IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

VB ASSETS, LLC,
Plaintiff,
v. Civil Action No. ______
SOUNDHOUND AI, INC.,
Defendant.

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff VB Assets, LLC ("Plaintiff" or "VoiceBox") brings this Complaint against Defendant SoundHound AI, Inc. ("Defendant" or "SoundHound AI") and alleges, on personal knowledge as to its own actions and on information and belief as to the actions of others, as follows:

NATURE OF THE ACTION

1. This is a civil action under 35 U.S.C. § 271 for SoundHound AI's infringement of VoiceBox's U.S. Patent Nos. 8,073,681 (the "681 patent"); 11,222,626 ("the '626 patent"); 8,886,536 ("the '536 patent"); 9,269,097 ("the '097 patent"); 9,502,025 ("the '025 patent"); and 11,087,385 ("the '385 patent") (collectively, "the VoiceBox Patents").

2. VoiceBox, through its predecessor companies VoiceBox Technologies Corporation and VoiceBox Technologies, Inc. (collectively, "VoiceBox Technologies"), pioneered voice-based natural language understanding and artificial intelligence technology.

3. In recognition of their many innovations, the U.S. Patent & Trademark Office awarded and issued the VoiceBox Patents.

4. The innovations claimed in the VoiceBox Patents are fundamental to the development of voice assistants.

PARTIES

5. VoiceBox is a limited liability company organized under the laws of Delaware and has its principal place of business at 1229A 120th Avenue NE, Bellevue, WA 98005.

6. VoiceBox is the owner of the entire right, title, and interest in each VoiceBox Patent, including the right to sue for and collect past, present, and future damages and to seek and obtain injunctive or any other relief for infringement.

7. On information and belief, SoundHound AI is a Delaware corporation with an established place of business at 5400 Betsy Ross Drive, Santa Clara, CA 95054.

JURISDICTION AND VENUE

8. This action arises under the Patent Laws of the United States, 35 U.S.C. § 1 *et seq.*

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

10. SoundHound AI is subject to personal jurisdiction in this District by virtue of, *inter alia*, its residence and conduct of business in this District.

11. Venue is proper in this District pursuant to 28 U.S.C. §§ 1391 and 1400(b)by virtue of, *inter alia*, SoundHound's residence in this District.

BACKGROUND

12. In 2001, three brothers—Mike, Rich, and Bob Kennewick—founded VoiceBox Technologies in Seattle, WA to bring voice-based natural language understanding ("NLU") to a wide array of computer applications. They recognized that the typical computer speech-recognition systems forced human operators to adhere to a limited number of rigid speech prompts. These rigid prompts limited how systems were used and inhibited the widespread adoption of speech-recognition systems. The brothers believed that VoiceBox Technologies could become the first company to enable people to naturally and effectively interact with computer speech systems.

13. From its inception, VoiceBox Technologies engaged in intense research efforts to develop its NLU technology.

14. VoiceBox Technologies' development efforts were successful. The company achieved a significant milestone when it developed a pioneering voice recognition prototype called "Cybermind." As demonstrated on a local Seattle news segment, Cybermind was a voice-controlled speaker that could provide weather, recipes, sports scores, calendar updates, or play a song.¹

¹ https://www.youtube.com/watch?v=DDcRyPnvWhw



Cybermind Prototype featured on King5 News

15. VoiceBox Technologies' groundbreaking work caught the attention of the industry. Toyota hired VoiceBox Technologies to build a sophisticated NLU speech interface for its Lexus line of vehicles. VoiceBox Technologies built the voice and NLU capability for Toyota's award-winning Entune multimedia system.²

16. As part of the development effort for the Lexus NLU interface, VoiceBox Technologies demonstrated a personal assistant called "Alexus" that showcased the power of its conversational voice technology.

17. VoiceBox Technologies further developed applications of its technology for use in smart speakers, smartphones, smart TVs, computers, tablets, e-readers, and personal navigation devices.

18. By January 2012, VoiceBox Technologies was a leader in NLU and conversational voice technology. VoiceBox Technologies' clients included TomTom, Pioneer, Chrysler, Dodge, and Magellan.

² See, e.g., VoiceBox and Toyota Form Strategic Relationship to Deliver In-Car Voice Technology Innovations, Jan. 9, 2012, available at https://www.businesswire.com/news/home/20120109006490/en/VoiceBox-and-Toyota-Form-Strategic-Relationship-to-Deliver-In-car-Voice-Technology-Innovations. 19. In 2013, the Institute of Electrical and Electronics Engineers (IEEE) ranked VoiceBox Technologies in the Top 15 for patent power in the computer software industry.³

20. As illustrated in the following company photograph, VoiceBox Technologies built a large team of engineers, scientists, linguists, and other personnel to develop its technology.



VoiceBox Technologies Company Photograph

21. Over time, however, VoiceBox's patented technology was misappropriated by several companies, including SoundHound AI.

22. In 2018, Mike Kennewick sold VoiceBox Technologies to Nuance Communications, Inc., but maintained ownership of the VoiceBox Patents.

THE VOICEBOX PATENTS

23. The inventions claimed in the VoiceBox Patents are groundbreaking improvements in voice recognition and NLU technology.

³ See VoiceBox Cited for 'Patent Power' and Innovation, Jan. 6, 2014, available at https://www.businesswire.com/news/home/20140106006780/en/VoiceBox-Cited-for-%E2%80%98Patent-Power%E2%80%99-and-Innovation.

The '681 and '626 patents

24. The '681 patent, entitled "SYSTEM AND METHOD FOR A COOPERATIVE CONVERSATIONAL VOICE USER INTERFACE," was duly and legally issued by the United States Patent & Trademark Office on December 6, 2011, and named Larry Baldwin, Tom Freeman, Michael Tjalve, Blane Ebersold, and Chris Weider as inventors. A true and correct copy of the '681 patent is attached hereto as Exhibit A.

25. The '681 patent claims, among other things, a system for providing a cooperative conversational voice user interface, comprising a voice input device configured to receive an utterance during a current conversation with a user, wherein the utterance includes one or more words that have different meanings in different contexts; and a conversational speech engine, wherein the conversational speech engine includes one or more processors configured to: accumulate short-term shared knowledge about the current conversation, wherein the short-term shared knowledge includes knowledge about the utterance received during the current conversation; accumulate long-term shared knowledge about the user, wherein the long-term shared knowledge includes knowledge about one or more past conversations with the user; identify a context associated with the utterance from the short-term shared knowledge and the long-term shared knowledge; establish an intended meaning for the utterance within the identified context to disambiguate an intent that the user had in speaking the one or more words that have the different meanings in the different contexts; and generate a grammatically or syntactically adapted response to the utterance based on the intended meaning established within the identified context (claim 25).

26. The '626 patent, entitled "SYSTEM AND METHOD FOR A COOPERATIVE CONVERSATIONAL VOICE USER INTERFACE," was duly and legally issued by the United States Patent & Trademark Office on January 11, 2022, and named Larry Baldwin, Tom Freeman, Michael Tjalve, Blane Ebersold, and Chris Weider as inventors. A true and correct copy of the '626 patent is attached hereto as Exhibit B.

27. The '626 patent claims, among other things, a system for facilitating natural language system responses utilizing a context stack generated based on multiple prior natural language utterances received, the system comprising: one or more physical processors programmed with one or more computer program instructions which, when executed, configure the one or more physical processors to: track a series of contexts respectively identified for a series of natural language utterances received by the system during a current conversation, the series of contexts comprising at least a first context identified for a first utterance at a first time and a second context identified for a second utterance at a second time after the first time; generate a context stack based on the tracked contexts comprising the series of contexts in reverse chronological order of a time of identification by the computer system, wherein the second context is listed before the first context; receive a third natural language utterance from an input device as part of the current conversation at a third time after the second time; determine whether the third natural language utterance corresponds to one or more of the series of contexts in the generated context stack by comparing the third natural language utterance to one or more of the series of contexts in the order the series of contexts are listed in the generated context stack; and responsive to a determination that the third natural language utterance corresponds to one or more of the series of contexts in the generated context stack, interpret the third natural language utterance using the corresponding one or more contexts (claim 10).

28. Voice user interface systems in existence before the inventions of the '681 and '626 patents were typically of the "Command and Control" type. Such systems used verbal menus to restrict information that a person can provide at a given point. For example, the voice system would present the list of available options either verbally and/or on a screen. The user could then respond by speaking the menu item. Such a system could include numerous menus that the user would have to get through to convey the desired information to the system and/or to cause the system to take the desired action. This type of system often failed to provide a seamless conversational experience.

29. The inventors of the '681 and '626 patents recognized a significant problem with the Command and Control systems in that users would have to memorize exact words and phrases to interact with the system. This required significant learning because the user had to know which words and phrases to use in order to make a request of a particular Command and Control voice user interface system. Additionally, the process of stepping through menus could be time-consuming and, in some cases, would dissuade a user from utilizing the voice-based system.

30. To overcome the shortcoming of prior art systems, the inventors provided a solution that used, among other things, a "conversational speech engine" or similar technology to interpret a voice input. The conversational speech engine—which was not well-understood, routine, or conventional—could be implemented locally on a user device or remotely on a server. In certain embodiments, the conversational speech engine can

include a conversational language processor and/or a context determination process. The conversational speech engine communicates with databases to generate an adaptive conversational response.

31. Through the use of a conversational speech engine, the '681 and '626 patents advantageously rely on conversational responses which, in some embodiments, use short-term, and in some embodiments long-term, shared knowledge about user utterances to determine a context for the request, infer additional information about a request, and provide an adaptive conversational response. For example, Figure 1 shows an architecture for the conversational speech engine of the cooperative conversational voice user interface.

32. The inventors were thereby able to improve the functioning of voice user interface systems which improved the operation of those systems in an unconventional manner. For example, the innovations in the '681 and '626 patents allowed a user to converse naturally with a voice user interface system instead of "dumbing down" their requests to match the simple sets of instructions that existing Command and Control systems required. In this regard, one of the problems faced by the inventors was necessarily rooted in voice user interface technology specifically arising in the realm of voice user interface systems. The commercial success and industry accolades provide objective evidence as to the VoiceBox Patents' innovative approach through the use of unconventional technology.

33. The prior art in the field of voice user interfaces neither taught accumulating short-term knowledge nor expressed any appreciation for the substantial advantages associated with utilizing this shared knowledge for various purposes in a conversational speech engine. Such uses include to identify context, infer additional information about an

utterance that contains insufficient information to complete a request, establish an intended meaning for an utterance within the context based on the additional information inferred about the utterance, and generate a response based on the intended meaning established within the identified context. In this regard, accumulating and using both short-term and long-term knowledge was not well-understood, routine, or conventional and stands in sharp contrast to the conventional and routine approach of Command and Control systems that require a user to use rigid menus to establish context before making a request.

The '536 and '097 patents

34. The '536 patent, entitled "SYSTEM AND METHOD FOR DELIVERING TARGETED ADVERTISEMENTS AND TRACKING ADVERTISEMENT INTERACTIONS IN VOICE RECOGNITION CONTEXTS," was duly and legally issued by the United States Patent & Trademark Office on November 11, 2014, and named Tom Freeman and Mike Kennewick as inventors. A true and correct copy of the '536 patent is attached hereto as Exhibit C.

35. The '536 patent claims, among other things, a system for providing promotional content related to one or more natural language utterances and/or responses, the system comprising: one or more physical processors programmed to execute one or more computer program instructions which, when executed, cause the one or more physical processors to: receive a first natural language utterance; provide a response to the first natural language utterance; receive a second natural language utterance relating to the first natural language utterance; perform speech recognition to recognize one or more words of the second natural language utterance; determine domain information for the one or more

recognized words based on the first natural language utterance; process, based on the domain information, the one or more recognized words to determine an interpretation of the second natural language utterance, wherein processing the one or more recognized words comprises: providing the one or more recognized words to a first domain agent associated with a first domain and a second domain agent associated with a second domain; obtaining a first interpretation of the second natural language utterance from the first domain agent; obtaining a second interpretation of the second natural language utterance from the second domain agent; and determining the interpretation based on one or more of the first interpretation or the second interpretation; determine promotional content based on the interpretation; and present the promotional content to a user (claim 32).

36. The '097 patent, entitled "SYSTEM AND METHOD FOR DELIVERING TARGETED ADVERTISEMENTS AND/OR NATURAL LANGUAGE PROCESSING BASED ON ADVERTISEMENTS," was duly and legally issued by the United States Patent & Trademark Office on February 23, 2016, and named Tom Freeman and Mike Kennewick as inventors. A true and correct copy of the '097 patent is attached hereto as Exhibit D.

37. The '097 patent claims, among other things, a system providing natural language processing based on advertisements, the system comprising: one or more physical processors programmed with computer program instructions which, when executed, cause the one or more physical processors to: provide an advertisement associated with a product or service for presentation to a user; receive a natural language utterance of the user; and interpret the natural language utterance based on the advertisement and, responsive to the

existence of a pronoun in the natural language utterance, determine whether the pronoun refers to one or more of the product or service or a provider of the product or service (Claim 23).

38. Before the inventions of the '536 and '097 patents, voice user interface systems were typically difficult to use, in part, because they had complex human to machine interfaces. Such systems forced a user to navigate through a series of menus and provide a series of user inputs to perform a relatively simple task.

39. The inventors recognized significant problems with existing systems. The systems did not allow a user to directly issue a request without having to memorize specific syntaxes, words, phrases, concepts, semantic indicators, or other keywords/qualifiers. Similarly, when users were uncertain of particular needs, many existing systems did not engage the user in a productive, cooperative dialogue to resolve requests and advance a conversation. Instead, many existing speech interfaces forced users to use a fixed set of commands or keywords to communicate requests in ways that systems would understand. Using existing voice user interfaces, there was virtually no option for dialogue between the user and the system to satisfy mutual goals.

40. The inventors recognized other problems with existing systems. The lack of adequate voice user interfaces resulted in missed opportunities for providing valuable and relevant information to users. Not only did this potentially leave user requests unresolved, in certain instances, providers of goods and services may have lost out on potential business. In an increasingly global marketplace, where marketers are continually looking for new and effective ways to reach consumers, the problems with existing voice user interfaces left a

large segment of consumer demand unfulfilled. Furthermore, existing techniques for marketing, advertising, or otherwise calling consumers to action failed to effectively utilize voice-based information, which is one of the most natural, intuitive methods of human interaction.

41. The inventors were able to improve the functioning of voice user interface systems and thereby improve the operation of those systems in an unconventional manner. For example, the innovations in the '536 and '097 patents allowed a user to directly issue natural language requests and engage in a productive, cooperative dialogue to resolve requests and advance a conversation. The '536 patent employs domain agents to help determine the appropriate context of a user request and enable the system to provide accurate responses. In this regard, one of the problems faced by the inventors was necessarily rooted in voice user interface technology specifically arising in the realm of voice user interface systems.

42. Conventional wisdom in shopping was keenly focused on menu-based systems. Indeed, web stores were (and still are) based on product categorizations. The typical user experience involves going through a series of menus to narrow down the particular product. As such, there was particular focus and motivation to emulate the menus in a speech-based system. That is, for the computer to read options which the end-user selects before moving to the next menu. The '536 and '097 patents represent a dramatic departure by selecting content based on domain information and context.

The '025 patent

43. The '025 patent, entitled "SYSTEM AND METHOD FOR PROVIDING A NATURAL LANGUAGE CONTENT DEDICATION SERVICE," was duly and legally issued by the United States Patent & Trademark Office on November 22, 2016, and named Mike Kennewick and Lynn Elise Armstrong as inventors. A true and correct copy of the '025 patent is attached hereto as Exhibit E.

44. The '025 patent claims, among other things, a system for providing a natural language content dedication service, comprising: one or more processors; and one or more non-transitory computer readable mediums storing executable instructions that when executed by the one or more processors cause the one or more processors to: receive a first utterance that includes a natural language utterance; determine, based on processing of the first utterance by a speech recognition engine, one or more words or phrases of the first utterance; provide the one or more words or phrases as an input to a conversational language processor; interpret the first utterance, at the conversational language processor, based on the one or more words or phrases; identify, based on the interpretation of the first utterance, content to dedicate to a recipient; initiate, based on the identified content, a dedication to the recipient; receive a second utterance to be associated with the dedication; determine, based on a processing of the second utterance by the speech recognition engine, one or more words or phrases of the second utterance; provide the one or more words or phrases of the second utterance as textual annotations within metadata of the content; and send information to enable the recipient to access the content and the second utterance (Claim 1).

45. Voice user interface systems in existence before the invention of the '025 patent were typically of the Command and Control type. Such systems used verbal menus to restrict information that a person can provide at a given point. For example, the voice system would present the list of available options either verbally and/or on a screen. The user could then respond by speaking the menu item. Such a system could include numerous menus that the user would have to get through in order to convey the desired information to the system and/or to cause the system to take the desired action. The inventors recognized a significant problem with the Command and Control systems that caused user frustration or dissatisfaction because of inaccurate speech recognition. Similarly, by forcing a user to provide pre-established commands or keywords to communicate requests in ways that a system can understand, existing voice user interfaces did not effectively engage the user in a productive, cooperative dialogue to resolve requests and advance a conversation towards a satisfactory goal (e.g., when users may be uncertain of particular needs, available information, device capabilities, etc.). As such, existing voice user interfaces tended to suffer from various drawbacks, including significant limitations on engaging users in a dialogue in a cooperative and conversational manner.

46. Additionally, existing voice user interface systems were constrained to a finite set of applications or devices, limiting users' ability to access a wide array of applications and services across different devices as needed. Users often had to carry multiple devices to fulfill various needs, but the voice user interface systems did not effectively facilitate access to services and content across these disparate devices. There was a notable absence of an integrated environment that enabled users to request content or

services associated with virtually any device or network, thereby restricting the availability of information and device interaction mechanisms. When users needed to perform a function on a device but were unsure how to do so, they could not simply use natural language to make the request. This resulted in simple functions becoming cumbersome and tedious. This could be illustrated by the example of purchasing a new ringtone for a mobile phone, which involved navigating through several menus and pressing numerous buttons. Additionally, the existing voice user interface systems did not support cooperative multimodal interactions, which would allow users to engage with their devices in an intuitive, natural, and efficient manner. By addressing these constraints, the invention aims to enhance the user experience through advanced voice recognition and natural language processing capabilities, enabling more seamless and integrated interactions with electronic devices.

47. To overcome the shortcoming of prior art systems, the inventors provided a solution that provided a system and method for providing a natural language content dedication service operating in a voice services environment that can receive multi-modal natural language device interactions. In particular, providing the natural language content dedication service may generally include a request to dedicate content, identifying the content requested for dedication from natural language utterances, processing natural language to customize the content for recipients of the dedications, and delivering the customized content to the recipients of the dedications.

48. The advantages of the invention include providing a natural language content dedication service that operates in a voice services environment. The system can detect

interactions that include content dedication requests, identify the requested content from natural language utterances, process transactions, and customize the content for recipients. Users can engage in natural language dialogues to dedicate content, process transactions, and customize the content, all seamlessly integrated across various devices and domains.

49. A skilled artisan would not consider the claim limitations of the '025 patent, whether alone or in combination, to recite well-understood, routine, or conventional concepts.

The '385 patent

50. The '385 patent, entitled "VOICE COMMERCE," was duly and legally issued by the United States Patent & Trademark Office on August 10, 2021, and named Mike Kennewick as inventor. A true and correct copy of the '385 patent is attached hereto as Exhibit F.

51. The '385 patent claims, among other things, a system for providing voice commerce, the system comprising: one or more physical processors programmed with computer program instructions which, when executed, cause the one or more physical processors to: receive a single first user input comprising a natural language utterance; provide the natural language utterance as an input to a speech recognition engine; obtain one or more words or phrases recognized from the natural language utterance as an output of the speech recognition engine; search one or more databases of products or services based on the one or more words or phrases; select, without further user input other than the single first user input, a product or service from the database to be purchased based on the search; receive a second user input indicating confirmation by a user to complete a purchase

transaction of the selected product or service; and complete, without further user input after the receipt of the second user input, a purchase transaction of the selected product or service (Claim 16).

52. Online shopping systems in existence before the inventions of the '385 patent typically required a user to browse a website to locate a product, make payment, and have the product delivered.

53. The inventor of the '385 patent recognized a significant problem with such systems in that a user must search a website in order to locate a product or service to be purchased and fill out numerous payment and shipping forms to complete checkout. This problem was exacerbated on a mobile electronic device because such devices typically have small screens and keyboards making it hard for the user to search for the product or service to purchase and input payment and shipping information.

54. In certain embodiments, the '385 patent advantageously provides a voice commerce system with a voice user interface for online shopping. For example, Figure 1 shows an architecture for the voice commerce system. The voice commerce system includes user input processing instructions 122, which may comprise a speech recognition engine and a natural language processing engine. Figure 2 shows a system for facilitating natural language processing for the voice commerce system including a speech recognition engine and a natural language processing engine.

55. The '385 patent claims and describes a system that advantageously determines a product or service to be purchased on behalf of the user based on a natural language utterance. To do so, the system receives a natural language utterance and uses a

speech recognition engine to recognize words and phrases from the natural language utterance. An example of this speech recognition engine is shown in Figure 2 as the Speech Recognition Engine 220. From the words and phrases the system identifies a context and determines a product or service to be purchased without further user input identifying a product or service. Exemplary components for performing this natural language processing are the Natural Language Processing Engine 230 shown in Figure 2 and the Transaction Preparation Instructions 124 shown in Figure 1.

56. By providing this innovation, the inventor was able to improve the functioning of voice user interfaces for online shopping systems thereby improving the operation of those systems in an unconventional manner. For example, the innovations in the '385 patent determine a product or service to be purchased based on a natural language utterance. This distinguishes the '385 patent from existing online shopping systems that required a user to search a website to locate a product or service to be purchased. In this regard, one of the problems faced by the inventors was necessarily rooted in online shopping technology specifically arising in the realm of online shopping.

57. The system has a further advantage in that it prepares and completes a transaction without further user input identifying a product or service, payment information, and/or shipping information. The system may obtain payment information with which to pay for the product or service without further user input identifying payment information. The system obtains shipping information with which to deliver the product or service without further user input identifying a product or service without further user input identifying a product or service without further user input identifying payment information.

product or service, payment information, and/or shipping information. An exemplary component for performing the above is the checkout management instructions 126 shown in Figure 1 of the '385 patent.

58. In doing so, the inventor was able to improve the functioning of online shopping and voice user interface systems thereby improving the operation of those systems in an unconventional manner. For example, the innovations in the '385 patent prepare and complete a transaction without further user input identifying a product or service, payment information, or shipping information. This distinguishes the '385 patent from existing online shopping systems that required a user to search for a product or service and fill out numerous payment and shipping forms to complete checkout. In this regard, one of the problems faced by the inventors was necessarily rooted in voice processing technology specifically arising in the realm of online shopping.

59. During prosecution of the '385 patent, the examiner rejected numerous application claims as being unpatentable over Cohen (US 6,859,776) and Kinsey (US 2014/0136259). In response, the applicant argued that "Cohen fails to teach or suggest searching a database of products or services – it simply discloses stored words and dictionaries. Further, in the latter portion cited by the Examiner, Cohen discloses a series of queries and answers used to, for example, select a flight, that is quite different from the claimed invention. The claimed invention selects a product or service from a database based on *single user input* (the claimed 'single first user input'), without the further user input."

limitations. The PTO eventually granted the claims of the '385 patent, finding them novel and non-obvious over Cohen, Kinsey, and other cited references.

61. Additionally, conventional wisdom was that to complete an online purchase the user would either have to provide a shipping address or, at minimum, affirmatively select a predefined address. While this approach was perhaps feasible in the context of a visual user interface, the inventor recognized that it was an unnecessary and distracting step in the context of voice-controlled purchase transactions. Therefore, the '385 patent requires "completing . . . without further user input after the receipt of the second user input, a purchase transaction of the selected product or service." In some embodiments, the '385 patent further requires "obtaining . . . shipping information with which to deliver the selected product or service, wherein the shipping information specifies a name or address of a recipient to which the selected product or service is to be delivered after the selected product or service is purchased, and wherein the purchase transaction is completed based on the shipping information without receiving confirmation of the shipping information by the user."

62. A skilled artisan would not consider the claim limitations of the '385 patent – either alone or in combination – to recite well-understood, routine or conventional concepts. Instead, a person of ordinary skill in the art would recognize that the claim limitations of the '385 patent are directed to the inventive concepts described in the specification and prosecution history.

COUNT I: INFRINGEMENT OF THE '681 PATENT

63. VoiceBox incorporates the foregoing paragraphs as if set forth herein.

64. SoundHound AI, on its own or by conduct attributable to it, has directly infringed, and continues to infringe, the '681 patent by making, using, selling, offering for sale, and/or importing into the United States, SoundHound Voice AI Systems,⁴ which infringe one or more claims of the '681 patent in violation of 35 U.S.C. § 271(a). Exemplary evidence of SoundHound's infringement of at least one claim of the '681 patent is set forth in Exhibit G. VoiceBox anticipates identifying additional asserted claims in accordance with the case schedule.

65. SoundHound AI has been and is inducing infringement of the '681 patent by actively and knowingly inducing others to make, use, sell, offer for sale, and/or import SoundHound Voice AI Systems, which infringe one or more claims of the '681 patent in

⁴ The accused SoundHound Voice AI Systems include the SoundHound Voice AI platform, including as used in SoundHound's Chat AI app, Music app, and enterprise solutions (such as Automotive, Hospitality, and Restaurants), either as stand-alone software or as software installed on a device with memory and processing capability.

violation of 35 U.S.C. § 271(b). On information and belief, SoundHound AI markets software implementing the SoundHound Voice AI Systems and designs the SoundHound Voice AI Systems to operate in an infringing manner when installed in or on client / customer devices and systems (e.g., as shown in the attached claim chart). SoundHound AI causes the SoundHound Voice AI Systems to be made available through its own website, and designs customized solutions for clients based on the SoundHound Voice AI platform. SoundHound AI profits from third parties that implement SoundHound AI Systems within their products. SoundHound AI instructs clients and users to use SoundHound AI Systems in an infringing manner and provides technical support and instruction for such use.

66. SoundHound AI has been and is continuing to contributorily infringe the '681 patent by selling or offering to sell SoundHound AI Voice Systems, knowing them to be especially made or especially adapted for practicing the invention of the '681 patent and not a staple article or commodity of commerce suitable for substantial non-infringing use in violation of 35 U.S.C. § 271(c). On information and belief, SoundHound AI writes software for SoundHound Voice AI Systems and designs SoundHound Voice AI Systems to operate in an infringing manner when installed in or on client / user devices and systems. SoundHound AI causes SoundHound Voice AI Systems to be made available through its own website, and designs customized solutions for clients based on the SoundHound Voice AI platform. On information and belief, SoundHound AI also profits from third parties who incorporate SoundHound Voice AI Systems in their products. SoundHound AI instructs users to use SoundHound Voice AI Systems in an infringing manner and provides technical support for such use.

67. VoiceBox and its predecessors-in-interest have satisfied the marking requirements of 35 U.S.C. § 287 with respect to the '681 patent to the extent that any patented article is subject to a duty to mark.

68. SoundHound AI's infringement of the '681 patent has caused and will continue to cause VoiceBox damages for which VoiceBox is entitled to compensation pursuant to 35 U.S.C. § 284.

COUNT II: INFRINGEMENT OF THE '626 PATENT

69. VoiceBox incorporates the foregoing paragraphs as if set forth herein.

70. SoundHound AI, on its own or by conduct attributable to it, has directly infringed, and continues to infringe, the '626 patent by making, using, selling, offering for sale, and/or importing into the United States, SoundHound Voice AI Systems, which infringe one or more claims of the '626 patent in violation of 35 U.S.C. § 271(a). Exemplary evidence of SoundHound's infringement of at least one claim of the '626 patent is set forth in Exhibit H. VoiceBox anticipates identifying additional asserted claims in accordance with the case schedule.

71. SoundHound AI has been and is inducing infringement of the '626 patent by actively and knowingly inducing others to make, use, sell, offer for sale, and/or import SoundHound Voice AI Systems, which infringe one or more claims of the '626 patent in violation of 35 U.S.C. § 271(b). On information and belief, SoundHound AI markets software implementing the SoundHound Voice AI Systems and designs the SoundHound Voice AI Systems to operate in an infringing manner when installed in or on client / customer devices and systems (e.g., as shown in the attached claim chart). SoundHound AI

causes the SoundHound Voice AI Systems to be made available through its own website, and designs customized solutions for clients based on the SoundHound Voice AI platform. SoundHound AI profits from third parties that implement SoundHound AI Systems within their products. SoundHound AI instructs clients and users to use SoundHound AI Systems in an infringing manner and provides technical support and instruction for such use.

72. SoundHound AI has been and is continuing to contributorily infringe the '626 patent by selling or offering to sell SoundHound AI Voice Systems, knowing them to be especially made or especially adapted for practicing the invention of the '626 patent and not a staple article or commodity of commerce suitable for substantial non-infringing use in violation of 35 U.S.C. § 271(c). On information and belief, SoundHound AI writes software for SoundHound Voice AI Systems and designs SoundHound Voice AI Systems to operate in an infringing manner when installed in or on client / user devices and systems. SoundHound AI causes SoundHound Voice AI Systems to be made available through its own website, and designs customized solutions for clients based on the SoundHound Voice AI platform. On information and belief, SoundHound AI also profits from third parties who incorporate SoundHound Voice AI Systems in their products. SoundHound AI instructs users to use SoundHound Voice AI Systems in an infringing manner and provides technical support for such use.

73. VoiceBox and its predecessors-in-interest have satisfied the marking requirements of 35 U.S.C. § 287 with respect to the '626 patent to the extent that any patented article is subject to a duty to mark.

74. SoundHound AI's infringement of the '626 patent has caused and will continue to cause VoiceBox damages for which VoiceBox is entitled to compensation pursuant to 35 U.S.C. § 284.

COUNT III: INFRINGEMENT OF THE '536 PATENT

75. VoiceBox incorporates the foregoing paragraphs as if set forth herein.

76. SoundHound AI, on its own or by conduct attributable to it, has directly infringed, and continues to infringe, the '536 patent by making, using, selling, offering for sale, and/or importing into the United States, SoundHound Voice AI Systems, which infringe one or more claims of the '536 patent in violation of 35 U.S.C. § 271(a). Exemplary evidence of SoundHound's infringement of at least one claim of the '536 patent is set forth in Exhibit I. VoiceBox anticipates identifying additional asserted claims in accordance with the case schedule.

77. SoundHound AI has been and is inducing infringement of the '536 patent by actively and knowingly inducing others to make, use, sell, offer for sale, and/or import SoundHound Voice AI Systems, which infringe one or more claims of the '536 patent in violation of 35 U.S.C. § 271(b). On information and belief, SoundHound AI markets software implementing the SoundHound Voice AI Systems and designs the SoundHound Voice AI Systems to operate in an infringing manner when installed in or on client / customer devices and systems (e.g., as shown in the attached claim chart). SoundHound AI causes the SoundHound Voice AI Systems to be made available through its own website, and designs customized solutions for clients based on the SoundHound Voice AI platform. SoundHound AI profits from third parties that implement SoundHound AI Systems within

their products. SoundHound AI instructs clients and users to use SoundHound AI Systems in an infringing manner and provides technical support and instruction for such use.

78. SoundHound AI has been and is continuing to contributorily infringe the '536 patent by selling or offering to sell SoundHound AI Voice Systems, knowing them to be especially made or especially adapted for practicing the invention of the '536 patent and not a staple article or commodity of commerce suitable for substantial non-infringing use in violation of 35 U.S.C. § 271(c). On information and belief, SoundHound AI writes software for SoundHound Voice AI Systems and designs SoundHound Voice AI Systems to operate in an infringing manner when installed in or on client / user devices and systems. SoundHound AI causes SoundHound Voice AI Systems to be made available through its own website, and designs customized solutions for clients based on the SoundHound Voice AI platform. On information and belief, SoundHound AI also profits from third parties who incorporate SoundHound Voice AI Systems in their products. SoundHound AI instructs users to use SoundHound Voice AI Systems in an infringing manner and provides technical support for such use.

79. VoiceBox and its predecessors-in-interest have satisfied the marking requirements of 35 U.S.C. § 287 with respect to the '536 patent to the extent that any patented article is subject to a duty to mark.

80. SoundHound AI's infringement of the '536 patent has caused and will continue to cause VoiceBox damages for which VoiceBox is entitled to compensation pursuant to 35 U.S.C. § 284.

COUNT IV: INFRINGEMENT OF THE '097 PATENT

81. VoiceBox incorporates the foregoing paragraphs as if set forth herein.

82. SoundHound AI, on its own or by conduct attributable to it, has directly infringed, and continues to infringe, the '097 patent by making, using, selling, offering for sale, and/or importing into the United States, SoundHound Voice AI Systems, which infringe one or more claims of the '097 patent in violation of 35 U.S.C. § 271(a). Exemplary evidence of SoundHound's infringement of at least one claim of the '097 patent is set forth in Exhibit J. VoiceBox anticipates identifying additional asserted claims in accordance with the case schedule.

83. SoundHound AI has been and is inducing infringement of the '097 patent by actively and knowingly inducing others to make, use, sell, offer for sale, and/or import SoundHound Voice AI Systems, which infringe one or more claims of the '097 patent in violation of 35 U.S.C. § 271(b). On information and belief, SoundHound AI markets software implementing the SoundHound Voice AI Systems and designs the SoundHound Voice AI Systems to operate in an infringing manner when installed in or on client / customer devices and systems (e.g., as shown in the attached claim chart). SoundHound AI causes the SoundHound Voice AI Systems to be made available through its own website, and designs customized solutions for clients based on the SoundHound Voice AI platform. SoundHound AI profits from third parties that implement SoundHound AI Systems within their products. SoundHound AI instructs clients and users to use SoundHound AI Systems in an infringing manner and provides technical support and instruction for such use.

84. SoundHound AI has been and is continuing to contributorily infringe the '097 patent by selling or offering to sell SoundHound AI Voice Systems, knowing them to be especially made or especially adapted for practicing the invention of the '097 patent and not a staple article or commodity of commerce suitable for substantial non-infringing use in violation of 35 U.S.C. § 271(c). On information and belief, SoundHound AI writes software for SoundHound Voice AI Systems and designs SoundHound Voice AI Systems to operate in an infringing manner when installed in or on client / user devices and systems. SoundHound AI causes SoundHound Voice AI Systems to be made available through its own website, and designs customized solutions for clients based on the SoundHound Voice AI platform. On information and belief, SoundHound AI also profits from third parties who incorporate SoundHound Voice AI Systems in their products. SoundHound AI instructs users to use SoundHound Voice AI Systems in an infringing manner and provides technical support for such use.

85. VoiceBox and its predecessors-in-interest have satisfied the marking requirements of 35 U.S.C. § 287 with respect to the '097 patent to the extent that any patented article is subject to a duty to mark.

86. SoundHound AI's infringement of the '097 patent has caused and will continue to cause VoiceBox damages for which VoiceBox is entitled to compensation pursuant to 35 U.S.C. § 284.

COUNT V: INFRINGEMENT OF THE '025 PATENT

87. VoiceBox incorporates the foregoing paragraphs as if set forth herein.

88. SoundHound AI, on its own or by conduct attributable to it, has directly infringed, and continues to infringe, the '025 patent by making, using, selling, offering for sale, and/or importing into the United States, SoundHound Voice AI Systems, which infringe one or more claims of the '025 patent in violation of 35 U.S.C. § 271(a). Exemplary evidence of SoundHound's infringement of at least one claim of the '025 patent is set forth in Exhibit K. VoiceBox anticipates identifying additional asserted claims in accordance with the case schedule.

89. SoundHound AI has been and is inducing infringement of the '025 patent by actively and knowingly inducing others to make, use, sell, offer for sale, and/or import SoundHound Voice AI Systems, which infringe one or more claims of the '025 patent in violation of 35 U.S.C. § 271(b). On information and belief, SoundHound AI markets software implementing the SoundHound Voice AI Systems and designs the SoundHound Voice AI Systems to operate in an infringing manner when installed in or on client / customer devices and systems (e.g., as shown in the attached claim chart). SoundHound AI causes the SoundHound Voice AI Systems to be made available through its own website, and designs customized solutions for clients based on the SoundHound Voice AI platform. SoundHound AI profits from third parties that implement SoundHound AI Systems within their products. SoundHound AI instructs clients and users to use SoundHound AI Systems in an infringing manner and provides technical support and instruction for such use.

90. SoundHound AI has been and is continuing to contributorily infringe the '025 patent by selling or offering to sell SoundHound AI Voice Systems, knowing them to be especially made or especially adapted for practicing the invention of the '025 patent and not a staple article or commodity of commerce suitable for substantial non-infringing use in violation of 35 U.S.C. § 271(c). On information and belief, SoundHound AI writes software for SoundHound Voice AI Systems and designs SoundHound Voice AI Systems to operate in an infringing manner when installed in or on client / user devices and systems. SoundHound AI causes SoundHound Voice AI Systems to be made available through its own website, and designs customized solutions for clients based on the SoundHound Voice AI platform. On information and belief, SoundHound AI also profits from third parties who incorporate SoundHound Voice AI Systems in their products. SoundHound AI instructs users to use SoundHound Voice AI Systems in an infringing manner and provides technical support for such use.

91. VoiceBox and its predecessors-in-interest have satisfied the marking requirements of 35 U.S.C. § 287 with respect to the '025 patent to the extent that any patented article is subject to a duty to mark.

92. SoundHound AI's infringement of the '025 patent has caused and will continue to cause VoiceBox damages for which VoiceBox is entitled to compensation pursuant to 35 U.S.C. § 284.

COUNT VI: INFRINGEMENT OF THE '385 PATENT

93. VoiceBox incorporates the foregoing paragraphs as if set forth herein.

94. SoundHound AI, on its own or by conduct attributable to it, has directly infringed, and continues to infringe, the '385 patent by making, using, selling, offering for sale, and/or importing into the United States, SoundHound Voice AI Systems, which infringe one or more claims of the '385 patent in violation of 35 U.S.C. § 271(a). Exemplary

evidence of SoundHound's infringement of at least one claim of the '385 patent is set forth in Exhibit L. VoiceBox anticipates identifying additional asserted claims in accordance with the case schedule.

95. SoundHound AI has been and is inducing infringement of the '385 patent by actively and knowingly inducing others to make, use, sell, offer for sale, and/or import SoundHound Voice AI Systems, which infringe one or more claims of the '385 patent in violation of 35 U.S.C. § 271(b). On information and belief, SoundHound AI markets software implementing the SoundHound Voice AI Systems and designs the SoundHound Voice AI Systems to operate in an infringing manner when installed in or on client / customer devices and systems (e.g., as shown in the attached claim chart). SoundHound AI causes the SoundHound Voice AI Systems to be made available through its own website, and designs customized solutions for clients based on the SoundHound Voice AI platform. SoundHound AI profits from third parties that implement SoundHound AI Systems within their products. SoundHound AI instructs clients and users to use SoundHound AI Systems in an infringing manner and provides technical support and instruction for such use.

96. SoundHound AI has been and is continuing to contributorily infringe the '385 patent by selling or offering to sell SoundHound AI Voice Systems, knowing them to be especially made or especially adapted for practicing the invention of the '385 patent and not a staple article or commodity of commerce suitable for substantial non-infringing use in violation of 35 U.S.C. § 271(c). On information and belief, SoundHound AI writes software for SoundHound Voice AI Systems and designs SoundHound Voice AI Systems to operate in an infringing manner when installed in or on client / user devices and systems.

SoundHound AI causes SoundHound Voice AI Systems to be made available through its own website, and designs customized solutions for clients based on the SoundHound Voice AI platform. On information and belief, SoundHound AI also profits from third parties who incorporate SoundHound Voice AI Systems in their products. SoundHound AI instructs users to use SoundHound Voice AI Systems in an infringing manner and provides technical support for such use.

97. VoiceBox and its predecessors-in-interest have satisfied the marking requirements of 35 U.S.C. § 287 with respect to the '385 patent to the extent that any patented article is subject to a duty to mark.

98. SoundHound AI's infringement of the '385 patent has caused and will continue to cause VoiceBox damages for which VoiceBox is entitled to compensation pursuant to 35 U.S.C. § 284.

PRAYER FOR RELIEF

WHEREFORE, VoiceBox requests that this Court enter judgment against SoundHound AI as follows:

A. SoundHound AI has been infringing and continues to infringe one or more claims of the VoiceBox Patents, literally or under the doctrine of equivalents;

B. SoundHound AI's infringement of the VoiceBox Patents shall be enjoined until expiration of the VoiceBox Patents;

C. An award of damages, including a reasonable royalty award, adequate to compensate VoiceBox for SoundHound AI's infringement, with pre-judgment interest;

D. A declaration that this case is exceptional and an award of attorneys' fees

under 35 U.S.C. § 285;

E. An award of costs and expenses in this action; and

F. Such other and further relief as the Court may deem just and proper.

DEMAND FOR JURY TRIAL

VoiceBox demands trial by jury on all claims and issues so triable.

Dated: November 21, 2024

Of Counsel:

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