

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

CDN INNOVATIONS, LLC,
Plaintiff,

v.

SOUNDHOUND, INC.,
Defendant.

Civil Action No. _____

JURY TRIAL DEMANDED

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff CDN Innovations, LLC (“CDN” or “Plaintiff”), for its Complaint against Defendant SoundHound, Inc. (“Defendant”), hereby alleges the following:

NATURE OF THE ACTION

1. This is an action for patent infringement arising under the Patent Laws of the United States, 35 U.S.C. § 1 *et seq.*

THE PARTIES

2. Plaintiff CDN is a limited liability company organized under the laws of the State Georgia with a place of business at 44 Milton Avenue, Suite 254, Alpharetta, GA 30009.

3. Upon information and belief, Defendant is a Delaware corporation with an established place of business at 5400 Betsy Ross Drive, Santa Clara, California 95054.

4. Upon information and belief, Defendant sells, offers to sell, and/or uses products and services throughout Georgia, including in this judicial district, and introduces infringing

products and services into the stream of commerce knowing that they would be sold and/or used in this judicial district.

JURISDICTION AND VENUE

5. This is an action for patent infringement arising under the Patent Laws of the United States, Title 35 of the United States Code.

6. This Court has subject matter jurisdiction under 28 U.S.C. §§ 1331 and 1338(a).

7. Venue is proper in this judicial district under 28 U.S.C. § 1400(b).

8. This Court has personal jurisdiction over the Defendant under the laws of the State of Georgia, due at least to its substantial business in Georgia and in this judicial district, directly or through intermediaries, including: (i) at least a portion of the infringements 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 the State of Georgia. Venue is proper in this Court pursuant to 28 U.S.C. § 1400(b) on the grounds that Defendant has committed acts of infringement and has a regular and established place of business in this Judicial District, including at 6700 Macon Road, Columbus, GA 31907.

BACKGROUND

Formatting Information for Display Device

9. Harold J. Weber (hereinafter “the ’180 Inventor”) is the inventor of U.S. Patent No. 6,311,180 (“the ’180 patent”). A true and correct copy of the ’180 patent is attached as Exhibit A-1.

10. The ’180 patent resulted from the pioneering efforts of the ’180 Inventor in the area of generating a display document, and more particularly generating a display document to conform to a display device. These efforts resulted in the development of a method and

apparatus for generating a display document that conform to a display device according to the display device and viewer preferences of a user in 2000.

Recognizing Spoken Identifiers

11. David B. Anderson (hereafter “the ’532 Inventor”) the inventor of U.S. Patent No. 6,865,532 (“the ’532 patent”). A true and correct copy of the ’532 patent is attached as Exhibit B-1.

12. The ’532 patent resulted from the pioneering efforts of the ’532 Inventor in the area of voice operated communication devices, and more particularly the area of recognizing spoken identifiers. These efforts resulted in the development of a novel method for recognizing spoken identifiers having predefined grammars.

Delivering Music and Information

13. Alexander C. Chen and Sanjivpal S. Gill (hereinafter “the Inventors”) are the inventors of U.S. Patent Nos. 7,870,088 (“the ’088 patent”); 8,509,397 (“the ’397 patent”); and 10,275,208 (“the ’208 patent”). A true and correct copy of the ’088 patent is attached as Exhibit C-1. A true and correct copy of the ’397 patent is attached as Exhibit D-1. A true and correct copy of the ’208 patent is attached as Exhibit E-1.

14. The ’088 and ’397 patents resulted from the pioneering efforts of the Inventors in the area of communication systems and methods, and specifically to methods and apparatuses for detecting, discovering and delivering music information. These efforts resulted in the development of innovative systems and methods for music detection, discovery and delivery (as of at least February 2000), including at least a method wherein a wireless telephone is configured to: (i) receive ambient music of a song; (ii) digitize the received ambient music to obtain a

sample; (iii) transmit a first signal derived from the sample to a server, wherein the first signal is derived from music of the song (not a signal embedded in the music); (iv) receive a second signal from the server; (v) recover text from the second signal, wherein the recovered text is a title of the song; and (vi) display the recovered text.

COUNT 1 – INFRINGEMENT OF U.S. PATENT NO. 6,311,180

15. The allegations set forth in the foregoing paragraphs are incorporated into this Count.

16. On October 30, 2001, the '180 patent was duly and legally issued by the United States Patent and Trademark Office under the title “Method for mapping and formatting information for a display device”

17. CDN is the assignee and owner of the right, title and interest in and to the '180 patent, including the right to assert all causes of action arising under said patent and the right to any remedies for infringement of it.

18. Upon information and belief, Defendant directly infringed one or more of the claims of the '180 patent during the relevant damages period by using the technology identified in Exhibit A-2 hereto (the “*Accused Display Instrumentalities*”). For example, upon information and belief, Defendant used the *Accused Display Instrumentalities* in the United States.

19. Exemplary infringement analysis showing infringement of claim 1 of the '180 patent is set forth in Exhibit A-2. This infringement analysis is necessarily preliminary, as it is provided in advance of any discovery provided by Defendant with respect to the '180 patent. CDN reserves all rights to amend, supplement and modify this preliminary infringement

analysis. Nothing in the attached chart should be construed as any express or implied contention or admission regarding the construction of any term or phrase of the '180 patent.

20. Upon information and belief, Defendant's use of the *Accused Display Instrumentalities* directly infringed claim 1 the '180 patent during the relevant damages period.

21. The *Accused Display Instrumentalities* infringed at least claim 1 of the '180 patent during the pendency of the '180 patent.

22. Upon information and belief, Defendant has used the *Accused Display Instrumentalities* in an infringing manner since at least 2016.

23. CDN has been harmed by the Defendant's infringing activities.

COUNT 2 – INFRINGEMENT OF U.S. PATENT NO. 6,865,532

24. The allegations set forth in the foregoing paragraphs are incorporated into this Count.

25. On March 8, 2005, the '532 patent was duly and legally issued by the United States Patent and Trademark Office under the title "Method for recognizing spoken identifiers having predefined grammars."

26. CDN is the assignee and owner of the right, title and interest in and to the '532 patent, including the right to assert all causes of action arising under said patent and the right to any remedies for infringement of it.

27. Upon information and belief, Defendant has and continues to directly infringe one or more claims of the '532 patent by using products, specifically one or more of the products identified in Exhibit B-2 hereto (the "*Accused Speech Recognition Instrumentalities*"). For

example, upon information and belief, Defendant at least uses and sells the *Accused Speech Recognition Instrumentalities* in the United States.

28. Exemplary infringement analysis showing infringement of claim 1 of the '532 patent is set forth in Exhibit B-2. This infringement analysis is necessarily preliminary, as it is provided in advance of any discovery provided by Defendant with respect to the '532 patent. CDN reserves all rights to amend, supplement and modify this preliminary infringement analysis. Nothing in the attached chart should be construed as any express or implied contention or admission regarding the construction of any term or phrase of the claims of the '532 patent.

29. Upon information and belief, users of devices containing Defendant's *Accused Speech Recognition Instrumentalities* have and will continue to directly infringe claims 1 '532 patent.

30. Upon information and belief, Defendant had knowledge of the '532 patent at least as early as its receipt of letters dated March 20, 2020 and April 6, 2020 sent to Defendant and identifying a list of CDN patents for which a license may be required, including the '532 patent. The April 5, 2020 letter specifically alleged infringement by Defendant of the '088 patent. Both letters included the '532 patent in a listings of CDN patents as potentially requiring a license for Defendant's continued commercial activities.

31. Defendant's encouragement of others to use the *Accused Speech Recognition Instrumentalities*—knowing that such use, as alleged herein, infringes claims 1 of the '532 patent—constitutes inducement of others under 35 U.S.C. § 271(b). Defendant's encouragement of infringement includes actively advertising, promoting and distributing technical information through its website (and other sources) that the *Accused Speech Recognition Instrumentalities* are

not only configured to speech recognition functionality which, as shown in Exhibit B-2, constitutes an infringement of the '532 patent, but specifically intended for use with other devices to utilize speech recognition functionality not only configured to enable speech recognition but specifically intended for use as a speech recognition tool.

32. Upon information and belief, Defendant is also liable as a contributory infringer of the '532 patent under 35 U.S.C. § 271(c) by offering to sell, selling and/or importing into the United States software especially made to enable the speech recognition functionality which, as shown in Exhibit B-2, constitutes an infringement of the '532 patent. The *Accused Speech Recognition Instrumentalities* are material components for use in practicing the '532 patent and are specifically made and are not a staple article of commerce suitable for substantial non-infringing use.

33. The *Accused Speech Recognition Instrumentalities* infringed and continues to infringe claim 1 of the '532 patent during the pendency of the '532 patent.

34. Upon information and belief, Defendant has used the *Accused Speech Recognition Instrumentalities* in an infringing manner since at least 2016.

35. CDN has been harmed by the Defendant's infringing activities.

COUNT 3 – INFRINGEMENT OF U.S. PATENT NO. 7,870,088

36. The allegations set forth in the foregoing paragraphs are incorporated into this Count.

37. On January 11, 2011, the '088 patent was duly and legally issued by the United States Patent and Trademark Office under the title "System and method for detecting computer port inactivity"

38. CDN is the assignee and owner of the right, title and interest in and to the '088 patent, including the right to assert all causes of action arising under said patent and the right to any remedies for infringement of it.

39. Upon information and belief, Defendant has directly infringed one or more claims of the '088 patent by making, using (e.g., developing, testing, installing or otherwise using) offering to sell, selling, or importing into the United States products, specifically one or more of the products identified in Exhibit C-2 hereto (the "*Accused Music Delivery Technologies*"). For example, upon information and belief, Defendant at least used, sold and offered to sell the *Accused Music Delivery Technologies* in the United States.

40. Exemplary infringement analysis showing infringement of at least claims 1 and 64 of the '088 patent is set forth in Exhibit C-2. This infringement analysis is necessarily preliminary, as it is provided in advance of any discovery provided by Defendant with respect to the '088 patent. CDN reserves all rights to amend, supplement and modify this preliminary infringement analysis. Nothing in the attached chart should be construed as any express or implied contention or admission regarding the construction of any term or phrase of the claims of the '088 patent.

41. Upon information and belief, users of devices containing Defendant's *Accused Music Delivery Technologies* have directly infringe at least claims 1 and 64 of the '088 patent.

42. Upon information and belief, Defendant had knowledge of the '088 patent at least as early as its receipt of letters dated March 20, 2020 and April 6, 2020 sent to Defendant and identifying a list of CDN patents for which a license may be required, including the '088 patent. The April 5, 2020 letter specifically alleged infringement by Defendant of the '088 patent. Both

letters included the '088 patent in a listings of CDN patents as potentially requiring a license for Defendant's continued commercial activities.

43. Defendant's encouragement of others to use the *Accused Music Delivery Technologies*—knowing that such use, as alleged herein, infringes at least claims 1 and 64 of the '088 patent—constitutes inducement of others under 35 U.S.C. § 271(b). Defendant's encouragement of infringement includes actively advertising, promoting and distributing technical information through its website (and other sources) that the *Accused Music Delivery Technologies* are not only configured to enable music recognition functionality which, as shown in Exhibit C-2, constitutes an infringement of the '088 patent, but specifically intended for use with mobile devices to utilize music recognition functionality.

44. Upon information and belief, Defendant is also liable as a contributory infringer of the '088 patent under 35 U.S.C. § 271(c) by offering to sell, selling and/or importing into the United States software especially configured to enable music recognition which, as shown in Exhibit C-2, constitutes an infringement of the '088 patent. The *Accused Music Delivery Technologies* are material components for use in practicing the '088 patent and are specifically made and are not a staple article of commerce suitable for substantial non-infringing use.

45. The *Accused Music Delivery Technologies* infringed at least claims 1 and 64 of the '088 patent during the pendency of the '088 patent.

46. Upon information and belief, Defendant has used the *Accused Music Delivery Technologies* in an infringing manner since at least 2016.

47. CDN has been harmed by the Defendant's infringing activities.

COUNT 4 – INFRINGEMENT OF U.S. PATENT NO. 8,509,397

48. The allegations set forth in the foregoing paragraphs are incorporated into this Count.

49. On August 13, 2013, the '397 patent was duly and legally issued by the United States Patent and Trademark Office under the title “System and method for detecting computer port inactivity”.

50. CDN is the assignee and owner of the right, title and interest in and to the '397 patent, including the right to assert all causes of action arising under said patent and the right to any remedies for infringement of it.

51. Upon information and belief, Defendant has and continues to directly infringe one or more claims 13 and 24 of the '397 patent by making, using (e.g., developing, testing, installing or otherwise using) offering to sell, selling, or importing into the United States products, specifically one or more of the products identified in Exhibit D-2 hereto (the “*Accused Music Delivery Technologies*”). For example, upon information and belief, Defendant at least uses, sells and offers to sell the *Accused Music Delivery Technologies* in the United States.

52. Exemplary infringement analysis showing infringement of at least claims 13 and 24 of the '397 patent is set forth in Exhibit D-2. This infringement analysis is necessarily preliminary, as it is provided in advance of any discovery provided by Defendant with respect to the '397 patent. CDN reserves all rights to amend, supplement and modify this preliminary infringement analysis. Nothing in the attached chart should be construed as any express or implied contention or admission regarding the construction of any term or phrase of the claims of the '397 patent.

53. Upon information and belief, users of devices containing Defendant's *Accused Music Delivery Technologies* have and will continue to directly infringe at least claims 13 and 24 of the '397 patent.

54. Upon information and belief, Defendant had knowledge of the '397 patent at least as early as its receipt of letters dated March 20, 2020 and April 6, 2020 sent to Defendant and identifying a list of CDN patents for which a license may be required, including the '397 patent. The April 5, 2020 letter specifically alleged infringement by Defendant of the '088 patent which is in the same family as and shares a common specification with the '397 patent. Both letters included the '397 patent in a listings of CDN patents as potentially requiring a license for Defendant's continued commercial activities.

55. Defendant's encouragement of others to use the *Accused Music Delivery Technologies*—knowing that such use, as alleged herein, infringes at least claims 13 and 24 of the '397 patent—constitutes inducement of others under 35 U.S.C. § 271(b). Defendant's encouragement of infringement includes actively advertising, promoting and distributing technical information through its website (and other sources) that the *Accused Music Delivery Technologies* are not only configured to enable music recognition functionality which, as shown in Exhibit D-2, constitutes an infringement of the '397 patent, but specifically intended for use with mobile devices to utilize music recognition functionality.

56. Upon information and belief, Defendant is also liable as a contributory infringer of the '397 patent under 35 U.S.C. § 271(c) by offering to sell, selling and/or importing into the United States software especially configured to enable music recognition which, as shown in Exhibit D-2, constitutes an infringement of the '397 patent. The *Accused Music Delivery*

Technologies are material components for use in practicing the '397 patent and are specifically made and are not a staple article of commerce suitable for substantial non-infringing use.

57. The *Accused Music Delivery Technologies* infringed and continues to infringe at least claims 13 and 24 of the '397 patent during the pendency of the '397 patent.

58. Upon information and belief, Defendant has used the *Accused Music Delivery Technologies* in an infringing manner since at least 2016.

59. CDN has been harmed by the Defendant infringing activities.

COUNT 5 – INFRINGEMENT OF U.S. PATENT NO. 10,275,208

60. The allegations set forth in the foregoing paragraphs are incorporated into this Count.

61. On August 13, 2013, the '208 patent was duly and legally issued by the United States Patent and Trademark Office under the title “System and method for detecting computer port inactivity”.

62. CDN is the assignee and owner of the right, title and interest in and to the '208 patent, including the right to assert all causes of action arising under said patent and the right to any remedies for infringement of it.

63. Upon information and belief, Defendant has and continues to directly infringe one or more claims of the '208 patent by making, using (e.g., developing, testing, installing or otherwise using) offering to sell, selling, or importing into the United States products, specifically one or more of the products identified in Exhibit E-2 hereto (the “*Accused Music Delivery Technologies*”). For example, upon information and belief, Defendant at least uses, sells and offers to sell the *Accused Music Delivery Technologies* in the United States.

64. Exemplary infringement analysis showing infringement of at least claim 1 of the '208 patent is set forth in Exhibit E-2. This infringement analysis is necessarily preliminary, as it is provided in advance of any discovery provided by Defendant with respect to the '208 patent. CDN reserves all rights to amend, supplement and modify this preliminary infringement analysis. Nothing in the attached chart should be construed as any express or implied contention or admission regarding the construction of any term or phrase of the claims of the '208 patent.

65. Upon information and belief, users of devices containing Defendant's *Accused Music Delivery Technologies* have and will continue to directly infringe at least claim 1 of the '208 patent.

66. Upon information and belief, Defendant had knowledge of the '208 patent at least as early as its receipt of letters dated March 20, 2020 and April 6, 2020 sent to Defendant and identifying a list of CDN patents for which a license may be required, including the '208 patent. The April 5, 2020 letter specifically alleged infringement by Defendant of the '088 patent which is in the same family as and shares a common specification with the '208 patent. Both letters included the '208 patent in a listings of CDN patents as potentially requiring a license for Defendant's continued commercial activities.

67. Defendant's encouragement of others to use the *Accused Music Delivery Technologies*—knowing that such use, as alleged herein, infringes at least claim 1 of the '208 patent—constitutes inducement of others under 35 U.S.C. § 271(b). Defendant's encouragement of infringement includes actively advertising, promoting and distributing technical information through its website (and other sources) that the *Accused Music Delivery Technologies* are not only configured to enable music recognition functionality which, as shown in Exhibit E-2,

constitutes an infringement of the '208 patent, but specifically intended for use with mobile devices to utilize music recognition functionality.

68. Upon information and belief, Defendant is also liable as a contributory infringer of the '208 patent under 35 U.S.C. § 271(c) by offering to sell, selling and/or importing into the United States software especially configured to enable music recognition which, as shown in Exhibit E-2, constitutes an infringement of the '208 patent. The *Accused Music Delivery Technologies* are material components for use in practicing the '208 patent and are specifically made and are not a staple article of commerce suitable for substantial non-infringing use.

69. The *Accused Music Delivery Technologies* infringed at least claim 1 of the '208 patent during the pendency of the '208 patent.

70. Upon information and belief, Defendant has used the *Accused Music Delivery Technologies* in an infringing manner since at least 2016.

71. CDN has been harmed by the Defendant infringing activities.

JURY DEMAND

Pursuant to Rule 38 of the Federal Rules of Civil Procedure, CDN demands a trial by jury on all issues triable as such.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff CDN demands judgment for itself and against Defendant as follows:

- A. An adjudication that the Defendant has infringed the patents asserted herein;
- B. An award of damages to be paid by Defendant adequate to compensate CDN for Defendant's past infringement of the patents asserted herein, and any continuing or future

infringement through the date such judgment is entered, including interest, costs, expenses and an accounting of all infringing acts including, but not limited to, those acts not presented at trial;

C. A declaration that this case is exceptional under 35 U.S.C. § 285, and an award of CDN's reasonable attorneys' fees; and

D. An award to CDN of such further relief at law or in equity as the Court deems just and proper.

Dated: December 22, 2022

/s/ James M. Lennon

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