UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF TEXAS MIDLAND/ODESSA DIVISION

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Civil Action No. 7:25-cv-00060

Plaintiff,

JURY TRIAL DEMANDED

v.

META PLATFORMS, INC.,

Defendant.

COMPLAINT FOR PATENT INFRINGEMENT AND DAMAGES AND DEMAND FOR JURY TRIAL

Plaintiff Dialect, LLC ("Dialect" or "Plaintiff") files this Complaint for Patent Infringement and Damages against Meta Platforms, Inc. ("Meta" or "Defendant") and alleges as follows:

INTRODUCTION

1. The novel inventions disclosed in United States Patent Numbers 7,398,209 (the "'209 Patent"), 8,015,006 (the "'006 Patent"), 8,447,607 (the "'607 Patent"), 9,263,039 (the "'039 Patent"), and 9,734,825 (the "'825 Patent") (collectively, the "Asserted Patents") were invented by VoiceBox Technologies Inc. ("VoiceBox"). VoiceBox was a key pioneer in the fields of voice recognition technology and natural language understanding ("NLU") technology. These technologies power a wide variety of applications and platforms used in smartphones, tablets, TVs, Internet of Things ("IoT") devices, and vehicle multimedia and navigation systems. VoiceBox spent more than a decade developing and building key early NLU inventions, producing one of

the most valuable patent portfolios in the industry, according to the Institute of Electrical and Electronics Engineers ("IEEE") in 2013. The Asserted Patents in this case are the result of this substantial investment and research.

- 2. Over the years, the inventions claimed in the Asserted Patents have been licensed to key companies in the industry.
- 3. The Asserted Patents, along with other former VoiceBox patents now owned by Dialect, are presently the subject of infringement lawsuits filed by Dialect against Google (pending in the Northern District of California, asserting the '209, '006, and '607 Patents, among others), Bank of America (pending in the Eastern District of Texas, asserting the '607 and '039 Patents, among others), and Microsoft (pending in the Eastern District of Texas, asserting the '209, '006, and '825 Patents, among others). Dialect also previously asserted the '006 and '039 Patents against Amazon and the '209, '607, and '825 Patents against Samsung.

THE PARTIES

- 4. Plaintiff is the current owner and assignee of the Asserted Patents.
- 5. Plaintiff is a Texas limited liability company with its principal place of business located at 133 E. Tyler Street, Longview, Texas 75601-7216.
- 6. Defendant Meta Platforms, Inc. is a Delaware corporation that maintains an established place of business at 300 West 6th Street Austin, Texas 78701.
- 7. On information and belief, Defendant directly and/or indirectly develops, designs, manufactures, uses, distributes, markets, and offers infringing products and/or services, including Defendant's Meta AI product available through its Facebook, Messenger, WhatsApp, Instagram Applications, as well as the Quest 2, Quest 3, Quest 3S, and Quest Pro using the Horizon OS, and Ray-Ban Meta Glasses (the "Accused Products") in the United States and within the Western

District of Texas ("District"), and otherwise directs infringing activities to this District in connection with its products and/or services as set forth in this Complaint.

JURISDICTION AND VENUE

- 8. This civil action arises under the patent laws of the United States, 35 U.S.C. § 1 *et seq.*, including without limitation 35 U.S.C. §§ 271, 281, 283, 284, and 285. Accordingly, this Court has subject matter jurisdiction under, *inter alia*, 28 U.S.C. §§ 1331 and 1338(a).
- 9. This District has general and specific personal jurisdiction over Defendant because Defendant has committed acts, directly or through intermediaries, in this District, giving rise to this action; is present in and transacts and conducts business in this District and the State of Texas; and transacts and conducts business with residents of this District and the State of Texas.
- 10. Plaintiff's causes of action arise, at least in part, from Defendant's contacts with and activities in this District and the State of Texas.
- 11. Defendant has infringed the Asserted Patents within this District and the State of Texas by making, using, distributing, marketing, offering, and/or importing in or into this District and elsewhere in the State of Texas, products and/or services that infringe the Asserted Patents, including the Accused Products. Defendant, directly and through intermediaries, makes, uses, offers, imports, distributes, advertises, promotes, and/or otherwise commercializes such infringing products in or into this District and the State of Texas. Defendant regularly conducts and solicits business in, engages in other persistent courses of conduct in, and/or derives substantial revenue from goods and services provided to residents of this District and the State of Texas.
- 12. This Court has personal jurisdiction over Defendants pursuant to TEX. CIV. PRAC. & REM. CODE § 17.041 *et seq*.

- 13. Personal jurisdiction exists over Defendant because Defendant has minimum contacts with this forum as a result of business regularly conducted within this District and the State of Texas, and, on information and belief, specifically as a result of, at least, committing the tort of patent infringement within this District and the State of Texas.
- 14. This Court also has personal jurisdiction over Defendant, in part, because Defendant does continuous and systematic business in this District, including by providing infringing products and services to the residents of this District that Defendant knew would be used within this District, and by soliciting business from the residents of this District.
- 15. This Court also has personal jurisdiction over Defendant because Defendant has made its products and services available for, at least, downloading and use within this District.
- 16. Accordingly, this Court's jurisdiction over the Defendant comports with the constitutional standards of fair play and substantial justice and arises directly from Defendant's purposeful minimum contacts with the State of Texas.
- 17. Venue is appropriate in this Court pursuant to 28 U.S.C. § 1400(b) because Meta has regular and established physical places of business in this District and has committed acts of patent infringement in the District.
- 18. For example, Defendant offers its products and services throughout Texas, including this District, by shipping, distributing, offering for sale, selling, and advertising its products and services through its website, accessible within this District, and through its physical business locations within this District.
- 19. Among other things, Meta has a significant presence in Austin, Texas, within this District. Meta first came to Austin over 10 years ago with just seven employees, and now has over 2,000 employees in the city. Ellen Glover, *Facebook's Meta Is Growing in Austin, Plans to Hire*

400, Built In Austin (Jan. 10, 2022), https://www.builtinaustin.com/articles/meta-new-austin-office-facebook-hiring-400.

- 20. Meta's Austin office focuses on various aspects of the company's business, including marketing, human resources, and augmented and virtual reality development. The company has stated its commitment to growing in Austin, with Katherine Shappley, the head of Meta's local office and VP for commerce customer success, saying, "We're committed to Austin and look forward to growing here together." Chris O'Connell, *Meta Reverses Plan to Occupy 66-Story Downtown Austin Skyscraper*, My San Antonio (Nov. 5, 2022, 7:24 AM), https://www.mysanantonio.com/business/article/meta-austin-office-17559188.php.
- 21. Meta's presence in Austin includes work on technologies directly related to the Accused Products. The Austin office is involved in augmented and virtual reality development, which is relevant to the Meta Quest headsets and Ray-Ban Meta Glasses. Additionally, the marketing and commerce teams in Austin likely contribute to the development and promotion of Meta AI across Facebook, Instagram, Messenger, and WhatsApp. Ellen Glover, *Facebook's Meta Is Growing in Austin, Plans to Hire 400*, Built In Austin (Jan. 10, 2022), https://www.builtinaustin.com/articles/meta-new-austin-office-facebook-hiring-400.
- 22. Meta's substantial investment in Austin demonstrates its long-term commitment to the area and its intention to make the city a significant hub for its operations, including those related to the Accused Products.
- 23. At minimum, Meta, directly and/or through its subsidiaries and agents (including distributors, retailers, and others), has purposefully and voluntarily put its Accused Products into the stream of commerce with the expectation that they will be purchased and used by consumers

in this District in an infringing manner. These infringing products and/or services have been and continue to be purchased and used by consumers in this District.

BACKGROUND

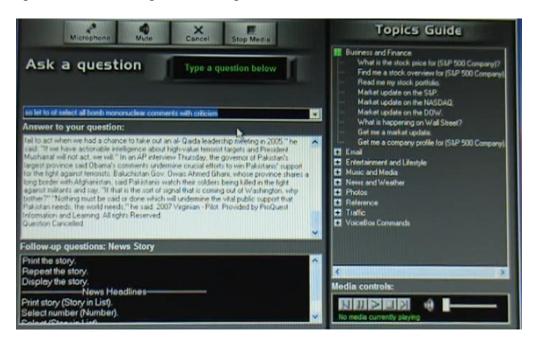
- 24. In 2001, three brothers, Mike, Rich, and Bob Kennewick, founded VoiceBox to bring NLU to a wide array of computer applications. They recognized that the typical computer speech-recognition systems forced human operators to adhere to a limited number of rigid speech prompts, typically through verbal menus of a so-called "Command and Control" system. These rigid prompts limited how systems were used and inhibited the widespread adoption of speech-recognition systems. The brothers believed that VoiceBox could become the first company to improve voice recognition systems to enable people to interact with computer speech systems naturally and effectively.
- 25. From its inception, VoiceBox engaged in intense research efforts to develop its NLU technology. As part of these efforts, VoiceBox Technologies achieved a significant milestone when it developed an early prototype called "Cybermind." As demonstrated on Seattle-area television news,¹ Cybermind was a voice-controlled speaker that could provide weather, recipes, sports scores, calendar updates, or play a song.



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

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26. In addition, Cybermind enabled multi-modal user interactions. For example, Cybermind technology was used in desktop applications that could understand and respond to speech user input as well as non-speech user input.



- 27. On information and belief, consumer focus groups being introduced to VoiceBox conversational voice technology described it as "cool," "unbelievable," "so fast," "it makes you feel like you're in the future already," and "I feel like I'm in the Jetsons."²
- 28. Throughout its research and development efforts, VoiceBox realized that its technology could be deployed in a wide range of applications from connected home to mobile personal assistants.
- 29. VoiceBox's groundbreaking work did not go unrecognized. By January 2012, VoiceBox had become a leader in NLU and conversational voice technology. Leading companies throughout the world, including Samsung, Toyota, Lexus, TomTom, Pioneer, Chrysler, Dodge, and Magellan used VoiceBox's award-winning and patented natural language understanding

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² https://www.youtube.com/watch?v=WCOGNnH-Bws

technology. VoiceBox had software applications that ran on smart speakers, in-car systems, smartphones, smart TVs, computers, tablets, e-readers, and personal navigation devices. As noted above, in November 2023, a Delaware jury determined that Amazon's "Alexa" platform, accessible through over 500 million devices throughout the world, including Amazon's Echo devices and the Alexa application for iOS and Android, also utilized VoiceBox's patented technology.

30. In 2013, the IEEE ranked VoiceBox number 13 in patent power for the computer software industry, ranking between SAP AG and Sony Computer Entertainment Inc.

	IEEE Patent Power Rankings										
Computer	Software										
Rank	Company / Organization	Country of Headquarters	2012 U.S. Patents	Pipeline Growth Index	Pipeline Impact	Self- Citations (%)	Adjusted Pipeline Impact	Pipeline Generality	Pipeline Originality	Pipeline Power	
1Mi	crosoft Corp.	United States	2665	1.14	1.07	0.22	1.07	1.19	1.01	3909.6	
2 VN	lware Inc.	United States	106	1.89	3.07	0.16	3.07	3.02	1.06	1966.6	
3 Cit	rix Systems Inc.	United States	112	1.56	2.83	0.27	2.83	2.62	1.12	1441.8	
4Syr	mantec Corp.	United States	379	1.34	1.54	0.16	1.54	1.63	1.01	1297.4	
5 Di	gimarc Corp.	United States	94	0.9	5	0.88	2.08	4.8	1.12	944.9	
6Or	acle Corp.	United States	913	0.92	1	0.12	1	1.13	0.98	930.3	
7 Co	mmVault Systems Inc.	United States	52	1.3	5	0.88	2.1	5	1.22	866.3	
8 Cadence Design Systems Inc.		United States	158	1.15	2.45	0.15	2.45	1.76	0.89	699.8	
9Ad	obe Systems Inc.	United States	332	1.13	1.14	0.18	1.14	1.24	1	526.8	
10 Rovi Corp.		United States	97	1.47	1.85	0.25	1.85	1.91	1.02	514.3	
11TeleCommunication Systems Inc.		United States	57	1.36	2.35	0.42	2.06	2.52	1.12	451.7	
12SAP AG		Germany	601	1.1	0.74	0.23	0.74	0.85	1.02	424.9	
13 Vo	icebox Technologies Inc.	United States	11	1.83	5	0.65	3.26	5	1.29	423.5	
14So	ny Computer Entertainment Inc.	Japan	220	1.33	1.1	0.36	1.03	1.26	1.08	409.	
15Ba	lly Technologies Inc.	United States	98	1.78	1.46	0.38	1.35	1.83	0.9	388.2	
16Sm	ith Micro Software Inc.	United States	18	3	2.8	0.17	2.8	2.41	0.97	353.4	
17 M	Afee Inc.	United States	84	1.33	2.02	0.39	1.85	1.61	1.04	347.0	
18 Nu	ance Communications Inc.	United States	160	1.15		0.3	1.19	1.56	1.02	345.9	
19Sy	nopsys Inc.	United States	148	0.95	1.61	0.08	1.61	1.17	1.06	280.4	
20 Inf	osys Ltd.	India	29	1.93	2.52	0.04	2.52	1.75	1.02	253.69	
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- 31. After learning about VoiceBox's technology, Toyota hired VoiceBox to build a sophisticated NLU speech interface for its Lexus automobiles. VoiceBox built the voice and NLU capability for Toyota's award-winning Entune multimedia system³.
- 32. Some of the most well-known technology companies and automotive companies in the world have paid, in the aggregate, hundreds of millions of dollars for access to VoiceBox's patented technology, through licensing of VoiceBox patents, including the Asserted Patents, and through adoption and deployment of VoiceBox's software platform and functionality in their products and services.

THE ASSERTED PATENTS

33. The VoiceBox inventions claimed in the Asserted Patents relate to groundbreaking improvements to voice recognition and NLU and have particular application in Meta's Accused Products.

U.S. PATENT No. 7,398,209

34. On July 8, 2008, the United States Patent and Trademark Office duly and legally issued the '209 Patent, entitled "Systems And Methods For Responding To Natural Language Speech Utterance." A true and correct copy of the '209 Patent is attached hereto as Exhibit 1.

https://www.businesswire.com/news/home/20120109006490/en/VoiceBox-and-Toyota-Form-Strategic-Relationship-to-Deliver-In-car-Voice-Technology-

 $Innovations \#: \sim : text = LAS\%20 VEGAS\%2D\%2D (BUSINESS\%20 WIRE, car\%20 voice\%20 products\%20 and\%20 capabilities.$

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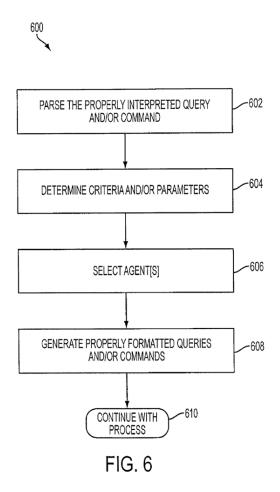
³ PRLOG Press Release Distribution, *Atlantic Toyota and Huntington Toyota Customers: Entune Wins Two Awards at CES in Las Vegas* (Jan. 31, 2011), https://www.prlog.org/11264790-atlantic-toyota-and-huntington-toyota-customers-entune-wins-two-awards-at-ces-in-las-vegas.html; BusinessWire, *VoiceBox and Toyota Form Strategic Relationship to Deliver In-car Voice Technology Innovations* (Jan. 9, 2012),

- 35. Dialect is the owner and assignee of all right, title, and interest in and to the '209 Patent, including the right to assert all causes of action arising under the '209 Patent and the right to sue and obtain any remedies for past, present, or future infringement.
- 36. The '209 Patent describes, among other things, novel systems and methods for receiving natural language queries and/or commands. '209 Patent, Abstract. The claimed invention makes significant use of context, prior information, domain knowledge, and user specific profile data to achieve a natural environment for one or more users. *Id.* As the '209 Patent explains, prior to its inventions, a machine's ability to communicate with humans in a natural manner was a difficult technical problem in need of a technical solution. As described in the specification, in the prior art "human questions and machine processing of queries may be fundamentally incompatible," because "a person asking a question or giving a command typically relies heavily on context and the domain knowledge of the person answering," whereas "machine-based queries" are "highly structured and are not inherently natural to the human user." Id. at 1:27-35. The inventions described and claimed in the '209 Patent overcome these challenges in various embodiments, for example by providing a system that uses domain agents to organize domain specific behavior and information. *Id.* at 2:48-59. The inventions in various embodiments further include a system capable of parsing and interpreting the natural language query to "determine the domain of expertise required and context, invoking the proper resources, including agents." Id. at 3:53-54.
- 37. The novel features of the invention are recited in the claims. For example, Claim 1 of the '209 Patent recites:
 - 1. A method responsive to a user generated natural language speech utterance, comprising:
 - receiving the user generated natural language speech utterance, the received user utterance containing at least one request;

- maintaining a dynamic set of prior probabilities or fuzzy possibilities usable at each stage of processing the received user utterance;
- recognizing words and phrases contained in the received utterance using information in one or more dictionary and phrase tables;
- parsing the recognized words and phrases to determine a meaning of the utterance, wherein determining the meaning includes determining a context for the at least one request contained in the utterance based on one or more keywords contained in the recognized words and phrases;
- selecting at least one domain agent based on the determined meaning, the selected domain agent being an autonomous executable that receives, processes, and responds to requests associated with the determined context;
- formulating the at least one request contained in the utterance in accordance with a grammar used by the selected domain agent to process requests associated with the determined context;
- invoking the selected domain agent to process the formulated request; and
- presenting results of the processed request to the user, the presented results generated as a result of the invoked domain agent processing the formulated request.

'209 Patent, Claim 1.

38. Figure 6 of the '209 Patent, reproduced below, shows a block diagram of a process for determining the proper domain agents to invoke and properly formatting queries for the agents according to one embodiment of the invention.



'209 Patent, Fig. 6.

39. In explaining the reasons for allowing the claims, the United States Patent and Trademark Office described how the closest existing prior art did not disclose or teach the claimed combination of inventive elements.

[T]he prior art of record does not disclose or reasonably suggest recognizing words using information from phrase tables in combination with the limitations of parsing to determine a meaning based on keywords, selecting a domain agent, and formulating a request in accordance with a grammar used by a selected domain agent Halverson et al. omits a grammar used by a domain agent associated with the determined context and one or more dictionary and phrase tables. Kuhn et al. teaches a natural language parser that returns a probability score for retrieved information in response to a user request, and predefined grammars that are constructed based on goal-oriented tasks, but omits recognizing words based on a dictionary and phrase tables. While it is known to recognize words based on a vocabulary defined by a dictionary for speech recognition, the prior art of record

does not disclose or reasonably suggest additionally utilizing phrase tables for speech recognition.

'209 File History, Notice of Allowance and Fee(s) Due (May 21, 2008), Notice of Allowability at 2 (attached as Exhibit 2).

40. In April 2024, Google filed a petition for *inter partes* review of the '209 Patent. In October 2024, the Patent Trial and Appeal Board (the "PTAB") denied institution of *inter partes* review of the '209 Patent.

U.S. PATENT NO. 8,015,006

- 41. On September 6, 2011, the United States Patent and Trademark Office duly and legally issued the '006 Patent, entitled "Systems And Methods For Processing Natural Language Speech Utterances With Context-Specific Domain Agents." A true and correct copy of the '006 Patent is attached hereto as Exhibit 3.
- 42. Dialect is the owner and assignee of all right, title, and interest in and to the '006 Patent, including the right to assert all causes of action arising under the '006 Patent and the right to sue and obtain any remedies for past, present, or future infringement.
- 43. As described in the '006 Patent, "[a] machine's ability to communicate with humans in a natural manner remains a difficult problem," in part because "machine-based queries (e.g., questions, commands, requests, and/or other types of communications) may be highly structured and are not inherently natural to the human user." '006 Patent at 1:33-41. Similarly, "[t]he fact that most natural language queries are incomplete in their definition is a significant barrier to natural human query-response interaction between humans and machines," and "many natural language questions are ambiguous or subjective," such that "the formation of a machine processable query and returning of a natural language response may be difficult at best." *Id.* at 9:11-21.

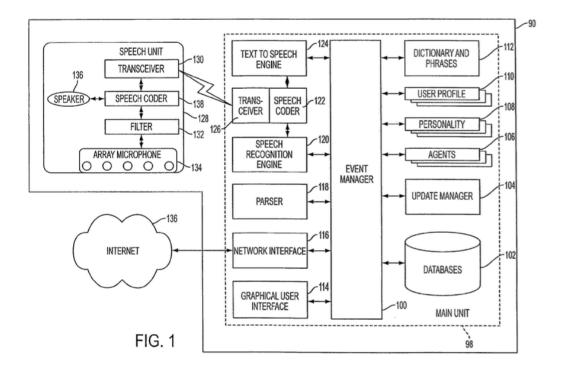
- 44. Thus, while "speech recognition" (i.e., transcribing human speech into text) had "steadily improved in accuracy" and was "successfully used in a wide range of applications," (*id.* at 1:46-48) simply translating uttered speech from a user into machine-readable text form, alone, did not and does not overcome the additional challenges of creating a natural language query and response system. Instead, existing systems were "generally unable to provide a complete environment for users to make natural language speech queries and receive natural-sounding responses" and "[t]here remain[ed] a number of significant barriers to creation of a complete natural language speech-based query and response environment." *Id.* at 1:50-55.
- 45. To overcome these barriers, the inventors of the '006 Patent conceived novel software techniques and structures (and novel combinations and ordering of techniques and structures) not found in existing systems. The claimed invention "makes significant use of context, prior information, domain knowledge, and user specific profile data to achieve a natural environment for one or more users making queries or commands in multiple domains." *Id.* at Abstract. The inventions described and claimed in the '006 Patent overcome these challenges in various embodiments, for example by providing a system that uses domain agents to organize domain specific behavior and information. *Id.* at 2:53-3:7. The inventions in various embodiments further include a system that can "determine the user's identity by voice and name for each utterance," so that "[r]ecognized words and phrases may be tagged with this identity in all further processing" for security and other purposes. *Id.* at 16:60-17:4.
- 46. The novel features of the invention are recited in the claims. For example, Claim 1 of the '006 Patent recites a novel combination of parsing to determine a meaning and a context of speech associated with a request involving a grammar by a domain agent, satisfying a

predetermined confidence level, updating dictionaries or phrase tables, and determining an identity of a user based on voice characteristics:

- 1. A method for processing natural language speech utterances with contextspecific domain agents, comprising:
- receiving, at a speech unit coupled to a processing device, a natural language speech utterance that contains a request;
- recognizing, at a speech recognition engine coupled to the processing device, one or more words or phrases contained in the utterance using information in one or more dictionary and phrase tables, wherein recognizing the one or more words or phrases contained in the utterance includes:
- dynamically updating the information in the one or more dictionary and phrase tables based on a dynamic set of prior probabilities or fuzzy possibilities;
- determining an identity associated with a user that spoke the utterance based on voice characteristics associated with the utterance; and
- associating the one or more recognized words or phrases and a pronunciation associated with the one or more recognized words or phrases with the determined identity and the request contained in the utterance in response to the one or more recognized words or phrases satisfying a predetermined confidence level;
- parsing, at a parser coupled to the processing device, the one or more recognized words or phrases to determine a meaning associated with the utterance and a context associated with the request contained in the utterance, wherein the one or more recognized words or phrases are further associated with the determined context in response to the one or more recognized words or phrases satisfying the predetermined confidence level;
- formulating, at the parser, the request contained in the utterance in accordance with a grammar used by a domain agent associated with the determined context;
- processing the formulated request with the domain agent associated with the determined context to generate a response to the utterance; and
- presenting the generated response to the utterance via the speech unit.

'006 Patent, Claim 1.

47. Embodiments of these claimed elements are shown and described in the specification. For example, Figure 1 shows an overall diagrammatic view of the interactive natural language speech processing system according to one embodiment:



- 48. The specification of the '006 Patent describes how these claim elements help the overall system overcome the technical limitations of existing speech recognition systems. *See e.g.*, *id.* at 10:56-12:18 (describing domain agents, system agents, and their interactions); 17:13-18:49 (describing the use of the speech recognition system and the dictionary and phrase entries, parser and domain agents to determine context and criteria); 18:50-21:25 (describing the interactions between system and domain agents in processing questions or commands).
- 49. In explaining the reasons for allowing the claims, the United States Patent and Trademark Office described how the closest existing prior art did not disclose or teach the claimed combination of inventive elements:

Independent Claim [5] is allowable because the prior art of record does not disclose or reasonably suggest a combination of parsing to determine a meaning and a context of speech associated with a request involving a grammar by a domain agent, satisfying a predetermined confidence level, updating user specific vocabularies or

dictionaries, and determining an identity of a user based on voice characteristics. Sabourin (U.S. Patent No. 6,208,964) teaches updating user specific vocabularies or dictionaries, but not in combination with satisfying a predetermined confidence level and determining an identity of the user based on voice characteristics of the user. Although determining an identity of a user based on voice characteristics is known individually for a voice profile, the prior art of record does not disclose or reasonably suggest that feature in combination with updating a user specific vocabulary when a predetermined confidence level is not met.

'006 File History, Notice of Allowance and Fee(s) Due (May 9, 2011), Notice of Allowability at 2 (attached as Exhibit 4).

50. In April 2024, Google filed a petition for *inter partes* review of the '006 Patent. In October 2024, the Patent Trial and Appeal Board denied institution of *inter partes* review of the '006 Patent.

U.S. PATENT NO. 8,447,607

- 51. On May 21, 2013, the United States Patent and Trademark Office duly and legally issued the '607 Patent, entitled "Mobile Systems And Methods Of Supporting Natural Language Human-Machine Interactions." A true and correct copy of the '607 Patent is attached hereto as Exhibit 5.
- 52. Dialect is the owner and assignee of all right, title, and interest in and to the '607 Patent, including the right to assert all causes of action arising under the '607 Patent and the right to sue and obtain any remedies for past, present, or future infringement.
- 53. The '607 Patent describes, among other things, a novel mobile system that identifies and uses context, prior information, domain knowledge, and user specific profile data to achieve a natural environment for users to submit natural language requests. '607 Patent, Abstract. The claimed invention creates, stores, and uses extensive personal profile information for each user to improve the reliability of determining the context of a request and presenting the expected results. *Id.* The claimed invention also provides a system that uses "multi-modal communications

that enable displaying of non-speech search results on a graphical interface" in conjunction with "speech commands" to execute requests. *Id.* at 21:49-60.

- 54. The novel inventions of the '607 Patent are recited in the claims. For example, Claim 12 of the '607 Patent recites:
 - 12. A method for processing natural language inputs, comprising:
 - receiving, by one or more processors, a multi-modal natural language input from a user, the multi-modal natural language input including a natural language utterance and a non-speech input;
 - generating, by the one or more processors, a non-speech transcription from the non-speech input;
 - identifying, by the one or more processors, the user who provided the multi-modal natural language input;
 - generating, by the one or more processors, a speech-based transcription based on a cognitive model associated with the user, wherein the cognitive model includes information on one or more prior interactions between the user and the device;
 - generating, by the one or more processors, a merged transcription from the speechbased transcription and the non-speech transcription;
 - identifying, by the one or more processors, an entry in a context stack, from among a plurality of entries that are in the context stack and that are each indicative of context, wherein the identified entry matches information in the merged transcription;
 - identifying, by the one or more processors, a domain agent associated with the entry in the context stack;
 - determining, by the one or more processors, a request based on the merged transcription; and
 - communicating, by the one or more processors, the request to the domain agent, wherein the domain agent is configured to generate a response to the user.

'607 Patent, Claim 12.

U.S. PATENT No. 9,263,039

55. On February 16, 2016, the United States Patent and Trademark Office duly and legally issued the '039 Patent, entitled "Systems And Methods For Responding To Natural

Language Speech Utterance." A true and correct copy of the '039 Patent is attached hereto as Exhibit 6.

- 56. Dialect is the owner and assignee of all right, title, and interest in and to the '039 Patent, including the right to assert all causes of action arising under the '039 Patent and the right to sue and obtain any remedies for past, present, or future infringement.
- 57. The inventors of the '039 Patent conceived novel software techniques and structures to overcome challenges in natural language processing. For example, Claim 13 recites a novel method of transcribing the speech and non-speech communications to create speech-based and non-speech-based textual messages, merging the speech-based and non-speech based textual messages; searching the merged query for text combinations, comparing the text combinations to context description grammar, generating a relevance score based on that comparison, selecting a domain agent based on the relevance score, and organizing content based on the results from the relevance score to generate a response:
 - 13. A method of processing speech and non-speech communications, comprising: receiving the speech and non-speech communications;
 - transcribing the speech and non-speech communications to create a speech-based textual message and a non-speech-based textual message;
 - merging the speech-based textual message and the non-speech-based textual message to generate a query;

searching the query for text combinations;

comparing the text combinations to entries in a context description grammar;

accessing a plurality of domain agents that are associated with the context description grammar;

generating a relevance score based on results from comparing the text combinations to entries in the context description grammar;

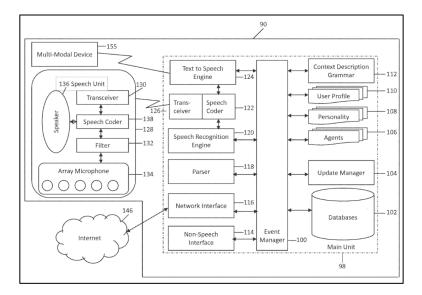
selecting one or more domain agents based on results from the relevance score;

obtaining content that is gathered by the selected domain agents; and

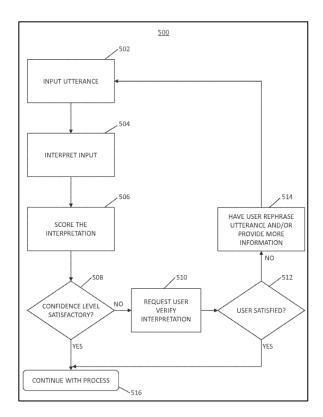
generating a response from the content, wherein the content is arranged in a selected order based on results from the relevance score.

'039 Patent, Claim 13.

58. Embodiments of these claimed elements are shown and described in the specification. For example, Figure 1 shows an overall diagrammatic view of the interactive natural language speech processing system according to one embodiment:



Additionally, Figure 5 shows a process for correctly interpreting a user's utterance according to one embodiment:



- 59. The specification of the '039 Patent describes how these claim elements help the overall system overcome the technical limitations of existing speech recognition systems. *See, e.g., id.* at 13:61-14:37 (describing comparison to context description grammar and relevance scoring); *id.* at 20:20-58 (describing improved word recognition accuracy using data from context description grammar); *id.* at 21:28-36 (describing a scoring system); *id.* at 23:19-29 (describing a scoring system); *id.* at 28:4-31 (describing the process of Figure 5); *id.* at 28:56-29:8 (describing selection of agents).
- 60. In explaining the reasons for allowing the claims, the United States Patent and Trademark Office described how the closest existing prior art did not disclose or teach the claimed combination of inventive elements:

The prior art of record does not disclose or suggest the combination of a comparison module that compares text combinations to entries in a context description grammar, a scoring module that provides relevance scores based on the results from the comparison module, a domain agent selector that selects domain agents based on results from the scoring module, and a response generating module that

generates a response from the content, wherein the content is arranged in a selected order based on results from the scoring module, as required by independent Claim 1. Independent Claims 13 and 19 recite similar limitations, and are allowed for similar reasons as Claim 1.

'039 File History, Notice of Allowability (October 26, 2015) at 2 (attached as Exhibit 7).

U.S. PATENT No. 9,734,825

- 61. On August 15, 2017, the United States Patent and Trademark Office duly and legally issued the '825 Patent, entitled "Methods and Apparatus for Determining a Domain Based on the Content and Context of a Natural Language Utterance." A true and correct copy of the '825 Patent is attached hereto as Exhibit 8.
- 62. Dialect is the owner and assignee of all right, title, and interest in and to the '825 Patent, including the right to assert all causes of action arising under the '825 Patent and the right to sue and obtain any remedies for past, present, or future infringement.
- 63. The '825 Patent describes, among other things, novel and inventive methods for receiving user generated natural language utterances. '825 Patent, Abstract. The methods enable obtaining information from a wide range of disciplines and presenting the information in a natural manner, even when the questions asked are incomplete, ambiguous, or subjective. *Id.* at 1:32-40.
- 64. The novel inventions of the '825 Patent are recited in the claims. For example, Claim 5 of the '825 Patent recites:
 - 5. A method for responding to a user generated natural language speech utterance, the method comprising:
 - recognizing, by a speech recognition engine, one or more words in the user generated natural language speech utterance;
 - receiving, at a parser, keyword and associated prior probabilities or fuzzy possibilities from a system agent or an active domain agent of a plurality of autonomous executable domain agents;
 - determining, for the natural language speech utterance, a score for each of at least two possible contexts, wherein the scores are determined based on the received keyword and associated prior probabilities or fuzzy possibilities;

- determining by the parser, a domain for the user generated natural language utterance based on the recognized one or more words of the natural language utterance and the determined scores for each of the at least two possible contexts;
- selecting at least one of the plurality of autonomous executable domain agents based, at least in part, on the determined domain, wherein each of the plurality of domain agents is configured to respond to queries and/or commands within a particular domain, wherein the particular domain indicates an area of expertise within which the domain agent is capable of responding to the queries and/or commands;
- providing at least one query and/or command based on the natural language utterance to the selected at least one of the plurality of domain agents;
- creating, by the selected at least one of the plurality of domain agents, one or more queries based on the at least one query and/or command;
- sending, by the selected at least one of the plurality of domain agents, the one or more queries in an asynchronous manner to one or more local or external information sources.
- 65. In explaining the reasons for allowability of the claims of the '825 Patent, the United States Patent and Trademark Office described how the closest existing prior art did not disclose or teach the claimed combination of inventive elements, noting that the closest prior art references do not disclose or reasonably suggest the claimed combination of inventive elements:

[T]he prior art of record does not disclose or reasonably suggest a system and method responsive to a user generated natural language speech utterance, comprising a plurality of autonomous executable domain agents, each of which is configured to respond to queries and/or commands within a particular domain, wherein the particular domain indicates an area of expertise within which the domain agent is configured to respond to the queries and/or commands, a speech recognition engine configured to recognize one or more words in the user generated natural language speech utterance, and a parser configured to receive from a system agent or an active domain agent of the plurality of autonomous executable domain agents, keyword and associated prior probabilities or fuzzy probabilities, determine for the natural language speech utterance, a score for each of at least two possible contexts, wherein the scores are determined based on the received keyword and associated prior probabilities or fuzzy probabilities, determine a domain for the user generated natural language utterance based on the recognized one or more words of the natural language utterance and determined scores for each of the at least two possible contexts, select at least one of the plurality of domain agents based, at least in part, on the determined domain, and provide at least one query and/or command based on the natural language utterance to the selected at least one of the plurality of domain agents, wherein each of the selected at least one of the plurality of domain agents is configured to create one or more queries based on the at least one query and/or command and send the one or more queries in an asynchronous manner to one or more local or external information sources

'825 File History, Notice of Allowance and Fee(s) Due (April 12, 2017), Notice of Allowability at 2-3 (attached as Exhibit 9).

META'S INFRINGING TECHNOLOGY

- 66. Meta is one of the largest and most successful technology companies in the world, with a market capitalization of more than \$1 trillion and an annual revenue of more than \$116 billion as of 2024.
- 67. On information and belief, Meta first introduced Meta AI in 2024, integrating it across its platforms including Facebook, Instagram, and WhatsApp. Meta AI is powered by Meta's Large Language Model Meta AI ("LLaMA"), and is designed to help users with daily tasks, learning, and creativity.
- 68. Meta AI is available across Meta's platforms, including Facebook, Messenger, Instagram, and WhatsApp. Users can access Meta AI through search bars and chat interfaces within these apps, including via Voice. Meta AI can assist users with tasks such as finding information, generating text or images, and providing recommendations.
- 69. Meta has also integrated AI capabilities into its Meta Quest headsets and Ray-Ban Meta Smart Glasses. These devices use AI for features such as voice commands and object recognition.
- 70. The integration of Meta AI across Meta's platforms and devices has been rapid and widespread.
- 71. Meta AI makes significant use of natural language processing and understanding, which are key aspects of the inventions claimed in the Asserted Patents.

FIRST COUNT (Infringement of U.S. Patent No. 7,398,209)

- 72. Dialect incorporates by reference the allegations set forth in Paragraphs 1-71 of the Complaint as though fully set forth herein.
- 73. The claims of the '209 Patent are valid and enforceable. In April 2024, Google filed a petition for *inter partes* review of the '209 Patent. In October 2024, the PTAB denied the institution of *inter partes* review.
- 74. The claims of the '209 Patent are directed to patentable subject matter. The '209 Patent is directed to innovations that improve systems and methods for responding to natural language utterances by, among other things, maintaining a dynamic set of prior probabilities or fuzzy possibilities, recognizing words and words and phrases contained in the received utterance using information in one or more dictionary and phrase tables, determining a context of the user utterance, and selecting and invoking domain agents. The inventive claimed steps of the '209 Patent improve on the processing of a natural language utterance by a user. The claimed inventions provide specific concrete solutions to the problem of natural language processing and understanding in existing systems.
- 75. On information and belief, in violation of 35 U.S.C. § 271(a), Defendant has directly infringed and continues to directly infringe one or more claims of the '209 Patent, including at least Claim 1 of the '209 Patent, in the State of Texas, in this District, and elsewhere in the United States by, among other things, making, using, selling, offering for sale, and/or importing into the United States products and services that embody one or more of the inventions claimed in the '209 Patent, including the Accused Products. For example, Defendant sells Quest headsets, Ray-Ban Meta Smart Glasses, and distributes its Facebook, Instagram, and WhatsApp applications in the United States.

- 76. Each of the Accused Products incorporates and/or implements elements that are identical or equivalent to each claimed element of the patented invention claimed by at least Claim 1 of the '209 Patent. *See* Appendix A.
 - 77. Claim 1 of the '209 Patent recites:
 - 1. A method responsive to a user generated natural language speech utterance, comprising:
 - receiving the user generated natural language speech utterance, the received user utterance containing at least one request;
 - maintaining a dynamic set of prior probabilities or fuzzy possibilities usable at each stage of processing the received user utterance;
 - recognizing words and phrases contained in the received utterance using information in one or more dictionary and phrase tables;
 - parsing the recognized words and phrases to determine a meaning of the utterance, wherein determining the meaning includes determining a context for the at least one request contained in the utterance based on one or more keywords contained in the recognized words and phrases;
 - selecting at least one domain agent based on the determined meaning, the selected domain agent being an autonomous executable that receives, processes, and responds to requests associated with the determined context;
 - formulating the at least one request contained in the utterance in accordance with a grammar used by the selected domain agent to process requests associated with the determined context;
 - invoking the selected domain agent to process the formulated request; and
 - presenting results of the processed request to the user, the presented results generated as a result of the invoked domain agent processing the formulated request.

'209 Patent, Claim 1.

78. On information and belief, each of the Accused Products implements a method recited in Claim 1. *See* Appendix A. Fact and expert discovery are expected to confirm that the Accused Products infringe the '209 Patent, for which further evidence may lie in whole or in part in source code and technical documents to which Dialect does not presently have access.

- 79. Further, on information and belief, Defendant has actively induced and/or contributed to infringement of at least Claim 1 of the '209 Patent in violation of at least 35 U.S.C. § 271(b) and (c).
- 80. Users of the Accused Products directly infringe at least Claim 1 of the '209 Patent when they use the Accused Products in the ordinary, customary, and intended way.
- 81. On information and belief, Defendant's inducements in violation of 35 U.S.C. § 271(b) include, without limitation and with specific intent to encourage infringement, knowingly inducing consumers to use the Products within the United States in the ordinary, customary, and intended way by, directly or through intermediaries, supplying the Accused Products to consumers within the United States and instructing and encouraging such customers to use the Accused Products in the ordinary, customary, and intended way, which Defendant knew infringes at least Claim 1 of the '209 Patent, or, alternatively, was willfully blind to the infringement.
- 82. On information and belief, Defendant's inducements in violation of 35 U.S.C. § 271(b) further include, without limitation and with specific intent to encourage the infringement, knowingly inducing customers to commit acts of infringement with respect to the Accused Products within the United States, by, directly or through intermediaries, instructing and encouraging such customers to import, make, use, sell, offer to sell, or otherwise commit acts of infringement with respect to the Accused Products in the United States, which Defendant knew infringes at least Claim 1 of the '209 Patent, or, alternatively, was willfully blind to the infringement.
- 83. For example, on information and belief, Defendant actively advertised the Accused Products with detailed instructions to users to encourage infringement.

- 84. For example, Defendant describes Meta AI and the Accused Products on its websites. See, e.g., Meta, Introducing Meta AI on Meta Quest—Your Smart MR Assistant, https://www.meta.com/blog/meta-ai-on-meta-quest-3/ (last visited Feb. 6, 2025), Meta, Ray-Ban Meta Glasses Are Getting New AI Features and More Partner Integrations, https://about.fb.com/news/2024/09/ray-ban-meta-glasses-new-ai-features-and-partnerintegrations/ (last visited Feb. 6, 2025), WhatsApp, How to Chat with Meta AI Using Voice Prompts, https://faq.whatsapp.com/711493831174250/?cms platform=android, (last visited Feb. and Meta's AI Products Just GotSmarter More 2025). Meta. Useful, https://about.fb.com/news/2024/09/metas-ai-product-news-connect/ (last visited Feb. 6, 2025). On information and belief, Defendant actively encourages the users to use the Meta AI features shown on Defendant's websites, which features closely match the claim elements of the '209 Patent. That supports a reasonable inference that Defendant encourages its users to infringe the '209 Patent.
- 85. On information and belief, in violation of 35 U.S.C. § 271(c), Defendant's contributory infringement further includes offering to sell or selling within the United States, or importing into the United States, components of the patented invention of and/or a material or apparatus for use in practicing at least Claim 1 of the '209 Patent, constituting a material part of the invention. On information and belief, Defendant knows and has known the same to be especially made or especially adapted for use in an infringement of the '209 Patent, and such components are not a staple article or commodity of commerce suitable for substantial non-infringing use. For example, on information and belief, the Accused Products are not a staple article of commerce suitable for substantial non-infringing use, at least because they are especially designed and produced by Defendant to understand and respond to user speech utterances in a manner claimed by the '209 Patent, and they are not capable of substantial non-infringing use.

- 86. Defendant is not licensed or otherwise authorized to practice the claims of the '209 Patent.
- 87. Thus, by its acts, Defendant has injured Dialect and is liable to Dialect for directly and/or indirectly infringing one or more claims of the '209 Patent, whether literally or under the doctrine of equivalents, including without limitation Claim 1.
- At a minimum, Defendant has knowledge of the '209 Patent and its infringement at least as of the filing of the Complaint. Defendant has had, and continues to have, the specific intent to infringe, through its deliberate and intentional infringement or, alternatively, through its willfully blind disregard of the '209 Patent by knowing there was a high probability of infringement but taking deliberate actions to avoid confirming that infringement. The filing of this action has also made Defendant aware of the unjustifiably high risk that its actions constituted and continue to constitute infringement of the '209 Patent. On information and belief, discovery will reveal additional facts and circumstances from which Defendant's knowledge and intent to infringe (or willful indifference), both before and after the filing of this action, may be inferred.
- 89. Accordingly, Defendant's infringement of the '209 Patent has been and continues to be deliberate, intentional, and willful, and this is therefore an exceptional case warranting an award of enhanced damages and attorneys' fees and costs pursuant to 35 U.S.C. §§ 284 and 285.
- 90. As a result of Defendant's infringement of the '209 Patent, Dialect has suffered monetary damages, and seeks recovery, in an amount to be proven at trial, adequate to compensate for Defendant's infringement, but in no event less than a reasonable royalty with interest and costs.
- 91. On information and belief, Defendant will continue to infringe the '209 Patent unless enjoined by this Court. Defendant's infringement of Dialect's rights under the '209 Patent

will continue to damage Dialect, causing irreparable harm for which there is no adequate remedy at law, unless enjoined by this Court.

SECOND COUNT (Infringement of U.S Patent No. 8,015,006)

- 92. Dialect incorporates by reference the allegations set forth in Paragraphs 1-91 of the Complaint as though fully set forth herein.
 - 93. The claims of the '006 Patent are valid and enforceable.
- 94. The claims of the '006 Patent are directed to patentable subject matter. The '006 Patent is directed to innovations that improve systems for natural language processing. The claimed inventions provide specific concrete solutions to the problem of natural language processing in existing systems.
- 95. On information and belief, in violation of 35 U.S.C. § 271(a), Defendant has directly infringed and continues to directly infringe one or more claims of the '006 Patent, including at least Claim 5 of the '006 Patent, in the State of Texas, in this judicial district, and elsewhere in the United States by, among other things, making, using, selling, offering for sale, and/or importing into the United States products and services that embody one or more of the inventions claimed in the '006 Patent, including the Accused Products. For example, Defendant sells Quest headsets, Ray-Ban Meta Smart Glasses, and distributes its Facebook, Instagram, and WhatsApp applications in the United States.
- 96. Each of the Accused Products incorporates and/or implements elements that are identical or equivalent to each claimed element of the patented invention claimed by at least Claim 5 of the '006 Patent:
 - 97. Claim 5 of the '006 Patent recites:

- 5. A method for processing natural language speech utterances with context-specific domain agents, comprising:
- receiving, at a speech unit coupled to a processing device, a natural language speech utterance that contains a request;
- recognizing, at a speech recognition engine coupled to the processing device, one or more words or phrases contained in the utterance using information in one or more dictionary and phrase tables;
- parsing, at a parser coupled to the processing device, information relating to the utterance to determine a meaning associated with the utterance and a context associated with the request contained in the utterance, wherein the parsed information includes the one or more recognized words or phrases;
- formulating, at the parser, the request contained in the utterance in accordance with a grammar used by a domain agent associated with the determined context, wherein formulating the request in accordance with the grammar used by the domain agent includes:
- determining one or more required values and one or more optional values associated with formulating the request in the grammar used by the domain agent;
- extracting one or more criteria and one or more parameters from one or more keywords contained in the one or more recognized words or phrases, wherein the parser extracts the one or more criteria and the one or more parameters using procedures sensitive to the determined context;
- inferring one or more further criteria and one or more further parameters associated with the request using a dynamic set of prior probabilities or fuzzy possibilities; and
- transforming the one or more extracted criteria, the one or more extracted parameters, the one or more inferred criteria, and the one or more inferred parameters into one or more tokens having a format compatible with the grammar used by the domain agent, wherein the one or more tokens include all the required values and one or more of the optional values associated with formulating the request in the grammar used by the domain agent;
- processing the formulated request with the domain agent associated with the determined context to generate a response to the utterance; and
- presenting the generated response to the utterance via the speech unit.

'006 Patent, Claim 5.

98. Each of the Accused Products implements a method recited in Claim 5. See Appendix B. Fact and expert discovery are expected to confirm that the Accused Products infringe

the '006 Patent, for which further evidence may lie in whole or in part in source code and technical documents to which Dialect does not presently have access.

- 99. Further, on information and belief, Defendant has actively induced and/or contributed to infringement of at least Claim 5 of the '006 Patent in violation of at least 35 U.S.C. § 271(b) and (c).
- 100. Users of the Accused Products directly infringe at least Claim 5 of the '006 Patent when they use the Accused Products in the ordinary, customary, and intended way.
- 101. On information and belief, Defendant's inducements in violation of 35 U.S.C. § 271(b) include, without limitation and with specific intent to encourage infringement, knowingly inducing consumers to use the Accused Products within the United States in the ordinary, customary, and intended way by, directly or through intermediaries, supplying the Accused Products to consumers within the United States and instructing and encouraging such customers to use the Accused Products in the ordinary, customary, and intended way, which Defendant knew infringes at least Claim 5 of the '006 Patent, or, alternatively, was willfully blind to the infringement.
- 102. On information and belief, Defendant's inducements in violation of 35 U.S.C. § 271(b) further include, without limitation and with specific intent to encourage the infringement, knowingly inducing customers to commit acts of infringement with respect to the Accused Products within the United States, by, directly or through intermediaries, instructing and encouraging such customers to import, make, use, sell, offer to sell, or otherwise commit acts of infringement with respect to the Accused Products in the United States, which Defendant knew infringes at least Claim 5 of the '006 Patent, or, alternatively, was willfully blind to the infringement.

- 103. On information and belief, Defendant actively advertised the Accused Products with instructions to users to encourage infringement.
- 104. For example, Defendant describes Meta AI and the Accused Products on its websites. See, e.g., Meta, Introducing Meta AI on Meta Quest—Your Smart MR Assistant, https://www.meta.com/blog/meta-ai-on-meta-quest-3/ (last visited Feb. 6, 2025), Meta, Ray-Ban Meta Glasses Are Getting New AI Features and More Partner Integrations, https://about.fb.com/news/2024/09/ray-ban-meta-glasses-new-ai-features-and-partnerintegrations/ (last visited Feb. 6, 2025), WhatsApp, How to Chat with Meta AI Using Voice *Prompts*, https://faq.whatsapp.com/711493831174250/?cms_platform=android, (last visited Feb. 2025), Meta, Meta's AIProducts Just Got Smarter and More Useful, 6, https://about.fb.com/news/2024/09/metas-ai-product-news-connect/ (last visited Feb. 6, 2025). On information and belief, Defendant actively encourages the users to use the Meta AI features shown on Defendant's websites, which features closely match the claim elements of the '006 Patent. That supports a reasonable inference that Defendant encourages its users to infringe the '006 Patent.
- 105. On information and belief, in violation of 35 U.S.C. § 271(c), Defendant's contributory infringement further includes offering to sell or selling within the United States, or importing into the United States, components of the patented invention of and/or a material or apparatus for use in practicing at least Claim 5 of the '006 Patent, constituting a material part of the invention. On information and belief, Defendant knows and has known the same to be especially made or especially adapted for use in an infringement of the '006 Patent, and such components are not a staple article or commodity of commerce suitable for substantial non-infringing use. For example, on information and belief, the Accused Products are not a staple article of commerce suitable for substantial non-infringing use, at least because they are especially

designed and produced by Defendant to understand and respond to user speech utterances in a manner claimed by the '006 Patent, and they are not capable of substantial non-infringing use.

- 106. Defendant is not licensed or otherwise authorized to practice the claims of the '006 Patent.
- 107. Thus, by its acts, Defendant has injured Dialect and is liable to Dialect for directly and/or indirectly infringing one or more claims of the '006 Patent, whether literally or under the doctrine of equivalents, including without limitation Claim 5.
- 108. At a minimum, Defendant has knowledge of the '006 Patent and its infringement at least as of the filing of the Complaint. Defendant has had, and continues to have, the specific intent to infringe, through its deliberate and intentional infringement or, alternatively, through its willfully blind disregard of the '006 Patent by knowing there was a high probability of infringement but taking deliberate actions to avoid confirming that infringement. The filing of this action has also made Defendant aware of the unjustifiably high risk that its actions constituted and continue to constitute infringement of the '006 Patent. On information and belief, discovery will reveal additional facts and circumstances from which Defendant's knowledge and intent to infringe (or willful indifference), both before and after the filing of this action, may be inferred.
- 109. Accordingly, Defendant's infringement of the '006 Patent has been and continues to be deliberate, intentional, and willful, and this is therefore an exceptional case warranting an award of enhanced damages and attorneys' fees and costs pursuant to 35 U.S.C. §§ 284 and 285.
- 110. As a result of Defendant's infringement of the '006 Patent, Dialect has suffered monetary damages, and seeks recovery, in an amount to be proven at trial, adequate to compensate for Defendant's infringement, but in no event less than a reasonable royalty with interest and costs.

111. On information and belief, Defendant will continue to infringe the '006 Patent unless enjoined by this Court. Defendant's infringement of Dialect's rights under the '006 Patent will continue to damage Dialect, causing irreparable harm for which there is no adequate remedy at law, unless enjoined by this Court.

THIRD COUNT (Infringement of U.S Patent No. 8,447,607)

- 112. Dialect incorporates by reference the allegations set forth in Paragraphs 1-111 of the Complaint as though fully set forth herein.
 - 113. The claims of the '607 Patent are valid and enforceable.
- 114. The claims of the '607 Patent are directed to patentable subject matter. The '607 Patent is directed to innovations that improve systems for natural language processing. The claimed inventions provide specific concrete solutions to the problem of natural language processing in existing systems.
- 115. On information and belief, in violation of 35 U.S.C. § 271(a), Defendant has directly infringed and continues to directly infringe one or more claims of the '607 Patent, including at least Claim 12 of the '607 Patent, in the State of Texas, in this judicial district, and elsewhere in the United States by, among other things, making, using, selling, offering for sale, and/or importing into the United States products and services that embody one or more of the inventions claimed in the '607 Patent, including the Accused Products. For example, Defendant sells Quest headsets, Ray-Ban Meta Smart Glasses, and distributes its Facebook, Instagram, and WhatsApp applications in the United States.
- 116. Each of the Accused Products incorporates and/or implements elements that are identical or equivalent to each claimed element of the patented invention claimed by at least Claim 12 of the '607 Patent:

- 117. Claim 12 of the '607 Patent recites:
- 12. A method for processing natural language inputs, comprising:
- receiving, by one or more processors, a multi-modal natural language input from a user, the multi-modal natural language input including a natural language utterance and a non-speech input;
- generating, by the one or more processors, a non-speech transcription from the non-speech input;
- identifying, by the one or more processors, the user who provided the multi-modal natural language input;
- generating, by the one or more processors, a speech-based transcription based on a cognitive model associated with the user, wherein the cognitive model includes information on one or more prior interactions between the user and the device:
- generating, by the one or more processors, a merged transcription from the speechbased transcription and the non-speech transcription;
- identifying, by the one or more processors, an entry in a context stack, from among a plurality of entries that are in the context stack and that are each indicative of context, wherein the identified entry matches information in the merged transcription;
- identifying, by the one or more processors, a domain agent associated with the entry in the context stack;
- determining, by the one or more processors, a request based on the merged transcription; and
- communicating, by the one or more processors, the request to the domain agent, wherein the domain agent is configured to generate a response to the user.

'607 Patent, Claim 12.

- 118. Each of the Accused Products implements a method recited in Claim 12. *See* Appendix C. Fact and expert discovery are expected to confirm that the Accused Products infringe the '607 Patent, for which further evidence may lie in whole or in part in source code and technical documents to which Dialect does not presently have access.
- 119. Further, on information and belief, Defendant has actively induced and/or contributed to infringement of at least Claim 12 of the '607 Patent in violation of at least 35 U.S.C. § 271(b) and (c).

- 120. Users of the Accused Products directly infringe at least Claim 12 of the '607 Patent when they use the Accused Products in the ordinary, customary, and intended way.
- 121. On information and belief, Defendant's inducements in violation of 35 U.S.C. § 271(b) include, without limitation and with specific intent to encourage infringement, knowingly inducing consumers to use the '607 Accused Products within the United States in the ordinary, customary, and intended way by, directly or through intermediaries, supplying the Accused Products to consumers within the United States and instructing and encouraging such customers to use the Accused Products in the ordinary, customary, and intended way, which Defendant knew infringes at least Claim 12 of the '607 Patent, or, alternatively, was willfully blind to the infringement.
- 122. On information and belief, Defendant's inducements in violation of 35 U.S.C. § 271(b) further include, without limitation and with specific intent to encourage the infringement, knowingly inducing customers to commit acts of infringement with respect to the Accused Products within the United States, by, directly or through intermediaries, instructing and encouraging such customers to import, make, use, sell, offer to sell, or otherwise commit acts of infringement with respect to the Accused Products in the United States, which Defendant knew infringes at least Claim 12 of the '607 Patent, or, alternatively, was willfully blind to the infringement.
- 123. On information and belief, Defendant actively advertised the Accused Products with instructions to users to encourage infringement.
- 124. For example, Defendant describes Meta AI and the Accused Products on its websites. *See, e.g.*, Meta, *Introducing Meta AI on Meta Quest—Your Smart MR Assistant*, https://www.meta.com/blog/meta-ai-on-meta-quest-3/ (last visited Feb. 6, 2025), Meta, *Ray-Ban*

Getting New AI Features Meta Glasses and More Partner Integrations, https://about.fb.com/news/2024/09/ray-ban-meta-glasses-new-ai-features-and-partnerintegrations/ (last visited Feb. 6, 2025), WhatsApp, How to Chat with Meta AI Using Voice *Prompts*, https://faq.whatsapp.com/711493831174250/?cms_platform=android, (last visited Feb. Meta, Meta's AIProducts Just Got Smarter and https://about.fb.com/news/2024/09/metas-ai-product-news-connect/ (last visited Feb. 6, 2025). On information and belief, Defendant actively encourages the users to use the Meta AI features shown on Defendant's websites, which features closely match the claim elements of the '607 Patent. That supports a reasonable inference that Defendant encourages its users to infringe the '607 Patent.

- 125. On information and belief, in violation of 35 U.S.C. § 271(c), Defendant's contributory infringement further includes offering to sell or selling within the United States, or importing into the United States, components of the patented invention of and/or a material or apparatus for use in practicing at least Claim 12 of the '607 Patent, constituting a material part of the invention. On information and belief, Defendant knows and has known the same to be especially made or especially adapted for use in an infringement of the '607 Patent, and such components are not a staple article or commodity of commerce suitable for substantial non-infringing use. For example, on information and belief, the Accused Products are not a staple article of commerce suitable for substantial non-infringing use, at least because they are especially designed and produced by Defendant to understand and respond to user speech utterances in a manner claimed by the '607 Patent, and they are not capable of substantial non-infringing use.
- 126. Defendant is not licensed or otherwise authorized to practice the claims of the '607 Patent.

- 127. Thus, by its acts, Defendant has injured Dialect and is liable to Dialect for directly and/or indirectly infringing one or more claims of the '607 Patent, whether literally or under the doctrine of equivalents, including without limitation Claim 12.
- 128. At a minimum, Defendant has knowledge of the '607 Patent and its infringement at least as of the filing of the Complaint. Defendant has had, and continues to have, the specific intent to infringe, through its deliberate and intentional infringement or, alternatively, through its willfully blind disregard of the '607 Patent by knowing there was a high probability of infringement but taking deliberate actions to avoid confirming that infringement. The filing of this action has also made Defendant aware of the unjustifiably high risk that its actions constituted and continue to constitute infringement of the '607 Patent. On information and belief, discovery will reveal additional facts and circumstances from which Defendant's knowledge and intent to infringe (or willful indifference), both before and after the filing of this action, may be inferred.
- 129. Accordingly, Defendant's infringement of the '607 Patent has been and continues to be deliberate, intentional, and willful, and this is therefore an exceptional case warranting an award of enhanced damages and attorneys' fees and costs pursuant to 35 U.S.C. §§ 284 and 285.
- 130. As a result of Defendant's infringement of the '607 Patent, Dialect has suffered monetary damages, and seeks recovery, in an amount to be proven at trial, adequate to compensate for Defendant's infringement, but in no event less than a reasonable royalty with interest and costs.
- 131. On information and belief, Defendant will continue to infringe the '607 Patent unless enjoined by this Court. Defendant's infringement of Dialect's rights under the '607 Patent will continue to damage Dialect, causing irreparable harm for which there is no adequate remedy at law, unless enjoined by this Court.

FOURTH COUNT (Infringement of U.S Patent No. 9,263,039)

- 132. Dialect incorporates by reference the allegations set forth in Paragraphs 1-131 of the Complaint as though fully set forth herein.
 - 133. The claims of the '039 Patent are valid and enforceable.
- 134. The claims of the '039 Patent are directed to patentable subject matter. The '039 Patent is directed to innovations that improve systems for natural language processing. The claimed inventions provide specific concrete solutions to the problem of natural language processing in existing systems.
- 135. On information and belief, in violation of 35 U.S.C. § 271(a), Defendant has directly infringed and continues to directly infringe one or more claims of the '039 Patent, including at least Claim 13 of the '039 Patent, in the State of Texas, in this judicial district, and elsewhere in the United States by, among other things, making, using, selling, offering for sale, and/or importing into the United States products and services that embody one or more of the inventions claimed in the '039 Patent, including the Accused Products. For example, Defendant sells Quest headsets, Ray-Ban Meta Smart Glasses, and distributes its Facebook, Instagram, and WhatsApp applications in the United States.
- 136. Each of the Accused Products incorporates and/or implements elements that are identical or equivalent to each claimed element of the patented invention claimed by at least Claim 13 of the '039 Patent:
 - 137. Claim 13 of the '039 Patent recites:
 - 13. A method of processing speech and non-speech communications, comprising: receiving the speech and non-speech communications;
 - transcribing the speech and non-speech communications to create a speech-based textual message and a non-speech-based textual message;

merging the speech-based textual message and the non-speech-based textual message to generate a query;

searching the query for text combinations;

comparing the text combinations to entries in a context description grammar;

accessing a plurality of domain agents that are associated with the context description grammar;

generating a relevance score based on results from comparing the text combinations to entries in the context description grammar;

selecting one or more domain agents based on results from the relevance score;

obtaining content that is gathered by the selected domain agents; and

generating a response from the content, wherein the content is arranged in a selected order based on results from the relevance score.

'039 Patent, Claim 13.

- 138. Each of the Accused Products implements a method recited in Claim 13. *See* Appendix D. Fact and expert discovery are expected to confirm that the Accused Products infringe the '039 Patent, for which further evidence may lie in whole or in part in source code and technical documents to which Dialect does not presently have access.
- 139. Further, on information and belief, Defendant has actively induced and/or contributed to infringement of at least Claim 13 of the '039 Patent in violation of at least 35 U.S.C. § 271(b) and (c).
- 140. Users of the Accused Products directly infringe at least Claim 13 of the '039 Patent when they use the Accused Products in the ordinary, customary, and intended way.
- 141. On information and belief, Defendant's inducements in violation of 35 U.S.C. § 271(b) include, without limitation and with specific intent to encourage infringement, knowingly inducing consumers to use the '039 Accused Products within the United States in the ordinary, customary, and intended way by, directly or through intermediaries, supplying the Accused Products to consumers within the United States and instructing and encouraging such customers to use the Accused Products in the ordinary, customary, and intended way, which Defendant knew

infringes at least Claim 13 of the '039 Patent, or, alternatively, was willfully blind to the infringement.

- 142. On information and belief, Defendant's inducements in violation of 35 U.S.C. § 271(b) further include, without limitation and with specific intent to encourage the infringement, knowingly inducing customers to commit acts of infringement with respect to the Accused Products within the United States, by, directly or through intermediaries, instructing and encouraging such customers to import, make, use, sell, offer to sell, or otherwise commit acts of infringement with respect to the Accused Products in the United States, which Defendant knew infringes at least Claim 13 of the '039 Patent, or, alternatively, was willfully blind to the infringement.
- 143. On information and belief, Defendant actively advertised the Accused Products with instructions to users to encourage infringement.
- 144. For example, Defendant describes Meta AI and the Accused Products on its websites. See, e.g., Meta, Introducing Meta AI on Meta Quest—Your Smart MR Assistant, https://www.meta.com/blog/meta-ai-on-meta-quest-3/ (last visited Feb. 6, 2025), Meta, Ray-Ban Meta Are Getting New AI Features and More Partner Integrations, https://about.fb.com/news/2024/09/ray-ban-meta-glasses-new-ai-features-and-partnerintegrations/ (last visited Feb. 6, 2025), WhatsApp, How to Chat with Meta AI Using Voice *Prompts*, https://faq.whatsapp.com/711493831174250/?cms platform=android, (last visited Feb. 2025), Meta, Meta's AI Products Just GotSmarter and More https://about.fb.com/news/2024/09/metas-ai-product-news-connect/ (last visited Feb. 6, 2025). On information and belief, Defendant actively encourages the users to use the Meta AI features shown

on Defendant's websites, which features closely match the claim elements of the '039 Patent. That supports a reasonable inference that Defendant encourages its users to infringe the '039 Patent.

- 145. On information and belief, in violation of 35 U.S.C. § 271(c), Defendant's contributory infringement further includes offering to sell or selling within the United States, or importing into the United States, components of the patented invention of and/or a material or apparatus for use in practicing at least Claim 13 of the '039 Patent, constituting a material part of the invention. On information and belief, Defendant knows and has known the same to be especially made or especially adapted for use in an infringement of the '039 Patent, and such components are not a staple article or commodity of commerce suitable for substantial non-infringing use. For example, on information and belief, the Accused Products are not a staple article of commerce suitable for substantial non-infringing use, at least because they are especially designed and produced by Defendant to understand and respond to user speech utterances in a manner claimed by the '039 Patent, and they are not capable of substantial non-infringing use.
- 146. Defendant is not licensed or otherwise authorized to practice the claims of the '039 Patent.
- 147. Thus, by its acts, Defendant has injured Dialect and is liable to Dialect for directly and/or indirectly infringing one or more claims of the '039 Patent, whether literally or under the doctrine of equivalents, including without limitation Claim 13.
- 148. At a minimum, Defendant has knowledge of the '039 Patent and its infringement at least as of the filing of the Complaint. Defendant has had, and continues to have, the specific intent to infringe, through its deliberate and intentional infringement or, alternatively, through its willfully blind disregard of the '039 Patent by knowing there was a high probability of infringement but taking deliberate actions to avoid confirming that infringement. The filing of this

action has also made Defendant aware of the unjustifiably high risk that its actions constituted and continue to constitute infringement of the '039 Patent. On information and belief, discovery will reveal additional facts and circumstances from which Defendant's knowledge and intent to infringe (or willful indifference), both before and after the filing of this action, may be inferred.

- 149. Accordingly, Defendant's infringement of the '039 Patent has been and continues to be deliberate, intentional, and willful, and this is therefore an exceptional case warranting an award of enhanced damages and attorneys' fees and costs pursuant to 35 U.S.C. §§ 284 and 285.
- 150. As a result of Defendant's infringement of the '039 Patent, Dialect has suffered monetary damages, and seeks recovery, in an amount to be proven at trial, adequate to compensate for Defendant's infringement, but in no event less than a reasonable royalty with interest and costs.
- 151. On information and belief, Defendant will continue to infringe the '039 Patent unless enjoined by this Court. Defendant's infringement of Dialect's rights under the '039 Patent will continue to damage Dialect, causing irreparable harm for which there is no adequate remedy at law, unless enjoined by this Court.

FIFTH COUNT (Infringement of U.S Patent No. 9,734,825)

- 152. Dialect incorporates by reference the allegations set forth in Paragraphs 1-151 of the Complaint as though fully set forth herein.
 - 153. The claims of the '825 Patent are valid and enforceable.
- 154. The claims of the '825 Patent are directed to patentable subject matter. The '825 Patent is directed to innovations that improve systems for natural language processing. The claimed inventions provide specific concrete solutions to the problem of natural language processing in existing systems.

- 155. On information and belief, in violation of 35 U.S.C. § 271(a), Defendant has directly infringed and continues to directly infringe one or more claims of the '825 Patent, including at least Claim 5 of the '825 Patent, in the State of Texas, in this judicial district, and elsewhere in the United States by, among other things, making, using, selling, offering for sale, and/or importing into the United States products and services that embody one or more of the inventions claimed in the '825 Patent, including the Accused Products. For example, Defendant sells Quest headsets, Ray-Ban Meta Smart Glasses, and distributes its Facebook, Instagram, and WhatsApp applications in the United States.
- 156. Each of the Accused Products incorporates and/or implements elements that are identical or equivalent to each claimed element of the patented invention claimed by at least Claim 5 of the '825 Patent:
 - 157. Claim 5 of the '825 Patent recites:
 - 5. A method for responding to a user generated natural language speech utterance, the method comprising:
 - recognizing, by a speech recognition engine, one or more words in the user generated natural language speech utterance;
 - receiving, at a parser, keyword and associated prior probabilities or fuzzy possibilities from a system agent or an active domain agent of a plurality of autonomous executable domain agents;
 - determining, for the natural language speech utterance, a score for each of at least two possible contexts, wherein the scores are determined based on the received keyword and associated prior probabilities or fuzzy possibilities;
 - determining by the parser, a domain for the user generated natural language utterance based on the recognized one or more words of the natural language utterance and the determined scores for each of the at least two possible contexts;
 - selecting at least one of the plurality of autonomous executable domain agents based, at least in part, on the determined domain, wherein each of the plurality of domain agents is configured to respond to queries and/or commands within a particular domain, wherein the particular domain indicates an area of expertise within which the domain agent is capable of responding to the queries and/or commands;

- providing at least one query and/or command based on the natural language utterance to the selected at least one of the plurality of domain agents;
- creating, by the selected at least one of the plurality of domain agents, one or more queries based on the at least one query and/or command;
- sending, by the selected at least one of the plurality of domain agents, the one or more queries in an asynchronous manner to one or more local or external information sources.

'825 Patent, Claim 5.

- 158. Each of the Accused Products implements a method recited in Claim 5. See Appendix E. Fact and expert discovery are expected to confirm that the Accused Products infringe the '825 Patent, for which further evidence may lie in whole or in part in source code and technical documents to which Dialect does not presently have access.
- 159. Further, on information and belief, Defendant has actively induced and/or contributed to infringement of at least Claim 5 of the '825 Patent in violation of at least 35 U.S.C. § 271(b) and (c).
- 160. Users of the Accused Products directly infringe at least Claim 5 of the '825 Patent when they use the Accused Products in the ordinary, customary, and intended way.
- 161. On information and belief, Defendant's inducements in violation of 35 U.S.C. § 271(b) include, without limitation and with specific intent to encourage infringement, knowingly inducing consumers to use the '825 Accused Products within the United States in the ordinary, customary, and intended way by, directly or through intermediaries, supplying the Accused Products to consumers within the United States and instructing and encouraging such customers to use the Accused Products in the ordinary, customary, and intended way, which Defendant knew infringes at least Claim 5 of the '825 Patent, or, alternatively, was willfully blind to the infringement.

- 162. On information and belief, Defendant's inducements in violation of 35 U.S.C. § 271(b) further include, without limitation and with specific intent to encourage the infringement, knowingly inducing customers to commit acts of infringement with respect to the Accused Products within the United States, by, directly or through intermediaries, instructing and encouraging such customers to import, make, use, sell, offer to sell, or otherwise commit acts of infringement with respect to the Accused Products in the United States, which Defendant knew infringes at least Claim 5 of the '825 Patent, or, alternatively, was willfully blind to the infringement.
- 163. On information and belief, Defendant actively advertised the Accused Products with instructions to users to encourage infringement.
- For example, Defendant describes Meta AI and the Accused Products on its 164. websites. See, e.g., Meta, Introducing Meta AI on Meta Quest—Your Smart MR Assistant, https://www.meta.com/blog/meta-ai-on-meta-quest-3/ (last visited Feb. 6, 2025), Meta, Ray-Ban Glasses Are Getting New AI Features and More Partner Integrations, https://about.fb.com/news/2024/09/ray-ban-meta-glasses-new-ai-features-and-partnerintegrations/ (last visited Feb. 6, 2025), WhatsApp, How to Chat with Meta AI Using Voice *Prompts*, https://faq.whatsapp.com/711493831174250/?cms platform=android, (last visited Feb. Meta, Meta's AI**Products** Just Got Smarter and More https://about.fb.com/news/2024/09/metas-ai-product-news-connect/ (last visited Feb. 6, 2025). On information and belief, Defendant actively encourages the users to use the Meta AI features shown on Defendant's websites, which features closely match the claim elements of the '825 Patent. That supports a reasonable inference that Defendant encourages its users to infringe the '825 Patent.

- 165. On information and belief, in violation of 35 U.S.C. § 271(c), Defendant's contributory infringement further includes offering to sell or selling within the United States, or importing into the United States, components of the patented invention of and/or a material or apparatus for use in practicing at least Claim 5 of the '825 Patent, constituting a material part of the invention. On information and belief, Defendant knows and has known the same to be especially made or especially adapted for use in an infringement of the '825 Patent, and such components are not a staple article or commodity of commerce suitable for substantial non-infringing use. For example, on information and belief, the Accused Products are not a staple article of commerce suitable for substantial non-infringing use, at least because they are especially designed and produced by Defendant to understand and respond to user speech utterances in a manner claimed by the '825 Patent, and they are not capable of substantial non-infringing use.
- 166. Defendant is not licensed or otherwise authorized to practice the claims of the '825 Patent.
- 167. Thus, by its acts, Defendant has injured Dialect and is liable to Dialect for directly and/or indirectly infringing one or more claims of the '825 Patent, whether literally or under the doctrine of equivalents, including without limitation Claim 5.
- 168. At a minimum, Defendant has knowledge of the '825 Patent and its infringement at least as of the filing of the Complaint. Defendant has had, and continues to have, the specific intent to infringe, through its deliberate and intentional infringement or, alternatively, through its willfully blind disregard of the '825 Patent by knowing there was a high probability of infringement but taking deliberate actions to avoid confirming that infringement. The filing of this action has also made Defendant aware of the unjustifiably high risk that its actions constituted and continue to constitute infringement of the '825 Patent. On information and belief, discovery will

reveal additional facts and circumstances from which Defendant's knowledge and intent to infringe (or willful indifference), both before and after the filing of this action, may be inferred.

- 169. Accordingly, Defendant's infringement of the '825 Patent has been and continues to be deliberate, intentional, and willful, and this is therefore an exceptional case warranting an award of enhanced damages and attorneys' fees and costs pursuant to 35 U.S.C. §§ 284 and 285.
- 170. As a result of Defendant's infringement of the '825 Patent, Dialect has suffered monetary damages, and seeks recovery, in an amount to be proven at trial, adequate to compensate for Defendant's infringement, but in no event less than a reasonable royalty with interest and costs.
- 171. On information and belief, Defendant will continue to infringe the '825 Patent unless enjoined by this Court. Defendant's infringement of Dialect's rights under the '825 Patent will continue to damage Dialect, causing irreparable harm for which there is no adequate remedy at law, unless enjoined by this Court.

DEMAND FOR JURY TRIAL

Pursuant to Rule 38(b) of the Federal Rules of Civil Procedure, Plaintiff demands a trial by jury in this action for all issues triable by a jury.

Dated: February 7, 2025 Respectfully Submitted,

/s/ Garland Stephens

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