuring Hugo Barra showed Google Now receiving Hugo Barra's spoken request of "directions to the museum with the William Haley exhibition." as shown below.[13]

[12] *See, e.g.*, Dieter Bohn, *Google Now: behind the predictive future of search*, Vox Media, Inc. (Oct. 29, 2012), http://www.theverge.com/2012/10/29/3569684/google-now-android-4-2-knowledge-graph-neural-networks.
[13] The Verge, *Google Now and the predictive future of search* (Oct. 29, 2012), https://www.youtube.com/watch?v=ZXtudZl5mzM.

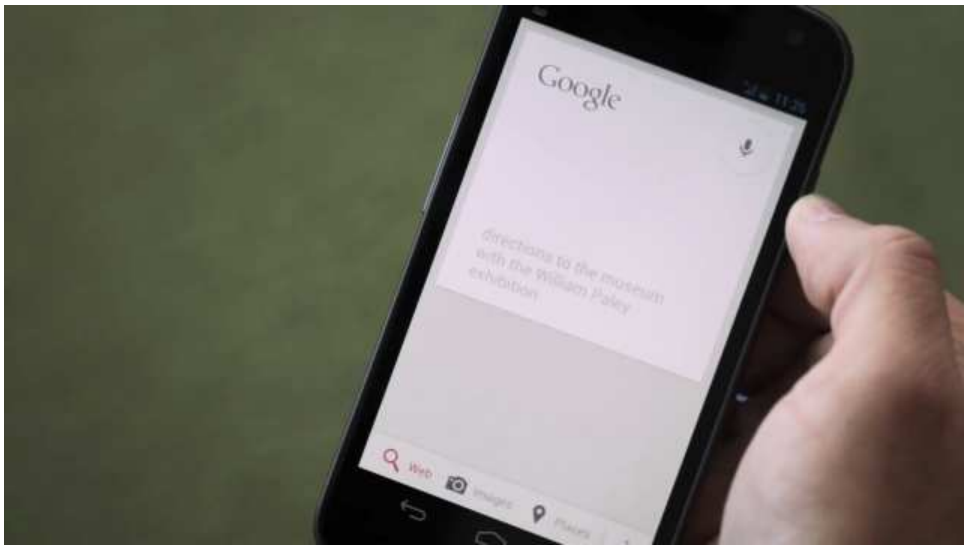




As another example, a segment of the interview video featuring Vincent Vanhoucke explained the process for turning sounds into something meaningful for the computer to interpret.[14]

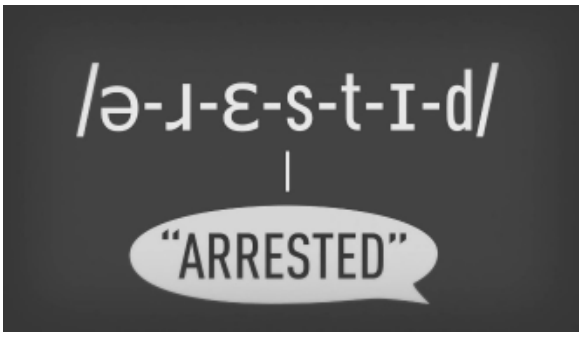
[14] *Id.*

36. On information and belief, the HTC Google Now-enabled products perform the step of rendering an interpretation of the spoken request. For example, a segment of the interview video featuring Hugo Barra showed Google Now rendering an interpretation of Hugo Barra's spoken request, as shown below.[15]

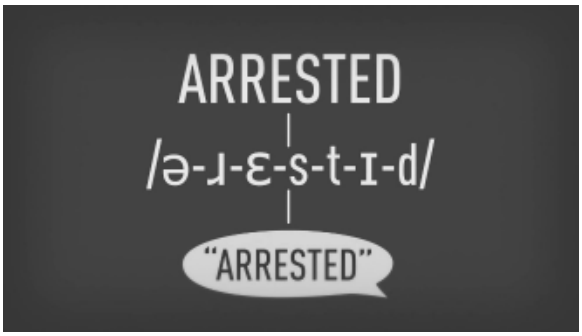


As another example, Vincent Vanhoucke explained that "[w]e want to turn sounds into what we call phonemes." [16]

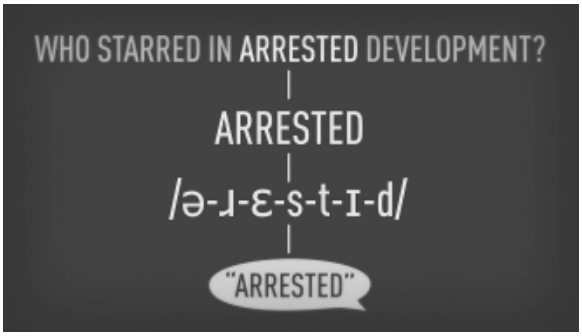
[15] *Id.*
[16] *Id.*



Vanhoucke explained "from the phonemes you want to turn them into words."[17]



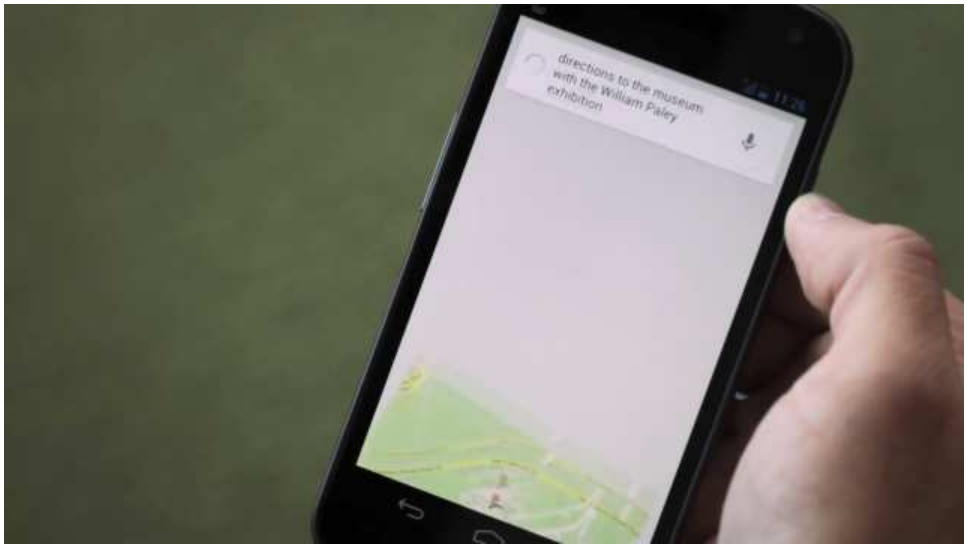
Vanhoucke explained "from the words you construct sentences."[18]



37. On information and belief, the HTC Google Now-enabled products perform the step of constructing at least part of a navigation query based upon the interpretation. For example, a segment of the interview video featuring Hugo Barra

[17] *Id.*
[18] *Id.*

showed Google Now constructing at least part of a navigation query based upon the interpretation of Hugo Barra's spoken request, as shown below.[19]

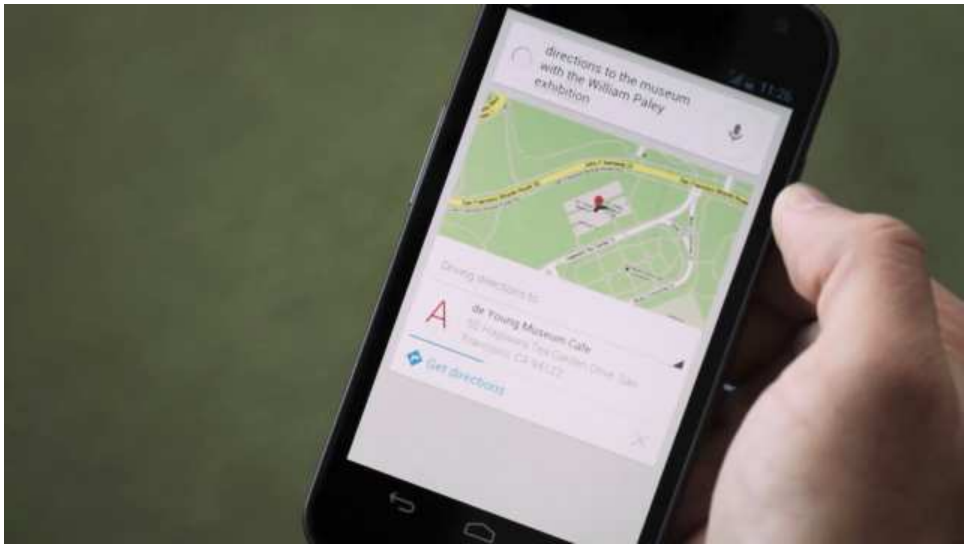


As another example, Vincent Vanhoucke explained that "once you have a sentence you have a transcript of what you said – you have to turn that into something that's meaningful for the computer to interpret."[20]

Vincent Vanhoucke stated, "so if you're doing a search query, you're asking for 'pictures of cats,' the computer has to understand that you're really doing an image search for the word 'cats.'"[21]

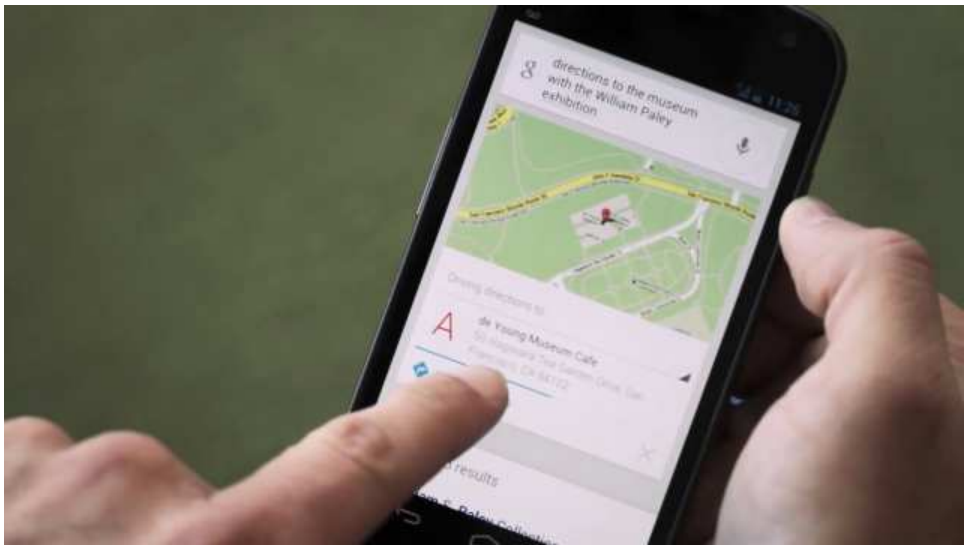
[19] *Id.*
[20] *Id.*
[21] *Id.*

38. On information and belief, the HTC Google Now-enabled products perform the step of 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. For example, a segment of the interview video featuring Hugo Barra showed Google Now soliciting additional input from Hugo Barra, by presenting search result / card having various information, including a map, an address, and the option of getting directions, as shown below.[22]



A user can select any of the presented information for further action, such as opening a larger map, opening a webpage (or search page) showing the information requested, or open a Google Maps app to get directions. In the video, Hugo Barra touched the option of "Get directions."[23]

[22] *Id.*
[23] *Id.*



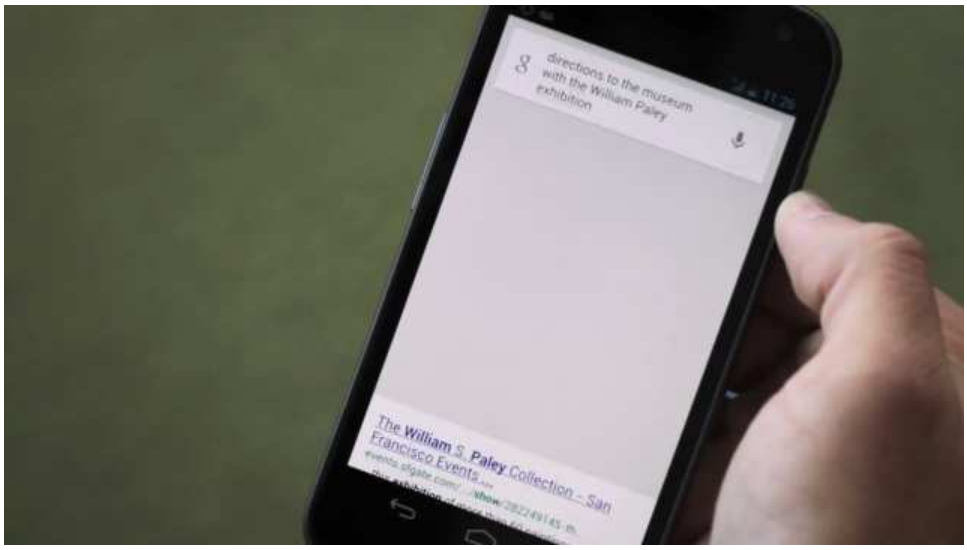
As another example, Google announced in its official blog that

> You're running late for an interview, but that little gas light on your dash has been on... for well... too long. You reroute Google Maps to the nearest gas station and start to fill up—and that's when you notice the gas across the street is 25 cents cheaper. When you finally close the tank, re-type the original address into your phone and get on the road again, you're short 15 minutes and $5.
> Over the next few weeks, we're rolling out an update to Google Maps on Android that will make your next gas stop more convenient and affordable. Now you can check out gas prices and add detours to your route, without having to exit out of navigation.[24]

On information and believe, the Google Maps reroute example quoted above has been implemented by Google. For example, a user can add a detour for getting gas by speaking to a HTC Google Now-enabled product. Google Maps will solicit additional input from the user by presenting gas station options and the corresponding reroute paths for the user to choose from. The user can interact with Google Maps in a non-spoken modality by touch selecting a location option.

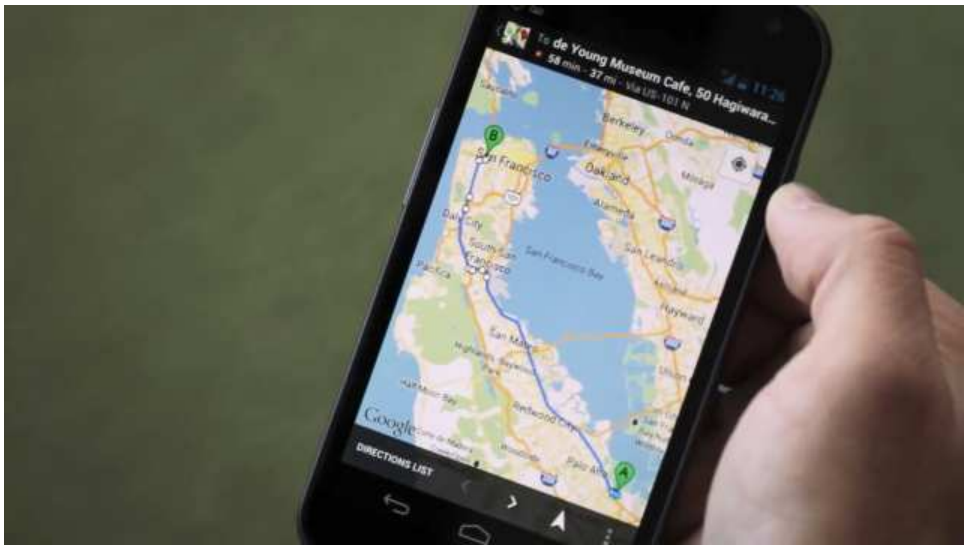
[24] The official blog for Google Maps, *Google Maps making stressful times easier* (Oct. 20, 2015), https://maps.googleblog.com/2015/10/google-maps-making-stressful-times.html.

39. On information and belief, the HTC Google Now-enabled products perform the step of refining the navigation query, based upon the additional input. For example, a segment of the interview video featuring Hugo Barra showed Google Now refining the navigation query, based upon Hugo Barra's touch input.[25]



40. On information and belief, the HTC Google Now-enabled products perform the step of using the refined navigation query to select a portion of the electronic data source. For example, a segment of the interview video featuring Hugo Barra showed Google Now using the refined navigation query to select a portion of the electronic data source for at least a map, Google Maps app, and other data affiliated with maps and navigation (*e.g.*, map, real-time traffic, and other alerts).[26]

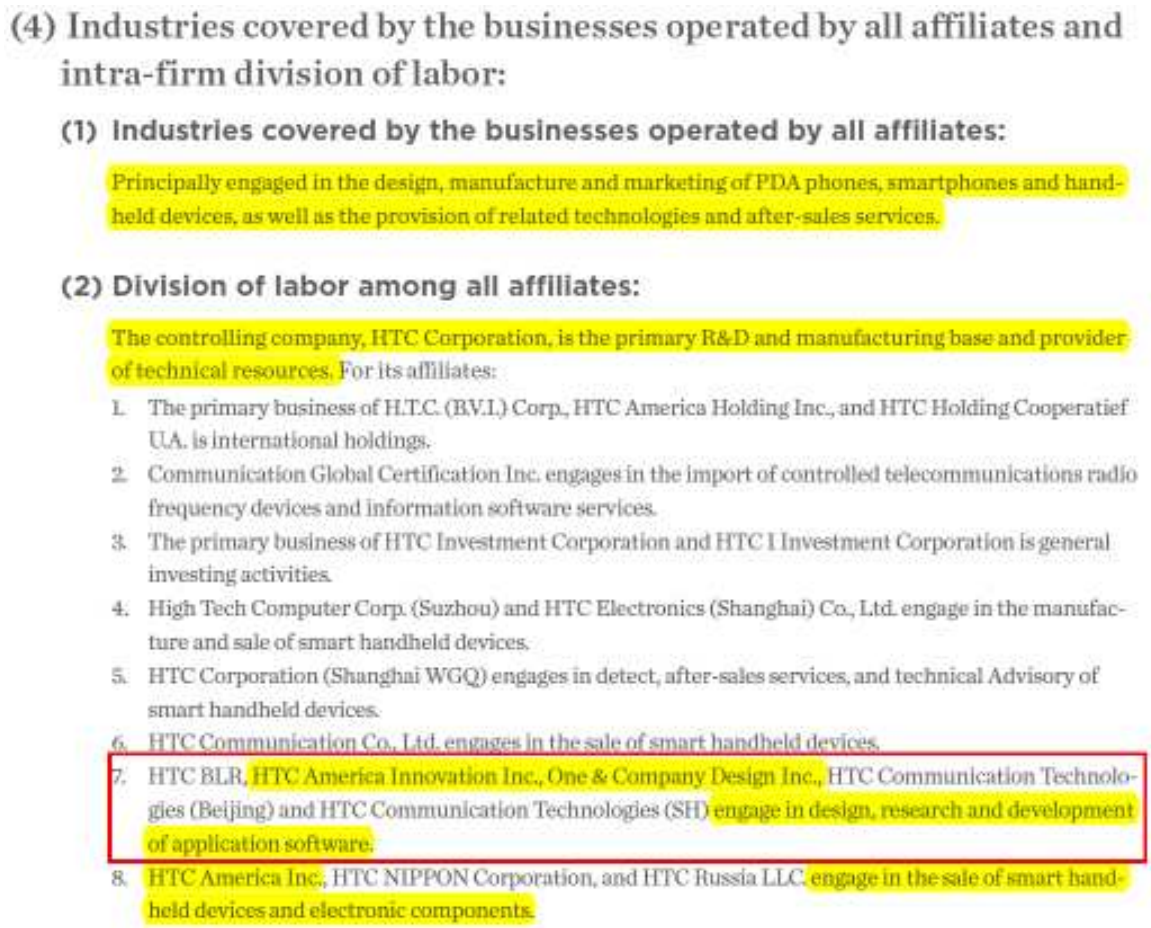
[25] *Id.*
[26] *Id.*



41. On information and belief, the HTC Google Now-enabled products perform the step of transmitting the selected portion of the electronic data source from the network server to a client device of the user. For example, a segment of the interview video featuring Hugo Barra showed Google Now transmitting the selected portion of the electronic data source from the network server to Hugo Barra's device.[27] Hugo Barra noted in the video that "Google [Now] crosses all these various different pieces of information in my question to give me an answer back which in this case is actually a map."[28]

42. There are at least several types of direct infringers of the '021 Patent under 35 U.S.C. § 271(a). For example, the HTC 2015 Annual Report disclosed that HTC's wholly-owned subsidiaries HTC America Innovation Inc. and One & Company Design Inc. engage in "design, research and development of application software," [29] as shown below.

[27] *Id.*
[28] *Id.*
[29] *See, e.g.*, HTC 2015 Annual Report at 155.



(4) Industries covered by the businesses operated by all affiliates and intra-firm division of labor:

(1) Industries covered by the businesses operated by all affiliates:

Principally engaged in the design, manufacture and marketing of PDA phones, smartphones and handheld devices, as well as the provision of related technologies and after-sales services.

(2) Division of labor among all affiliates:

The controlling company, HTC Corporation, is the primary R&D and manufacturing base and provider of technical resources. For its affiliates:

1. The primary business of H.T.C. (B.V.I.) Corp., HTC America Holding Inc., and HTC Holding Cooperatief U.A. is international holdings.
2. Communication Global Certification Inc. engages in the import of controlled telecommunications radio frequency devices and information software services.
3. The primary business of HTC Investment Corporation and HTC I Investment Corporation is general investing activities.
4. High Tech Computer Corp. (Suzhou) and HTC Electronics (Shanghai) Co., Ltd. engage in the manufacture and sale of smart handheld devices.
5. HTC Corporation (Shanghai WGQ) engages in detect, after-sales services, and technical Advisory of smart handheld devices.
6. HTC Communication Co., Ltd. engages in the sale of smart handheld devices.
7. HTC BLR, HTC America Innovation Inc., One & Company Design Inc., HTC Communication Technologies (Beijing) and HTC Communication Technologies (SH) engage in design, research and development of application software.
8. HTC America Inc., HTC NIPPON Corporation, and HTC Russia LLC engage in the sale of smart handheld devices and electronic components.

On information and belief, employees of HTC America Innovation Inc. and One & Company Design Inc. (both subsidiaries located in the United States) have used and continue to use Google Now digital assistant features to research and develop apps to directly infringe the ‘021 Patent.

43. On information and belief, employees of HTC’s wholly-owned subsidiary HTC America use Google Now digital assistant, for example, to demonstrate the capabilities of HTC Google Now-enabled products in the course of employees’ sales and marketing efforts, and to perform speech-based navigation of electronic data sources in the course of their employment, directly infringing the ‘021 Patent.

44. On information and belief, consumers use, for example, Google Now digital assistant to directly infringe the ‘021 Patent.

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

46. On information and belief, HTC gained knowledge of the ’021 Patent no later than the filing of this complaint or shortly thereafter.

47. On information and belief, HTC 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, HTC 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, HTC also 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 materials and information made available to users, including product manuals and technical information.[30] 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, HTC has and continues to specifically intend to induce infringement of the ’021 Patent.

48. HTC’s infringement of the ’021 Patent is or has been willful. On information and belief, HTC gained knowledge of the ’021 Patent at least as early as

[30] *See also, e.g.*, Getting instant information with Google Now, *available at* http://www.htc.com/us/support/htc-one/howto/365592.html (providing instructions for activation and use of Google Now).

October 2012. On information and belief, HTC was under the duty to disclose its knowledge of the '021 Patent to the Patent Office. HTC cited the '021 Patent during prosecution of its U.S. Patent No. 8,509,403 (filed Apr. 12, 2010). In any event, on information and belief, HTC gained knowledge of the '021 Patent no later than the filing of this complaint or shortly thereafter.

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

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

51. Unless a permanent injunction is issued enjoining HTC 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)

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

53. Plaintiff is informed and believes, and on that basis alleges, that HTC 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.

54. HTC 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, HTC Google Now-enabled products falling within the scope of one or more claims of the ’061 Patent, including claim 1.[31]

55. On information and belief, the HTC Google Now-enabled products perform a method for utilizing agents for speech-based navigation of an electronic data source. For example, Hugo Barra explained in The Verge interview that “Google Now touches every back-end of Google, every different web service that’s been developed over the last ten years or so is part of this service.”[32] Consistent with this statement, a figure presented previously was published in a companion article to the interview, showing that Google Now accesses resources and information which may be locally stored on the device (*e.g.,* Android operating system), privately on remote servers (*e.g.,* Gmail), publicly accessible websites and databases (*e.g.,* News, weather, and stock quotes) and as well as information stored on other services and apps (*e.g.,* Google Maps,

[31] 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.
[32] The Verge, *Google Now and the predictive future of search* (Oct. 29, 2012), https://www.youtube.com/watch?v=ZXtudZl5mzM.

YouTube).[33] In the interview, Scott Huffman, Engineering Director of Search at Google, stated that

> We're obviously very excited about search on mobile devices on Android and about the idea of people being able to interact with their phone in just a natural way.
>
> And if you think about what that takes, we feel like there's a few key elements that have to come together.
>
> One obviously is voice recognition.
>
> The second piece is once I have those words is natural language understanding.
>
> And the third piece which is a fairly new thing for us that Google is understanding what are the basic kind of components and facts in the world.
>
> And this is something we call our knowledge graph.
>
> And it's really the first time in sort of computer science history that those three things are all available and not just available in some giant from computational center; but available, you know, in a powerful device that's in my pocket.[34]

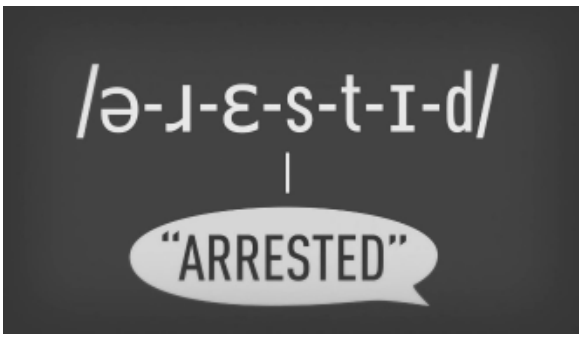
Also in the interview, Vincent Vanhoucke, a Research Scientist at Google, stated that "[s]peech recognition is the process of turning sounds into meaning. And between those two there's many levels of processing."[35]

56. On information and belief, the HTC Google Now-enabled products perform the step of receiving a spoken request for desired information from a user. For example, a segment of the interview video featuring Hugo Barra showed Google Now

[33] *See, e.g.*, Dieter Bohn, *Google Now: behind the predictive future of search*, Vox Media, Inc. (Oct. 29, 2012), http://www.theverge.com/2012/10/29/3569684/google-now-android-4-2-knowledge-graph-neural-networks.
[34] The Verge, *Google Now and the predictive future of search* (Oct. 29, 2012), https://www.youtube.com/watch?v=ZXtudZl5mzM.
[35] *Id.*

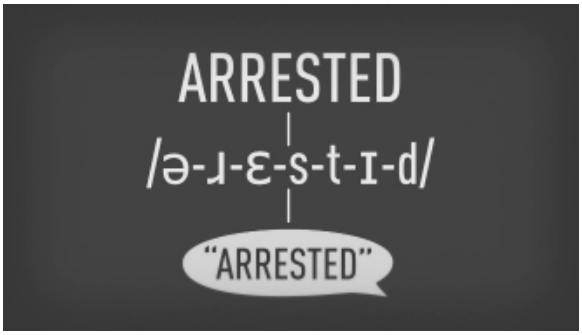
receiving Hugo Barra's spoken request of "directions to the museum with the William Haley exhibition," as previously shown.[36] As another example, a segment of the interview video featuring Vincent Vanhoucke explained the process for turning sounds into something meaningful for the computer to interpret.[37]

57. On information and belief, the HTC Google Now-enabled products perform the step of rendering an interpretation of the spoken request. For example, a segment of the interview video featuring Hugo Barra showed Google Now rendering an interpretation of Hugo Barra's spoken request, as shown previously.[38] As another example, Vincent Vanhoucke explained that "[w]e want to turn sounds into what we call phonemes."[39]

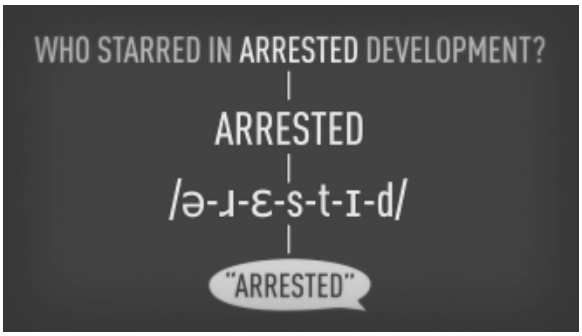


[36] *Id.*
[37] *Id.*
[38] *Id.*
[39] *Id.*

Vanhoucke explained "from the phonemes you want to turn them into words."[40]



Vanhoucke explained "from the words you construct sentences."[41]



58. On information and belief, the HTC Google Now-enabled products perform the step of constructing a navigation query based upon the interpretation. For example, a segment of the interview video featuring Hugo Barra showed Google Now constructing a navigation query based upon the interpretation of Hugo Barra's spoken request, as shown previously.[42] As another example, Vincent Vanhoucke explained that "once you have a sentence you have a transcript of what you said – you have to turn that into something that's meaningful for the computer to interpret."[43]

[40] *Id.*
[41] *Id.*
[42] *Id.*
[43] *Id.*

Vincent Vanhoucke stated, "so if you're doing a search query, you're asking for 'pictures of cats,' the computer has to understand that you're really doing an image search for the word 'cats.'"[44]

59. On information and belief, the HTC Google Now-enabled products perform the step of 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. For example, a segment of the interview video featuring Hugo Barra showed his Android smartphone routing the navigation query to at least one agent (*e.g.*, Google Now, Google Search and Google Maps), wherein the at least one agent utilizes the navigation query to select a portion of the electronic data source for at least a map, Google Maps app, and other data affiliated with maps and navigation (*e.g.*, map, real-time traffic, and other alerts), as shown previously.[45] Consistent with this statement, the figure below was published in a companion article to the interview, showing that Google Now accesses resources and information which may be locally stored on the device (*e.g.*, Android operating system), privately on remote servers (*e.g.*, Gmail), publicly accessible websites

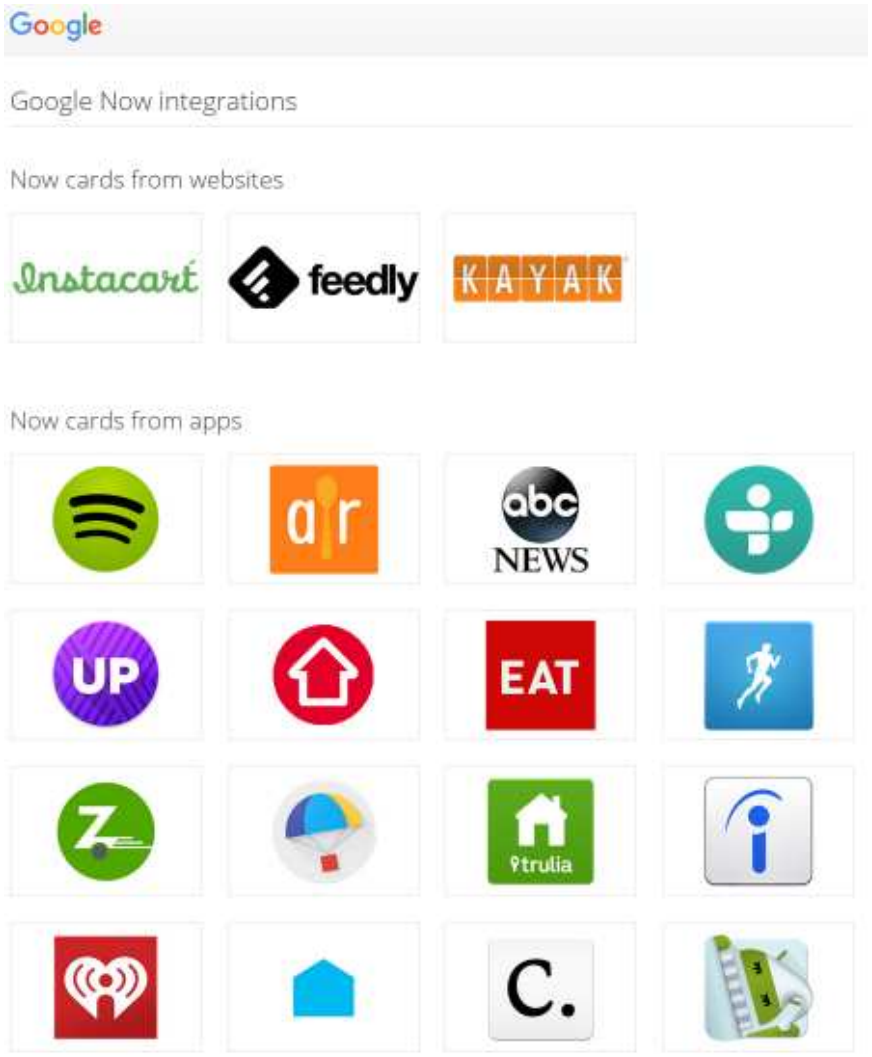
[44] *Id.*
[45] *Id.*

and databases (*e.g.*, News, weather, and stock quotes) and as well as information stored on other services and apps (*e.g.*, Google Maps, YouTube).[46]

60. On information and belief, the HTC Google Now-enabled products perform the step of 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. For example, a segment of the interview video featuring Hugo Barra showed HTC Google Now-enabled products invoking a user interface agent for outputting the selected portion of the electronic data source to the user, wherein the Android operating system and Google Now manages data flow among multiple apps on the device and maintains a registration of each of said agents' capabilities, as shown previously. Further, Google

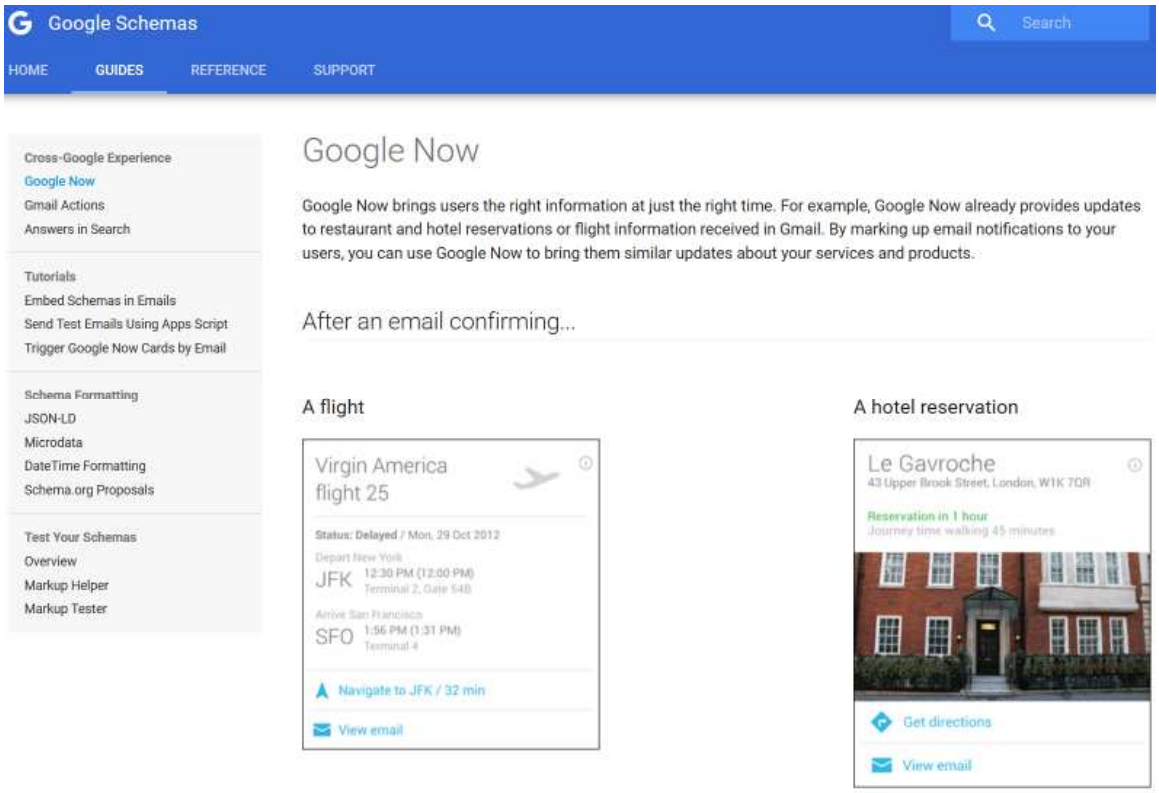
[46] *See, e.g.*, Dieter Bohn, *Google Now: behind the predictive future of search*, Vox Media, Inc. (Oct. 29, 2012), http://www.theverge.com/2012/10/29/3569684/google-now-android-4-2-knowledge-graph-neural-networks.

advertised various websites and apps that are integrated with Google Now, as shown below.[47]



Google also published examples of ways in which products and services work with Google Now, as shown below.[48]

[47] *See, e.g.*, https://web.archive.org/web/20160904040129/http://www.google.com/landing/now/integrations.html.
[48] *See, e.g.*, https://web.archive.org/web/20160916060246/https://developers.google.com/schemas/now/cards#close (last updated May 28, 2015).



61. There are at least several types of direct infringers of the '061 Patent under 35 U.S.C. § 271(a). For example, the HTC 2015 Annual Report disclosed that HTC's wholly-owned subsidiaries HTC America Innovation Inc. and One & Company Design Inc. engage in "design, research and development of application software," [49] as shown below.

[49] *See, e.g.*, HTC 2015 Annual Report at 155.

(4) Industries covered by the businesses operated by all affiliates and intra-firm division of labor:

(1) Industries covered by the businesses operated by all affiliates:

Principally engaged in the design, manufacture and marketing of PDA phones, smartphones and handheld devices, as well as the provision of related technologies and after-sales services.

(2) Division of labor among all affiliates:

The controlling company, HTC Corporation, is the primary R&D and manufacturing base and provider of technical resources. For its affiliates:

1. The primary business of H.T.C. (B.V.I.) Corp., HTC America Holding Inc., and HTC Holding Cooperatief U.A. is international holdings.
2. Communication Global Certification Inc. engages in the import of controlled telecommunications radio frequency devices and information software services.
3. The primary business of HTC Investment Corporation and HTC I Investment Corporation is general investing activities.
4. High Tech Computer Corp. (Suzhou) and HTC Electronics (Shanghai) Co., Ltd. engage in the manufacture and sale of smart handheld devices.
5. HTC Corporation (Shanghai WGQ) engages in detect, after-sales services, and technical Advisory of smart handheld devices.
6. HTC Communication Co., Ltd. engages in the sale of smart handheld devices.
7. HTC BLR, HTC America Innovation Inc., One & Company Design Inc., HTC Communication Technologies (Beijing) and HTC Communication Technologies (SH) engage in design, research and development of application software.
8. HTC America Inc., HTC NIPPON Corporation, and HTC Russia LLC engage in the sale of smart handheld devices and electronic components.

On information and belief, employees of HTC America Innovation Inc. and One & Company Design Inc. (both subsidiaries located in the United States) have used and continue to use Google Now digital assistant features to research and develop apps to directly infringe the '061 Patent.

62. On information and belief, employees of HTC's wholly-owned subsidiary HTC America use Google Now digital assistant, for example, to demonstrate the capabilities of HTC Google Now-enabled products in the course of employees' sales and marketing efforts, and to perform speech-based navigation of electronic data sources in the course of their employment, directly infringing the '061 Patent.

63. On information and belief, consumers, for example, use Google Now

digital assistant and to directly infringe the ‘061 Patent.

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

65. On information and belief, HTC gained knowledge of the ’061 Patent no later than the filing of this complaint or shortly thereafter.

66. On information and belief, HTC 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, HTC 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, HTC also encourages and instructs users 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 through materials and information made available to users, including product manuals and technical information.[50] 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, HTC has and continues to specifically intend to induce infringement of the ’061 Patent.

[50] *See also, e.g.*, Getting instant information with Google Now, *available at* http://www.htc.com/us/support/htc-one/howto/365592.html (providing instructions for activation and use of Google Now).

67. HTC's infringement of the '061 Patent is or has been willful. On information and belief, HTC gained knowledge of the '021 Patent at least as early as October 2012. The '061 Patent is based on the continuation application that issued as the '021 Patent, but the '061 patent had issued before '021 Patent. The '021 and the '061 Patents share the same disclosures in the specification. On information and belief, HTC was under the duty to disclose its knowledge of the '021 Patent to the Patent Office. HTC cited the '021 Patent during prosecution of its U.S. Patent No. 8,509,403 (filed Apr. 12, 2010). In any event, on information and belief, HTC gained knowledge of the '061 Patent no later than the filing of this complaint or shortly thereafter.

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

69. As a result of HTC's infringement of the '061 Patent, Plaintiff has suffered monetary damages in an amount adequate to compensate for HTC's infringement, but in no event less than a reasonable royalty for the use made of the invention by HTC, together with interest and costs as fixed by the Court, and Plaintiff will continue to suffer damages in the future unless HTC's infringing activities are enjoined by this Court.

70. Unless a permanent injunction is issued enjoining HTC 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.

PRAYER FOR RELIEF

Plaintiff prays for the following relief:

A. A judgment that HTC has infringed one or more claims of the ’021 and ’061 Patents;

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

C. An award of damages resulting from HTC’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 HTC.

E. A judgment and order requiring HTC 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: February 7, 2018

BAYARD, P.A.

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