

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

	)	Case No. 6-21-cv-00570-ADA
	)	
PARUS HOLDINGS INC.,	)	
	)	
Plaintiff,	)	<b>JURY TRIAL DEMANDED</b>
	)	
v.	)	
	)	
MICROSOFT CORPORATION,	)	
	)	
Defendant.	)	

**PARUS HOLDING INC.’S  
FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT**

Plaintiff Parus Holdings Inc. (“Parus” or “Plaintiff”) brings this First Amended Complaint for patent infringement (“Amended Complaint”) and for a Jury Trial against Microsoft Corporation (“Microsoft” or “Defendant”). Parus alleges as follows:

**THE PARTIES**

1. Plaintiff Parus Holdings Inc. is a Delaware corporation having its principal place of business at 3000 Lakeside Drive, Suite 110S, Bannockburn, IL 60015.
2. Parus is the owner by assignment of U.S. Patent No. 6,721,705 (“the ’705 Patent” or “Asserted Patent”).
3. Defendant Microsoft Corporation is a Washington corporation with a principal place of business located at 1 Microsoft Way, Redmond, Washington 98052-8300.
4. Microsoft is registered to do business in Texas and can be served via its registered agent, Corporation Service Company dba CSC – Lawyers Incorporating Service Company at 211 East 7th Street, Suite 620, Austin, Texas 78701-3218.
5. Microsoft maintains a permanent physical presence within the Western District of Texas, conducting business from at least its locations at: 10900 Stonelake Boulevard, Suite 225,

Austin, Texas 78759; Concord Park II 401 East Sonterra Boulevard, Suite 300, San Antonio, Texas 78258; as well as other locations in and around the Austin and San Antonio areas.

6. Microsoft currently employs more than 800 people in Austin and San Antonio, Texas.

7. Microsoft has placed or contributed to placing infringing products, including but not limited to the Microsoft Surface, Microsoft Windows 10, and Microsoft Windows 10 Mobile, into the stream of commerce via an established distribution channel knowing or understanding that such products would be sold and used in the United States, including in the Western District of Texas. On information and belief, Microsoft also has derived substantial revenues from infringing acts in the Western District of Texas, including from the sale and use of infringing products including but not limited to the Microsoft Surface, Microsoft Windows 10, and Microsoft Windows 10 Mobile.

8. Microsoft had constructive notice of the Asserted Patent based on Parus's marking at least as of 2014.

### **JURISDICTION AND VENUE**

9. This is an action for patent infringement arising under the patent laws of the United States, Title 35 of the United States Code. Accordingly, this Court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a).

10. This Court has specific personal jurisdiction over Defendant at least in part because Defendant conducts business in this Judicial District. Parus's causes of action arise, at least in part, from Defendant's contacts with and activities in the State of Texas and this Judicial District. Upon information and belief, each Defendant has committed acts of infringement within the State of Texas and this Judicial District by, inter alia, directly using, selling, offering to sell, or importing products that infringe one or more claims of the Asserted Patent.

11. Defendant has committed acts within this District giving rise to this action and have established sufficient minimum contacts with the State of Texas such that the exercise of jurisdiction would not offend traditional notions of fair play and substantial justice.

12. Venue is proper in this Judicial District pursuant to 28 U.S.C. § 1400(b). Venue is proper for Microsoft because (1) it has done and continues to do business in this Judicial District and (2) it has committed and continues to commit acts of patent infringement in this Judicial District by, *inter alia*, directly using, selling, offering to sell, or importing products that infringe one or more claims of the Asserted Patent.

### **BACKGROUND**

13. Founded in 1997, Parus provides innovative solutions to businesses and individuals, enabling thousands of professionals to stay in touch and in control of their communications. Its patented, voice-driven applications, deep understanding of the needs and challenges of the market, and passion for unsurpassed customer service have kept Parus at the forefront of the unified communications industry for more than twenty years. Parus is a pioneer in this space, offering voice-driven unified communications and voice assistant solutions, including messaging, voice search, collaboration, presence and real-time communications for mobile communities and businesses.

14. On information and belief, Microsoft was founded in 1975 and currently offers a variety of services and products, including, *inter alia*, search-engine services, consumer-level web-based services (*i.e.*, “Outlook”), software (including the Windows operating system and Edge browser), hardware (including the Surface Duo smartphone, Surface tablets, and Xbox), enterprise services, internet services, and other e-commerce services. *See, e.g.*, <https://support.microsoft.com/en-us/allproducts><https://support.microsoft.com/en-us/allproducts>. Microsoft reported \$38 billion in revenue in the fourth quarter of 2020. *See* <https://news.alphastreet.com/microsoft-msft-q4-2020-earnings-bright-spots-and-areas-of-concern/>.

15. Microsoft, like other major technology and online retailers that have licensed or been found to infringe the Asserted Patent, has incorporated Parus’s technology into its products and offerings without authorization.

### THE ASSERTED PATENT

16. The '705 Patent relates to “robust and highly reliable” systems for users to search the internet using voice-enabled devices. '705 Patent at 1:15–16. At the time of the invention, users were limited in the devices they could use to conduct web searches (*i.e.*, conventional computers, PDAs, or web-phones/web-pagers). As explained in the specification, these devices had numerous limitations, including (i) the form of the devices, their portability, and their ability to connect to the Internet; (ii) the compatibility of the devices with particular web site designs; and (iii) the devices' responsiveness to rapid changes in website content (e.g., “[t]he design of the web site may change, the information required by the web site in order to perform searches may change, and the method of reporting search results may change”). *Id.* at 1:25–2:52. Therefore, there was a need for a system that could “detect modifications to web sites and adapt to such changes in order to quickly and accurately provide the information requested by a user through a voice enabled device.” *Id.* at 2:32–36.

17. Voice-enabled searches of the Internet present several unique technological hurdles. For example, unlike regular browser-based or application-based searches, a voice-enabled device must limit its results because a user simply cannot listen to an entire page worth of search results. *See id.* at 2:36–52. Voice users are especially sensitive to latency and expect immediate responses to their search requests. *Id.* Indeed, rapid responses are an essential feature of a voice system's desirability and usability. *Id.* And “[a] system that introduces too much delay between the time a user makes a request and the time of response will not be tolerated by users and will lose its usefulness.” *Id.* at 2:43–46.

18. The inventors of the Asserted Patent were thus presented with a technical problem: how to quickly provide complete, timely, and relevant web site search results to voice-enabled devices, accounting for the rapidly changing nature of web sites and Internet applications. '705 Patent at 2:32–26, 17:9–15. The inventors thus developed specific and concrete ways of solving the technical problems presented by voice-based internet searching, developing a robust, innovative system to provide quick, reliable results to the voice-based user that can access web

sites in a ranked order in response to a voice request, and discover new web sites using, *inter alia*, content extraction, pinging, polling, and ranking. *See, e.g., id.* at 6:58–7:30, 17:48–18:4, 19:3–21.

19. The claims of these patents vary in scope, and no single claim is representative of all the Asserted Patent or its claims. For example, the '705 Patent concerns how to determine from which website to retrieve information in response to a speech command from a pre-selected web site using a specific polling and ranking mechanism. *See, e.g., '705 Patent* at 20:3–17. The '705 patent further claims a “content extraction agent,” a “content descriptor,” and a “content fetcher.” *See, e.g., id.* at 19:60–67. The specification describes and gives descriptions of these features, for example, describing a “content extraction agent” as “allow[ing] the web browsing server 102 to properly format requests and read responses provided by the web site 114;” a “content descriptor” as “direct[ing] the extraction agent where to extract data from the accessed web page and how to format a response to the user utilizing that data;” and a “content fetcher” as “retriev[ing] information from a web site.” *Id.* at 7:2–28, 9:35–37.

20. Parus expects that at least some terms as used in the claims will be subject to construction in this case based on both the intrinsic record and, to the extent necessary, extrinsic evidence, including testimony from expert witnesses.

### **MICROSOFT’S INFRINGING PRODUCTS AND SERVICES**

21. Upon information and belief, Microsoft has infringed and continues to infringe one or more claims of the Asserted Patent, as shown below, acting through the Microsoft Surface, Windows 10 Operating System, and Windows 10 Mobile Operating System (collectively, “the Microsoft Accused Products”). On information and belief, Microsoft has released different versions of the Microsoft Surface, Microsoft Windows 10, and Microsoft Windows 10 Mobile, but on information and belief, each of these products infringed through use of Cortana at least since Cortana’s release in 2015.<sup>1</sup>

### **COUNT I**

---

<sup>1</sup> <https://news.microsoft.com/2015/07/13/microsoft-to-celebrate-windows-10-launch-around-the-world-on-july-29/>

**MICROSOFT'S INFRINGEMENT OF U.S. PATENT NO. 6,721,705**

22. Parus restates and incorporates by reference all of the allegations made in the preceding paragraphs as though fully set forth herein.

23. Parus is the owner, by assignment, of the '705 Patent. A true copy of the '705 Patent granted by the U.S. Patent & Trademark Office is attached as Exhibit 1.

24. Defendant Microsoft has directly infringed, and is continuing to directly infringe, literally or under the doctrine of equivalents, at least independent claim 2 of Parus's '705 Patent by making, using, selling, and/or offering for sale the Microsoft Accused Products, including at least the Microsoft Surface, Windows 10, and Windows 10 Mobile in violation of 35 U.S.C. § 271(a).

25. Upon receipt of Parus's letter of June 3, 2021, filing of the complaint or shortly thereafter, Defendant Microsoft has knowledge of the '705 Patent.

26. The Microsoft Accused Products in conjunction with Cortana form an internet voice browsing system for gathering information from Web sites on the Internet. The following exemplary documents provide support to demonstrate how the Microsoft Accused Products in conjunction with Cortana practice at least claim 2 of the '705 Patent: Andrew Nusca, How voice recognition will change the world (Nov. 4, 2011), *available at* <https://www.zdnet.com/article/how-voice-recognition-will-change-the-world/>, Gene Munster, Will Thompson, Annual Digital Assistant IQ Test – Siri, Google Assistant, Alexa, Cortana (Jul. 25, 2018), *available at* <https://loupventures.com/annual-digital-assistant-iq-test-siri-googleassistant-alexa-cortana/>.

27. The Microsoft Accused Products in conjunction with Cortana include at least one CPU-based media server. *See, e.g.*, <https://www.microsoft.com/en-us/surface/devices/surface-pro-6/tech-specs>; <http://support.microsoft.com/en-us/windows/windows-10-system-requirements-6d4e9a79-66bf-7950-467c-795cf0386715>.

28. The Microsoft Accused Products in conjunction with Cortana include the media server having at least a speech recognition engine, a speech synthesis engine, an interactive voice response application, a call processing system, and telephony hardware, where the media server is

configured to receive a speech command from a user and to convert the speech command into a digital data message and is also configured to receive a speech command from a user and to convert the speech command into a digital data message.

29. For example, Cortana is built-in to the Microsoft Accused Products, including the Microsoft Surface, Microsoft Windows 10, and Microsoft Windows 10 Mobile products.

30. For example, the Microsoft Products with Cortana take audio input from at least one microphone and provide that audio input to Microsoft servers. *See, e.g.*, <https://www.microsoft.com/en-us/surface/devices/surface-pro-6/tech-specs>. The microphone allows the Microsoft Products with Cortana to receive speech commands from the user. *See, e.g.*, <https://www.microsoft.com/en-us/p/surface-pro-6/8zcn665slq5?activetab=pivot%3aoverviewtab>; <https://www.microsoft.com/en-us/cortana/gettingstarted?activetab=pivot1%3aprimar2>; <https://blogs.windows.com/windowsexperience/2017/01/02/windows-10-tip-enable-hey-cortana-teach-cortana-recognize-voice/#FFO4L94slLIPSLeR.97>; <https://www.windowscentral.com/how-use-cortana-search-windows-10>; <https://www.businessnewsdaily.com/10368-how-to-stop-cortana-from-using-bing.html>.

31. The Microsoft Accused Products in conjunction with Cortana are also systems for retrieving information from pre-selected web sites by uttering speech commands into a voice enabled device. For example, Microsoft touts Cortana on its web pages.

## What is Cortana?

*Cortana, Windows 10*

Cortana is Microsoft's personal productivity assistant that helps you save time and focus attention on what matters most.

To get started, select the **Cortana** icon on the taskbar. If you're not sure what to say, try asking, "What can you do?"

See, e.g., <https://support.microsoft.com/en-us/topic/what-is-cortana-953e648d-5668-e017-1341-7f26f7d0f825>.

32. For example, Microsoft indicates that the Microsoft devices in conjunction with Cortana “can help you access information quicker, connect with people faster, and be better at keeping on track.” See e.g., <https://support.microsoft.com/en-us/topic/what-can-you-do-with-cortana-in-windows-f57ef46f-716a-9940-a8fc-09b3433d05ea>.

33. Cortana retrieves information from pre-selected websites that have already been crawled by Bing.

Cortana was designed to work with Microsoft Edge and is powered by Bing.

Here are a few examples of how this integrated experience can enable Windows 10 to anticipate your needs, help you complete tasks, and even help you save time and money:

See, e.g., <https://blogs.windows.com/windowsexperience/2016/04/28/delivering-personalized-search-experiences-in-windows-10-through-cortana/#ukyzi4GKeCgMI0P0.97>.

## How Bing delivers search results

As an online search engine, the primary objective of Bing is to connect users with the most relevant search results from the web—providing easy access to quality content produced by web publishers. To do this, Bing automatically crawls the web to build an index of new and updated pages (or URLs) to display as a set of search results relevant to a user-initiated search or action. The content of these pages may reference or contain various online resources and content including websites, images, videos, documents, and other items. Search results are generated by using computer algorithms to match the search terms you enter with results in our index. In general, we try to provide as comprehensive and as useful a collection of displayed search results as we can. We design—and continually improve—our algorithms to provide the most relevant and useful results.

See, e.g., <http://help.bing.microsoft.com/#apex/18/en-US/10016/0>.

Bingbot is the name of the crawler used by Bing to crawl or “spider” the web. It is Bingbot’s job to find new and updated pages on websites across the Internet, so that they can be processed for indexation. When crawling a website, Bingbot looks at robots.txt for special instructions from the website owner. Bingbot honors robots.txt directives, including the *crawl-delay*: setting, and, in the absence of a *crawl-delay*, respects the input from Webmasters in the Crawl Control Feature.

See, e.g., <https://www.bing.com/webmaster/help/how-to-report-an-issue-with-bingbot-25c19802>.

34. Additionally, the Microsoft Accused Products include call processing systems and telephony hardware, including responding to messages. For example, Windows 10 comes with skype as a built-in application. See, e.g., [cnet.com/how-to/setting-up-skype-in-windows-10/](http://cnet.com/how-to/setting-up-skype-in-windows-10/).



Skype allows users to make and receive phone calls. *See, e.g.,* <https://www.digitalunite.com/technology-guides/email-skype/skype/how-launch-skype-app-windows-10>.

35. The Microsoft Accused Products in conjunction with Cortana include at least a database containing a list of web sites stored on magnetic media. *See, e.g.,* <http://help.bing.microsoft.com/#apex/18/en-US/10016/0> (discussing crawling and indexing); <https://www.bing.com/webmaster/help/how-to-report-an-issue-with-bingbot-25c19802>; <https://www.bing.com/webmaster/help/which-crawlers-does-bing-use-8c184ec0>; <https://www.searchenginejournal.com/why-how-bing-plans-to-improve-its-crawler-bingbot/291979/#close>.

36. The Microsoft Accused Products in conjunction with Cortana include a rank assigned to each one of the web sites and stored in the database. *See, e.g.,* <https://www.bing.com/webmasters/help/webmaster-guidelines-30fba23a> (discussing “to rank for relevant queries in Bing’s search results.”); <http://help.bing.microsoft.com/#apex/18/en-US/10016/0>; <https://www.google.com/search/howsearchworks/crawling-indexing>; <https://www.bing.com/webmaster/help/how-to-report-an-issue-with-bingbot-25c19802>; <https://www.bing.com/webmaster/help/which-crawlers-does-bing-use-8c184ec0>; <https://www.searchenginejournal.com/why-how-bing-plans-to-improve-its-crawler-bingbot/291979/#close>. In particular, Cortana uses Bing, which determines ranks for each website to determine from what website to extract responses. *See, e.g.,* <https://blogs.windows.com/windowsexperience/2016/04/28/delivering-personalized-search-experiences-in-windows-10-through-cortana/#ukyzi4GKeCgMI0P0.97>; *See, e.g.,* <http://help.bing.microsoft.com/#apex/18/en-US/10016/0>.

37. For example, the Microsoft Accused Products in conjunction with Cortana include a CPU-based web browsing server that includes at least a content extraction agent, a content fetcher, a polling and ranking agent, and a content descriptor file. The web browsing servers of the Microsoft Accused Products are configured to receive a digital data message from the media

server and configured to access one of the web sites having the highest rank and to retrieve information from at least one of the web sites. See, e.g., <https://www.bing.com/webmasters/help/webmaster-guidelines-30fba23a>.

38. The Microsoft Accused Products in conjunction with Cortana include a media server configured to generate an audio message representing the information and to transmit the audio message to a user, as discussed above. For example, the Microsoft Accused Products in conjunction with Cortana can handle voice commands with help from the cloud and produce an audio response.

**Cortana is a cloud-based digital assistant that works across your devices and other Microsoft services.**

Depending on the capabilities of your device and the version of Cortana you're using, Cortana can provide a range of features, some of which are personalized.

See, e.g., [https://support.microsoft.com/en-us/topic/cortana-and-privacy-47e5856e-3680-d930-22e1-](https://support.microsoft.com/en-us/topic/cortana-and-privacy-47e5856e-3680-d930-22e1-71ec6cdde231#:~:text=Cortana%20is%20a%20cloud%2Dbased,devices%20and%20other%20Microsoft%20services)

[71ec6cdde231#:~:text=Cortana%20is%20a%20cloud%2Dbased,devices%20and%20other%20Microsoft%20services](https://support.microsoft.com/en-us/topic/cortana-and-privacy-47e5856e-3680-d930-22e1-71ec6cdde231#:~:text=Cortana%20is%20a%20cloud%2Dbased,devices%20and%20other%20Microsoft%20services).

Our approach on personality includes defining a voice with an *actual* personality. This included writing a detailed personality, and laying out how we wanted Cortana to be perceived. We used words like witty, confident and loyal to describe how Cortana responds through voice, text and animated character. We wrote an actual script based on this definition that is spoken by a trained voice actress with thousands of responses to questions that will have variability to make Cortana feel like it has an actual personality and isn't just programmed with robotic responses.

See, e.g., <https://blogs.windows.com/windowsexperience/2015/02/10/how-cortana-comes-to-life-in-windows-10/#qid8dcOIxcbAtFi2.97>.

SSML is an XML-based markup language that skill developers use to specify the speech text that Cortana translates to speech. Using SSML improves the quality of synthesized content over sending Cortana plain text. SSML handles normal punctuation, such as pausing after a period, or speaking a sentence that ends with a question mark as a question. However, in some cases, you may want additional control over various characteristics of synthetic speech or text-to-speech (TTS) output, including pitch, rate, volume, pronunciation, and other characteristics.

See, e.g., <https://docs.microsoft.com/en-us/cortana/skills/speech-synthesis-markup-language>.

① Note

Cortana will respond with speech when queried with speech. Queries by text will have a text-only response.

See, e.g., <https://docs.microsoft.com/en-us/cortana/skills/overview>.

39. For example, the Microsoft Accused Products in conjunction with Cortana can handle voice commands and generate an audio message. The Microsoft Surface Pro 6 (with Windows 10) in conjunction with Cortana has the ability to speak naturally to users. The Microsoft text-to-speech voices are speech synthesizers provided for use with applications that use the Microsoft Speech API (SAPI) or the Microsoft Speech Server Platform. There are client, server, and mobile versions of Microsoft text-to-speech voices. In Windows 10, the Microsoft voices for Mobile (phone/tablet) are available (Microsoft Mark and Microsoft Zira). See, e.g., <https://www.itprotoday.com/artificial-intelligence/microsoft-aims-raise-cortanas-business-cred-through-use-natural-language>.

40. The Microsoft Accused Products in conjunction with Cortana includes at least a polling mechanism configured to periodically send a polling digital data message to each one of the web sites and to receive a response, such that each web site becomes a polled web site. The polling mechanism in each of the Microsoft Accused Products is configured to decrease the rank of the polled web site if no response is received from the polled web site and is also configured to decrease the rank of the polled web site if an unexpected response is received from the polled web site. The polling mechanism in each of the Microsoft Accused Products is also configured to decrease the rank of the polled web site if a response time of the polled web site is longer than a second response time of a second polled web site.

41. For example, the Microsoft Accused Products in conjunction with Cortana use a wide variety of polling mechanisms to determine the quality of a webpage and to change the rank of the site, including using polling digital data message and whether a response is received from a

polled web site. *See, e.g.*, <https://www.bing.com/webmasters/help/webmaster-guidelines-30fba23a>.

42. Parus has been damaged by the infringement of one or more claims of the '705 Patent by Microsoft. Parus is entitled to recover from Microsoft the damages sustained by Parus as a result of Microsoft's wrongful acts.

**PRAYER FOR RELIEF**

WHEREFORE, Parus request the Court grant the relief set forth below:

- A. Enter judgment that Microsoft has directly infringed, and continues to directly infringe, one or more claims of the '705 Patent;
- B. Order Microsoft to account for and pay damages caused to Parus by Microsoft's unlawful acts of patent infringement;
- C. Award Parus increased damages and attorney fees pursuant to 35 U.S.C. §§ 284 and 285;
- D. Award Parus the interest and costs incurred in this action; and
- E. Grant Parus such other and further relief, including equitable relief, as the Court deems just and proper.

**DEMAND FOR JURY TRIAL**

Plaintiff demands a jury trial for all issues deemed to be triable by a jury.

Dated: August 11, 2021

Respectfully submitted,

By /s/ Michael N. McNamara w/permission  
Andrea L. Fair

Michael N. McNamara – Lead Counsel  
Massachusetts BBO No. 665885  
MMcNamara@mintz.com  
Michael T. Renaud  
Massachusetts BBO No. 629783  
MTRenaud@mintz.com  
Sean M. Casey

Massachusetts BBO No. 705197  
SMCasey@mintz.com  
**MINTZ LEVIN COHN FERRIS GLOVSKY  
AND POPEO PC**  
One Financial Center  
Boston, MA 02111  
Tel: 617-542-6000  
Fax: 617-542-2241  
www.mintz.com

*Of Counsel:*

T. John Ward, Jr.  
Texas State Bar No. 00794818  
E-mail: jw@wsfirm.com

Andrea L. Fair  
Texas State Bar No. 24078488  
E-mail: andrea@wsfirm.com

Claire Abernathy Henry  
Texas State Bar No. 24053063  
Email: claire@wsfirm.com

Charles Everingham IV  
Texas State Bar No. 00787447  
Email: ce@wsfirm.com

**WARD, SMITH & HILL, PLLC**  
1507 Bill Owens Parkway  
Longview, Texas 75604  
(903) 757-6400 (telephone)  
(903) 757-2323 (facsimile)

Attorneys for Plaintiff *Parus Holdings Inc.*

**CERTIFICATE OF SERVICE**

The undersigned hereby certifies that a true and correct copy of the foregoing document has been served on August 11, 2021 to all counsel of record who are deemed to have consented to electronic service via the Court's CM/ECF system.

/s/ Andrea L. Fair  
Andrea L. Fair