

Preliminary Ineligibility Contentions for U.S. Patent 7,818,176

Pursuant to Chief Judge Gilstrap's Standing Order Regarding Subject Matter Eligibility Contentions, the following charts contain Samsung's Preliminary Ineligibility Contentions demonstrating that claims 1-52 of U.S. Patent No. 7,818,176 (" '176 patent") are patent-ineligible under 35 U.S.C. § 101. Because the Court has yet to issue a claim construction in this case, and to the extent Plaintiff contends that there are factual disputes that relate to eligibility of the asserted claims of the '176 patent, fact and expert discovery is ongoing, these contentions are preliminary only and Samsung reserves the right to supplement or modify these contentions in accordance with the agreed patent-disclosure procedures and the Docket Control Order in this case. Additionally, and in further consideration of the preliminary stages of the case, Samsung notes that the pinpoint citations referenced in this chart are not exhaustive, and Samsung reserves the right to rely on additional citations within the asserted patent any cited reference. Furthermore, citations to any figure, table, or chart are meant to encompass the language describing the figure, table, or chart, and vice versa. To the extent applicable, Samsung incorporates by reference its citations in its eligibility contentions for the other asserted patents, which are related to the '176 patent.

To the extent applicable, Samsung further incorporates by reference its citation in the § 102/103 contentions, which illustrate that the claimed elements were well-understood, routine, and conventional.

Further, these charts may incorporate Plaintiff's apparent interpretation of the breakdown of elements within the asserted claims, as reflected in Plaintiff's infringement contentions to date. Samsung does not concede that such interpretation is correct, and reserves its right to supplement these contentions accordingly.

Samsung reserves its right to supplement these contentions based on further discovery, including any supplemental infringement contentions or to any interrogatory response provided by Plaintiff purporting to rebut these ineligibility contentions.

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Pursuant to Judge Gilstrap’s Standing Order Regarding Subject Matter Eligibility Contentions, Samsung provides the following chart identifying each exception to eligibility (e.g., abstract idea, law of nature, and natural phenomenon) to which each Challenged Claim is directed and the factual and legal basis therefor, as well as identification of whether one or more of the Challenged Claims are representative of any other Challenged Claims. Samsung incorporates by reference the prior art identified in the ’176 patent, the prosecution history of the ’176 patent, any related litigations, and any related PTAB proceedings. Samsung further incorporates by reference any prior art identified or to be identified in its invalidity contentions and/or expert reports that will be provided according to the schedule provided by the Court’s Docket Control Order (Dkt. No. 42).

Challenged Claims	Exception to Eligibility
Claims 1-52	Each of the independent claims of the ’176 patent are directed to the abstract idea of selecting and presenting advertisements based on natural language processing. This is not a technological advancement in the art, but a form of tailoring information based on provided data, such as was ruled abstract in <i>Intellectual Ventures I LLC v. Capital One Bank (USA)</i>, 792 F.3d 1363, 1369 (Fed. Cir. 2015). That the supposed tailoring of information results in a targeted advertisement is no matter since, as the Federal Circuit held in <i>Bridge & Post, Inc. v. Verizon Commc’ns, Inc.</i>, 778 F. App’x 882, 887 (Fed. Cir. 2019), targeted marketing or advertising simply using technological solutions does not escape the conclusion that the claim is directed to anything more than an abstract idea. <i>See also Customedia Technologies, LLC v. Dish Network Corp.</i>, 951 F.3d 1359 (Fed. Cir. 2020) (technology that merely improves the abstract ideal of targeted advertising is abstract). Accordingly, the patent is subject to the “abstract idea” exception to patent eligibility under the Patent Act as construed by the Supreme Court in <i>Alice</i>. <u>Representativeness</u> As an initial matter, for the purpose of the <i>Alice</i> inquiry, Claim 1 is representative of all asserted claims of the ’176 patent. VBA asserts all claims (1-52) of the ’176 patent, which includes independent claims 1, 14, 27, and 40. Starting with the independent claims, the claims are identical except for minor differences between them. Claim 14 is similar to claim 1 but add the steps of an adaptive misrecognition

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	engine for interpreting errors. Such engines were well-known in the art at the time and are not claimed to add an inventive step to the claims. Claim 27 and Claim 40 are system claims of claims 1 and 14, respectively, using non-inventive and off-the-shelf hardware components.				
	Feature	Claim 1 (Method)	Claim 14 (Method)	Claim 27 (System)	Claim 40 (System)
	Receiving an utterance	✓	✓	✓	✓
	Recognizing one or more words in the utterance	✓	✓	✓	✓
	Establishing a context for the utterance	✓	✓	✓	✓
	Interpreting the recognized words in the utterance	✓	✓	✓	✓
	Selecting an advertisement in the established context	✓	✓	✓	✓
	Presenting the advertisement	✓	✓	✓	✓
	Determining an incorrect interpretation of the words or phrases and reinterpretation of the same words and phrases		✓		✓

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	The dependent claims do not alter the analysis as the dependent claims are substantially are substantially similar, if not substantially identical, and linked to the same abstract idea. <i>See Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat. Ass’n</i>, 776 F.3d 1343, 1348 (Fed. Cir. 2014). For example, claims 2, 18, 28, and 44 refine the abstract idea of selecting and presenting advertisements based on natural language processing by introducing the use of personalized cognitive models, generalized cognitive models, or environmental models. These models, however, do not claim any new inventive concept but instead represent different ways of refining the decision-making process for selecting an advertisement. Simply changing the way a decision is made does not transform the fundamental concept of selecting and presenting advertisements based on natural language processing into an inventive concept. Claims 3-5, 19-21, 29-31, and 45-47 further build upon these concepts by introducing an additional step in which the cognitive models are updated based on the interaction pattern tracked for each advertisement. This refinement, however, remains within the realm of abstract ideas. The idea of updating a model based on user interaction is a fundamental data-gathering process, which courts have frequently found to be abstract. These claims do not introduce a novel technological advancement; rather, they simply automate a method of improving ad selection based on observed interactions, which is not inherently transformative. Similarly, claims 6, 22, 32, and 48 simply describe achieving the same abstract idea use “shared knowledge”, while still performing the same essential function. The concept of using shared knowledge to refine decision-making does not change the abstract nature of the claim. Claims 7-8, 23-24, 33-34, and 49-50 incorporate user interaction tracking to inform future ad selection. But tracking user engagement with advertisements is a well-known practice in digital advertising and does not introduce a new technological solution. Rather, these claims merely apply conventional tracking methods to an already abstract idea without demonstrating any improvement in the underlying technology.

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	Claims 9, 17, 35, and 43 add a limitation in which the advertisement selected is intended to clarify or resolve an incomplete or ambiguous user input. This does not alter the fundamental abstract nature of the claims. Claims 10-11, 25-26, 36-37, and 51-52 specify that the speech recognition engine utilizes dynamically updated dictionary and phrase tables to recognize words and phrases. However, dynamically updating dictionary entries or phrase mappings is confirmed by the specification as a is a standard technique in natural language processing and does not, by itself, constitute a technological improvement. Modifications to stored data or language models do not transform an abstract concept into a patentable invention unless they introduce a fundamentally new way of improving computing efficiency. Claims 12-13 and 38-39 add the concept of an adaptive misrecognition engine, which meaningfully parallel claims 14 and 40, and their dependent claims 15 and 41, which. As discussed above, the use of adaptive correction in NLP is well-established and does not, on its own, constitute a patent-eligible advancement. Claims 16 and 42 add the same phenome-mapping step that is articulated in claims 1 and 27. Finally, claims 28 through 39 and 41 through 52 mirror the method claims but recast them in the form of a system implementation. Simply stating an abstract idea in terms of a system does not make it patentable. Courts have consistently found that system claims must demonstrate a specific technological improvement to overcome an abstract concept. Here, these claims do not introduce new functionality beyond what is already described in the method claims. As detailed above, all of the asserted dependent claims merely narrow the scope of the independent claims to use specific modalities or decision processes for obtaining the same abstract idea claimed in the independent claims. Because these limitations do not provide any

Challenged Claims	Exception to Eligibility
	additional inventive concept, their eligibility under 101 rises and falls with the independent claims. <u>The ’176 Patent Claims an Abstract Idea</u> In <i>Beteiro, LLC v. DraftKings Inc.</i>, the Federal Circuit recently identified certain “well-settled indicators of abstractness.” 104 F. 4th 1350, 1355 (Fed. Cir. 2024). These are: (1) claims that broadly recite generic steps; (2) claims drafted using largely result-focused functional language, and (3) claims that can be analogized to “longstanding ‘real-world’ activities. <i>Id.</i> While each of these indicators are sufficient to demonstrate abstractness, the claims of the ’176 patent exhibit all of the features identified by that court. <i>First</i>, the claims are broad and cite generic steps. In considering the breadth and genericness of the claims, the focus must be on the actual claims. <i>See ChargePoint, Inc. v. SemaConnect, Inc.</i>, 920 F.3d 759, 769 (Fed. Cir. 2019) (“[T]he § 101 inquiry must focus on the language of the Asserted Claims themselves” (quoting <i>Synopsys, Inc. v. Mentor Graphics Corp.</i>, 839 F.3d 1138, 1149 (Fed. Cir. 2016)); <i>Alice</i>, 573 U.S. at 219, 134 S.Ct. 2347 (“On their face, the claims before us are drawn to the concept of intermediated settlement” (emphasis added)). When evaluating the claim language, the court must evaluate “the ‘focus of the claimed advance over the prior art’ to determine if the claim’s ‘character as a whole’ is directed to excluded subject matter.” <i>Intell. Ventures I LLC v. Erie Indem. Co.</i>, 850 F.3d 1315, 1325 (Fed. Cir. 2017) (quoting <i>Affinity Labs of Tex., LLC v. DIRECTV, LLC</i>, 838 F.3d 1253, 1257 (Fed. Cir. 2016)). While claim 1 of the ’176 patent includes extraneous verbiage designed to provide a perception of technological advance and complexity of the alleged invention in an attempt to remove it from the realm of ineligible subject matter, it is at bottom a claim over the following six-step process: (1) Receiving an utterance; (2) Recognizing one or more words in the utterance; (3) Establishing a context for the utterance; (4) Interpreting the recognized words in the utterance; (5) Selecting an advertisement in the established context; (6); and Presenting the advertisement. Those steps, paired with the corresponding claim language, are set out below:

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	'176 patent	Claimed Concept
	[1pre]: A method for selecting and presenting advertisements in response to processing natural language utterances, comprising:	A method for speech recognition, comprising:
	[1A] receiving a natural language utterance containing at least one request at an input device;	Step 1: Receiving an utterance
	[1B] recognizing one or more words or phrases in the natural language utterance at a speech recognition engine coupled to the input device, wherein recognizing the words or phrases in the natural language utterance includes:	Step 2: Recognizing one or more words or phrases in the utterance by:
	[1B.1] mapping a stream of phonemes contained in the natural language utterance to one or more syllables that are phonemically represented in an acoustic grammar; and	Step 2: converting a stream of phonemes into one or more syllables
	[1B.2] generating a preliminary interpretation for the natural language utterance from the one or more syllables,	Step 2: generating an initial interpretation of the utterance

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	wherein the preliminary interpretation generated from the one or more syllables includes the recognized words or phrases;	
	[1C] interpreting the recognized words or phrases at a conversational language processor coupled to the speech recognition engine, wherein interpreting the recognized words or phrases includes establishing a context for the natural language utterance;	Step 3: Establish a context for the utterance and interpret the recognized words and phrase
	[1D] selecting an advertisement in the context established for the natural language utterance; and	Step 4: Select and advertisement within the established context
	[1D.1] presenting the selected advertisement via an output device coupled to the conversational language processor.	Step 5: Present the selected advertisement
These steps—receiving a message, detecting information, and generating and transmitting a response—are <i>exactly</i> the type of steps that the Federal Circuit has “frequently” held to be abstract. <i>See, e.g., AI Visualize, Inc. v. Nuance Commc’ns, Inc.</i>, 97 F.4th 1371, 1378 (Fed. Cir. 2024) (“We have explained that the steps of obtaining, manipulating, and displaying data, particularly when claimed at a high level of generality, are abstract concepts.”); <i>Elec. Power Grp. LLC v. Alstom S.A.</i>, 830 F.3d 1350, 1354 (Fed Cir. 2016) (finding “a process of gathering and analyzing information of a specified content, then displaying the results” abstract); <i>Intell. Ventures I LLC v. Capital One Bank (USA)</i>, 792 F.3d 1363, 1369 (Fed. Cir. 2015) (finding		

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	“tailoring content based on the [user’s] location” abstract); <i>buySAFE, Inc. v. Google, Inc.</i>, 765 F.3d 1350, 1355 (Fed. Cir. 2014) (claiming “a computer receiv[ing] and send[ing] information over a network – with no further specification – is not even arguably inventive”). <i>Second</i>, the claims are drafted using largely result-focused functional language that “contain[s] no specificity about how the purported invention achieves those results.” <i>Beteiro, LLC v. DraftKings Inc.</i>, 104 F.4th 1350, 1356 (Fed. Cir. 2024). As the Federal Circuit has observed “Claims of this nature are almost always found to be ineligible for patenting under Section 101.” <i>Id.</i> (citing <i>Elec. Power Grp.</i>, 830 F.3d at 1356 (“[T]he essentially result-focused, functional character of claim language has been a frequent feature of claims held ineligible under § 101, especially in the area of using generic computer and network technology to carry out economic transactions.”); <i>Two-Way Media Ltd. v. Comcast Cable Commc’ns, LLC</i>, 874 F.3d 1329, 1337 (Fed. Cir. 2017) (“The claim requires the functional results of ‘converting,’ ‘routing,’ ‘controlling,’ ‘monitoring,’ and ‘accumulating records,’ but does not sufficiently describe how to achieve these results in a non-abstract way.”)). More specifically, claim 1 of the 176 patent employs purely functional claiming because it describes the intended results of various components without specifying any particular structure or algorithm for achieving those results. The claim recites broad functional language, such as “recognizing one or more words or phrases in the natural language utterance at a speech recognition engine coupled to the input device” and “interpreting the recognized words or phrases at a conversational language processor”, but does not disclose <i>how</i> these tasks are performed beyond referencing generic components. The speech recognition engine is claimed to “map[] a stream of phonemes contained in the natural language utterance to one or more syllables that are phonemically represented in an acoustic grammar”, yet the claim does not specify how the mapping is conducted or what algorithm governs this process or even what an acoustic grammar is. Likewise, the conversational language processor is merely described as “selecting an advertisement in the context established for the natural language utterance”, but the claim provides no explanation of how context is determined, how the selection process operates, or what parameters guide ad placement. By failing to define specific implementation

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	details, Claim 1 merely states desired functional outcomes without limiting itself to a particular technical solution, thereby preempting all possible implementations rather than claiming a specific inventive concept. <i>Third</i>, the claims are directly analogous to “longstanding ‘real-world’ (‘brick-and-mortar’) activities.” <i>Beteiro, LLC v. DraftKings Inc.</i>, 104 F.4th at 1356; <i>see also PersonalWeb Techs. LLC v. Google LLC</i>, 8 F.4th 1310, 1316 (Fed. Cir. 2021) (claims that “can be performed in the human mind” or “using a pencil and paper” are “a telltale sign of abstraction”); <i>Intell. Ventures I LLC v. Symantec Corp.</i>, 838 F.3d 1307, 1314 (Fed. Cir. 2016) (a claimed method’s similarity to “fundamental ... practices long prevalent” is yet another clue that the claims may be abstract and unpatentable). More specifically, the ’176 patent simply describes the process of selecting and presenting an advertisement that is responsive to a voice input. That is, of course, what salespersons do every day. That the patent claims performing this process using electronic devices and speech recognition software or hardware does not change the ultimate conclusion that the patent is directed to the abstract idea of selecting and presenting advertisements based on natural language processing. Indeed, the Federal Circuit has repeatedly held that a patent is directed to an abstract idea when the claimed invention simply automates via computer a process that has been and can be effectuated by humans. <i>See CyberSource Corp., v. Retail Decisions, Inc.</i>, 654 F.3d 1366, 1373 (Fed. Cir. 2011); <i>see also Voter Verified, Inc. v. Election Sys. & Software LLC</i>, 887 F.3d 1376, 1385 (Fed. Cir. 2018) (holding patent claims directed to auto-verification of a ballot to be abstract because “[h]umans have performed [the act of voting] . . . for hundreds of years.”); <i>Repifi Vendor Logistics, Inc. v. IntelliCentrics, Inc.</i>, 2022 WL 794981, *2-3 (Fed. Cir. 2022) (claims were “directed to the abstract idea of credentialing visitors and checking them in and out”—a “long-standing human process” (quotation marks omitted)); <i>CardioNet, LLC v. InfoBionic, Inc.</i>, 816 F. App’x 471, 476–77 (Fed. Cir. 2020) (measuring heart data claims abstract because process “could otherwise be performed by a human”); <i>Perry St. Software, Inc. v. Jedi Techs., Inc.</i>, 548 F. Supp. 3d 418, 432 (S.D.N.Y. 2021) (“Jedi seeks to apply these age-old processes to the context of internet chatrooms. But facilitating human interactions or

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	relationships – which could occur offline and without automation – is not a patent-eligible idea. It is, as Judge Sleet found in connection with Jedi's earlier patents, nothing more than the mechanization of traditional processes designed to satisfy humanity's desire for companionship.”) While the specification includes numerous references to assertedly technical solutions to various speech recognition issues, these details do not end up in the claims themselves. As the Federal Circuit has noted, district courts must not “import details from the specification if those details are themselves not claimed.” <i>AI Visualize, Inc. v. Nuance Commc'ns, Inc.</i>, 97 F.4th 1371, 1379 (Fed. Cir. 2024) (citing <i>ChargePoint</i>, 920 F.3d at 769).

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Pursuant to Judge Gilstrap’s Standing Order Regarding Subject Matter Eligibility Contentions, Samsung provides the following chart identifying a description of the industry, at the relevant time, in which the Challenged Claims are alleged to be well understood, routine, and conventional, and the factual and legal basis therefor; and a description of how each element of each Challenged Claim, both individually and in combination with the other elements of that claim, was well understood, routine, and conventional, in the relevant industry at the relevant time, and the legal and factual basis therefor.¹

The claims of the 176 patent amount to nothing more than the practice of an abstract idea using conventional (even as of 2006) electronics. Such claims are not eligible for patent under current Section 101 jurisprudence. *See, e.g., Alice*, 573 U.S. at 223, 134 S.Ct. 2347 (“[T]he mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention.”); *BSG Tech.*, 899 F.3d at 1290-91 (“If a claim’s only ‘inventive concept’ is the application of an abstract idea using conventional and well-understood techniques, the claim has not been transformed into a patent-eligible application of an abstract idea.”). Accordingly, the district court rightly dismissed the complaints.

Claim Language	Description of the Industry and Description of How Each Element Was Well-Understood, Routine, and Conventional
[1pre] A method for selecting and presenting advertisements in response to processing natural language utterances, comprising:	
[1A] receiving a natural language utterance containing at least one request at an input device;	The claimed method of receiving a natural language utterance containing at least one request at an input device was well understood, routine, and conventional in the relevant industry at the relevant time.

¹ Samsung notes that under Supreme Court and Federal Circuit precedent, the Court need not, and should not, consider whether each and every element of each Challenged Claim was well understood, routine, and conventional. Rather, the only elements which should be considered under *Alice* step 2 are the elements that fall outside the scope of the abstract idea. *See Alice Corp. v. CLS Bank Int’l*, 573 U.S. 208, 221-224 (2014); *BSG Tech LLC v. BuySeasons, Inc.*, 899 F.3d 1281, 1290 (Fed. Cir. 2018) (“It has been clear since *Alice* that a claimed invention’s use of the ineligible concept to which it is directed cannot supply the inventive concept that renders the invention ‘significantly more’ than that ineligible concept.”).

Claim Language	Description of the Industry and Description of How Each Element Was Well-Understood, Routine, and Conventional
	There is no technical disclosure or explanation in the specification about how to specifically receive a natural language utterance containing a request beyond broadly describing the input process. This lack of technical detail indicates that these processes were well understood, routine, and conventional in the relevant industry at the relevant time period. Receiving natural language input containing user requests through an input device was a foundational element of interactive and speech-enabled systems. For example, McTear’s <i>Spoken Dialogue Technology</i> (2004) describes systems that accept user utterances via microphones or text interfaces and interpret requests as part of the dialogue management process. These capabilities were routinely implemented in spoken language interfaces and multimodal systems well before the relevant time. For example, the intrinsic record describes how: “According to various aspects of the invention, system 100 may receive a user input, including at least a voice-based user utterance, at an input device 105. Input device 105 may include any suitable device, or combination of devices, for receiving a voice-based input (e.g., a microphone). In various implementations, input device 105 may include a multi-modal input, such as a touch-screen interface, keypad, or other input.” ’176 patent at 3:30–36. Further, there is no technical disclosure or explanation in the specification about how the input device “receives” the natural language utterance. This demonstrates that it was well understood, routine, and conventional in the relevant industry at the relevant time period.

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[1B] recognizing one or more words or phrases in the natural language utterance at a speech recognition engine coupled to the input device, wherein recognizing the words or phrases in the natural language utterance includes: [1B.1] mapping a stream of phonemes contained in the natural language utterance to one or more syllables that are phonemically represented in an acoustic grammar; and [1B.2] generating a preliminary interpretation for the natural language utterance from the one or more syllables, wherein the preliminary interpretation generated from the one or more syllables includes the recognized words or phrases;	The claimed method of recognizing one or more words or phrases in the natural language utterance at a speech recognition engine coupled to the input device, including mapping a stream of phonemes to syllables represented in an acoustic grammar and generating a preliminary interpretation from the syllables, was well understood, routine, and conventional in the relevant industry at the relevant time. There is no technical disclosure or explanation in the specification about how to specifically map phonemes to syllables or generate preliminary interpretations beyond broad conceptual statements. This lack of technical detail indicates that these processes were well understood, routine, and conventional in the relevant industry at the relevant time period. Mapping streams of phonemes to intermediate representations such as syllables, and then using those representations to generate preliminary recognized word hypotheses, was a well-established practice in automatic speech recognition (ASR) systems. For example, McTear’s <i>Spoken Dialogue Technology</i> (2004) describes ASR systems that use hierarchical recognition strategies, including phoneme-to-syllable mappings and language models, to generate preliminary interpretations and recognized outputs from natural language speech input. These techniques were standard in commercially deployed and research-grade dialogue systems well before the relevant time. The specification makes clear that the limitations reciting “recogniz[ing] words or phrases” by “map[ping] a stream of phonemes . . . to one or more syllables,” (<i>i.e.</i>, mapping sounds to syllables) is a pre-existing technique. ’176 patent at 3:39-41. (“Automatic Speech Recognizer 110 may interpret the utterance using techniques of phonetic dictation to recognize a stream of phonemes.”)

Claim Language	Description of the Industry and Description of How Each Element Was Well-Understood, Routine, and Conventional
	More specifically, the specification confirms that “map[ping]” phonemes to syllables and generating the interpretation from “syllables” are purely conventional. (<i>Id.</i> at 3:3-19, 3:46-51 (incorporating techniques from unrelated prior art patents); 3:39-41 (using conventional “phonetic dictation . . . techniques . . . to recognize a stream of phonemes”).) The specification offers no additional guidance about how the “conversational language processor” “interpret[s] the recognized words or phrases . . . [to] establish[] a context” for the utterance and refers to admittedly pre-existing solutions. (See <i>id.</i> at 4:34-44 (incorporating techniques for context-based interpretation from unrelated prior art patents); 7:52-56 (“conversational language processor may therefore use various techniques . . . described in [prior art patents]”).) Further, there is no technical disclosure or explanation in the specification about how the claimed method (1) maps phonemes to syllables that are phonemically represented in an acoustic grammar, and (2) generates a preliminary interpretation for the natural language utterance from the syllables, (3) interprets the recognized words of phrases at a conventional language processor. This demonstrates that it was well understood, routine, and conventional in the relevant industry at the relevant time period. To the extent that the claimed “speech recognition engine” relates to an “automated speech engine”, Michael Kennewick, a principal of VB Assets and a former officer of VoiceBox, has admitted that these engines were “commodity products” at the time of the priority date of this patent: Q. And that software section, let's go to the next page, 0194. And if we could on that page, if you could put just

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	the top paragraph on the screen. And kind of put it to the side so you can see both at the same time. During the opening by Amazon's counsel, you indicated that the original Cybermind used some software from IBM, did you hear that? A. Yes. Q. What was that, sir? A. That was a component called the ASR, Automated Speech recognition engine and that was pretty much a commodity product at the same time. <i>Trial Tr. 147:18-148:3</i> <i>VB Assets v. Amazon.com Services LLC</i>, No. 19-cv-01410, at ECF No. 304 (D. Del. Dec. 12, 2023)
[1C] interpreting the recognized words or phrases at a conversational language processor coupled to the speech recognition engine, wherein interpreting the recognized words or phrases includes establishing a context for the natural language utterance;	See Claim 1B. The claimed method of interpreting the recognized words or phrases at a conversational language processor coupled to the speech recognition engine, including establishing a context for the natural language utterance, was well understood, routine, and conventional in the relevant industry at the relevant time. There is no technical disclosure or explanation in the specification about how to specifically interpret recognized words or establish a conversational context beyond broadly describing the concept. This lack of technical detail indicates that these processes were well understood, routine, and conventional in the relevant industry at the relevant time period. Using recognized words or phrases to establish conversational context was a well-established technique in dialogue systems and natural language understanding.

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	For example, McTear's <i>Spoken Dialogue Technology</i> (2004) describes dialogue systems that interpret recognized input by identifying context. Additionally, Seneff et al.'s <i>Galaxy-II: A Reference Architecture for Conversational System Development</i> (1998) discusses conversational systems that map recognized words to semantic frames or domains in order to establish context for ongoing dialogue management and system responses. In addition, Thomas Freeman, an inventor of the related '681 patent, has admitted that the so-called conversational language processor was well-understood, routine, and conventional at the time of the priority date of the '681 patent: Q. Let's look at the patent again, please, Mr. Patterson, JTX-003. And let's look at Claim 40. Did you invent a conversational language processor? A. Did I invent a conversational language processor? Q. Yes, sir. A. I did not. <i>Trial Tr. 284:2-8</i> <i>VB Assets v. Amazon.com Services LLC</i>, No. 19-cv-01410, at ECF No. 304 (D. Del. Dec. 12, 2023)
[1D] selecting an advertisement in the context established for the natural language utterance; and	The claimed method of selecting an advertisement in the context established for the natural language utterance was well understood, routine, and conventional in the relevant industry at the relevant time.

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	There is no technical disclosure or explanation in the specification about how to specifically select an advertisement based on the conversational context beyond high-level conceptual descriptions. This lack of technical detail indicates that these processes were well understood, routine, and conventional in the relevant industry at the relevant time period. Selecting advertisements based on the conversational or situational context established from user input was a well-established practice in the online advertising and dialogue management industries. For example, Plummer’s <i>The Online Advertising Playbook</i> (2007) describes longstanding systems that dynamically select advertisements based on contextual relevance, behavioral targeting, and real-time interaction cues to match user interests and ongoing conversational context. Selecting advertisements based on context is a form of targeted marketing. As the Federal Circuit has observed: “Targeted marketing is a form of “tailoring information based on [provided] data,” which we have previously held is an abstract idea. <i>Intellectual Ventures I LLC v. Capital One Bank (USA)</i>, 792 F.3d 1363, 1369 (Fed. Cir. 2015). The concept is a “fundamental practice” that dates back to newspaper advertisements. <i>Id.</i> (ellipsis omitted). Bridge and Post acknowledges as much in its complaint, alleging that “[t]argeted marketing and market segmentation were originally developed to increase the effectiveness of advertisements placed in traditional media such as radio, television, and printed newspapers and magazines.”” <i>Bridge & Post, Inc. v. Verizon Commc’ns, Inc.</i>, 778 F. App’x 882, 887 (Fed. Cir. 2019). The claim says nothing about how the advertisement is selected. The specification also makes clear that the process of selecting an advertisement is not based on any particular technical solution but is claiming functional steps that can be performed

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	in any number of ways using existing art. For instance, it illustrates the “[a]dvertising [s]erver 230” as a black box with a collection of other black boxes such as a “[c]ontent/[a]ction [i]dentification module 235” and an “advertisement selection [module] 250.” (Id. at Fig. 2.) The specification describes the content/action identification module 235 by its functions: selecting an advertisement (id. at 5:56-64) using an “advertisement selection module 250 [that] may correlate the information about the request to select advertisements. . . . (e.g., based on a ranking of relevance . . .)” (id. at 6:19-26). Neither the specification nor the claims disclose any algorithm or other solution for these black boxes. Indeed, the patent specification is clear that the advertisement can be selected through any number of pre-existing ways. The patent describes a system in which advertisements are selected based on various contextual factors, including the content of the user’s input, related activities, and user profiles. Specifically, it states that “advertisements may be selected based on various criteria, including content of the input (e.g., concepts, semantic indicators, etc.), an activity related to the input (e.g., a relation to a request, a requested application, etc.), user profiles (e.g., demographics, preferences, location, etc.), or in other ways.” (2:7-12). This illustrates that the method of selecting advertisements in response to user context is based on known targeting methods, such as keyword-based and profile-driven advertising. Further, the specification acknowledges the use of tracking user interactions to refine advertisement selection, stating that “the interaction may be tracked to build statistical profiles of user behavior based on affinities or clusters among advertisements, user profiles, contexts, topics, semantic indicators, concepts, or other criteria.” (2:14-18). This reflects an approach long used in digital advertising systems where user engagement is recorded to optimize future ad placements.

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	Additionally, the patent describes how advertisements are stored in a repository and retrieved based on predefined parameters, akin to basic data storage and retrieval processes long-held to be routine and conventional. It notes that “advertisements may include sponsored messages, calls to action, purchase opportunities, trial downloads, or any other marketing communication, as would be apparent to those skilled in the art.” (2:21-24). The phrase “as would be apparent to those skilled in the art” implies that the concept of targeted advertising in response to contextual cues was not considered novel but rather an adaptation of known principles. Moreover, the patent details an advertisement selection module responsible for extracting relevant information from user inputs and selecting advertisements accordingly. Specifically, it states that “advertisement selection module 250 [will] extract relevant information from the voice-based input, where advertisement selection module 250 may select one or more advertisements relevant to the voice-based input based on information extracted using content/action identification module 235 and/or user profile module 240.” (5:49-55). This description aligns with traditional context-aware advertising, where ad targeting is based on content analysis and user data. Other relevant references establishing that the claims are directed to well-understood and routine subject matter include: Soe-Tsyr Yuan, Y.W. Tsao, A recommendation mechanism for contextualized mobile advertising, Expert Systems with Applications, Volume 24, Issue 4, 2003, Pages 399-414, ISSN 0957-4174.

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	Gediminas Adomavicius, Ramesh Sankaranarayanan, Shahana Sen, and Alexander Tuzhilin. 2005. Incorporating contextual information in recommender systems using a multidimensional approach. <i>ACM Trans. Inf. Syst.</i> 23, 1 (January 2005) Intelligent Techniques for Web Personalization IJCAI 2003 Workshop, ITWP 2003, Acapulco, Mexico, August 11, 2003, Revised Selected Papers Conference proceedings 2005 Marko Balabanović and Yoav Shoham. 1997. Fab: content-based, collaborative recommendation. <i>Commun. ACM</i> 40, 3 (March 1997), 66–72. https://doi.org/10.1145/245108.245124
[1E] presenting the selected advertisement via an output device coupled to the conversational language processor.	The claimed method of presenting the selected advertisement via an output device coupled to the conversational language processor was well understood, routine, and conventional in the relevant industry at the relevant time. There is no technical disclosure or explanation in the specification about how to specifically present the selected advertisement through an output device beyond generally describing the result. This lack of technical detail indicates that these processes were well understood, routine, and conventional in the relevant industry at the relevant time period. Presenting selected advertisements through output devices such as displays, speakers, or other user interfaces following dialogue system processing was a well-established practice. For example, McTear’s <i>Spoken Dialogue Technology</i> (2004) describes dialogue systems that generate and present system outputs, including multimedia content, based on recognized user input and conversational context.

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	As noted above, the specification describes the claimed “input” and “output” devices as any generic devices capable of performing their claimed functions. (<i>Id.</i> at 3:30-32 (“[i]nput device 105” is “any suitable device . . . for receiving a voice-based input (e.g., a microphone)”; 5:20, 5:47, 6:9, 6:36, 10:61-62 (“output device” is a generic “voice-enabled device” such as a “satellite radio player”).) As with other limitations, this limitation reaches all types of output devices without limitation, describing how advertisements may be delivered through various output modalities, including visual and auditory formats. It states that “the output may include text-based, graphic-based, video-based, audio-based, or other types of advertisements, as would be apparent to those skilled in the art.” (8:18-21). The phrase “as would be apparent to those skilled in the art” again demonstrates that the use of an output device to present advertisements was not considered an inventive concept but rather an expected implementation of advertising delivery mechanisms.
[2] The method of claim 1, wherein the conversational language processor selects the advertisement based on information related to one or more of the recognized words or phrases, an action associated with the request, a personalized cognitive model derived from an interaction pattern for a specific user, a generalized cognitive model derived from an interaction pattern for a plurality of users, or an environmental model derived from	The claimed method of selecting, by the conversational language processor, an advertisement based on information related to one or more of the recognized words or phrases, an action associated with the request, a personalized cognitive model derived from an interaction pattern for a specific user, a generalized cognitive model derived from an interaction pattern for a plurality of users, or an environmental model derived from environmental conditions or surroundings associated with the specific user, was well understood, routine, and conventional in the relevant industry at the relevant time. There is no technical disclosure or explanation in the specification about how to specifically select advertisements based on such models or information sources beyond broadly describing the concept. This lack of technical detail indicates that

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environmental conditions or surroundings associated with the specific user.	these processes were well understood, routine, and conventional in the relevant industry at the relevant time period. Selecting content or advertisements based on recognized words, inferred actions, personalized or generalized cognitive models, and environmental models was a well-established practice prior to the relevant time. For example, Plummer et al.’s <i>The Online Advertising Playbook</i> (2007) describes behavioral, demographic, and contextual targeting strategies where ad selection is influenced by prior user interaction patterns, inferred interests, and environmental signals such as device type or location. There is no technical disclosure or explanation in the specification about how “general cognitive model”, “environmental model”, and “personalized cognitive model” are used by the claimed conversational language processor. This demonstrates that it was well understood, routine, and conventional in the relevant industry at the relevant time period. Indeed, the claims do not explain or describe these models in any way. The specification also provides no description of these models either. Instead, the specification states that these models are part of the “conversational language processor 120” and are a subset of the “various other techniques” that may be used as part of the conversational language processor, citing prior art including “U.S. patent application Ser. No. 11/200,164, entitled “System and Method of Supporting Adaptive Misrecognition in Conversational Speech filed Aug. 10, 2005, which issued as U.S. Pat. No. 7,620,549 on Nov. 17, 2009, and U.S. patent application Ser. No. 11/580,926, entitled “System and Method for a Cooperative Conversational Voice User Interface.” filed Oct. 16, 2006, both of which are hereby incorporated by reference in their entirety.”

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	The specification cites unrelated U.S. patent application Ser. No. 11/200,164 specifically as describing the claimed models, demonstrating their conventionality.
[3pre] The method of claim 2, further comprising:	
[3A] tracking an interaction pattern with the advertisement presented via the output device; and	The claimed method of tracking an interaction pattern with the advertisement presented via the output device was well understood, routine, and conventional in the relevant industry at the relevant time. There is no technical disclosure or explanation in the specification about how to specifically track user interaction patterns with presented advertisements beyond generally stating the concept. This lack of technical detail indicates that these processes were well understood, routine, and conventional in the relevant industry at the relevant time period. Tracking user interactions with presented advertisements—such as clicks, hovers, viewing time, or engagement sequences—was a well-established practice in online advertising and interactive system design. For example, Plummer’s <i>The Online Advertising Playbook</i> (2007) discusses in detail how advertising systems routinely monitor user behavior during and after ad presentation to evaluate engagement and effectiveness. There is no technical disclosure or explanation in the specification about how an “interaction pattern” with the advertisement is tracked. This demonstrates that it was well understood, routine, and conventional in the relevant industry at the relevant time period.

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	What disclosures do exist in the specification relating to this limitation indicate that what is claimed is well-understood, routine, and conventional, <i>e.g.</i>: “Furthermore, the user's subsequent interaction with an advertisement may be tracked using tracking module 255. For example, tracking module 255 may determine whether a conversion or click-through occurs for each advertisement presented to users. Further, tracking module 255 may maintain accounting and/or billing information associated with advertisers 220. For example, advertisers 220 may specify a maximum insertion cost, a cost-per-click-through, an average insertion cost, or other criteria specifying a budget constraint for an advertisement. As such, tracking module 255 may track which advertisements are selected and/or presented, which advertisements result in a conversion or click-through, whether a click-through or conversion results in a transaction or sale, associations between advertisements and users, requests, concepts, semantic indicators, and/or other criteria. For example, tracking user interaction with advertisements may be used to build user-specific and/or global statistical profiles that map or cluster advertisements to topics, semantic indicators, contexts, concepts, etc. based on user behavior, demographics, targeting constraints, content of advertisements, content of requests, actions associated with requests, or other statistically relevant information. Accordingly, the tracking information may be used to bill or invoice advertisers 220, as well as to improve Subsequent performance and relevance of advertisements selected using advertisement selection module 250. Other techniques and features of selecting and presenting advertisements based on Voice-based inputs may suitably be employed, as would be apparent.” (176 Patent at 6: 38-65)

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[3B] updating one or more of the personalized cognitive model, the generalized cognitive model, or the environmental model based on the interaction pattern tracked for the advertisement.	The claimed method of updating one or more of the personalized cognitive model, the generalized cognitive model, or the environmental model based on the interaction pattern tracked for the advertisement was well understood, routine, and conventional in the relevant industry at the relevant time. There is no technical disclosure or explanation in the specification about how to specifically update cognitive or environmental models based on user interaction patterns beyond broadly describing the concept. This lack of technical detail indicates that these processes were well understood, routine, and conventional in the relevant industry at the relevant time period. Updating user-specific or generalized models with interaction data captured from user engagement with advertisements was a well-established practice before the relevant time. For example, Plummer’s <i>The Online Advertising Playbook</i> (2007) describes how behavioral targeting systems update audience segments and predictive models based on tracked interactions with ads, refining future ad delivery strategies. There is no technical disclosure or explanation in the specification about how “general cognitive model”, “environmental model”, and “personalized cognitive model” are updated by the interaction pattern tracked for the advertisement. This demonstrates that it was well understood, routine, and conventional in the relevant industry at the relevant time period. Indeed, the claims do not explain or describe these models in any way. The specification also provides no description of these models either. Instead, the specification states that these models are part of the “conversational language processor 120” and are a subset of the “various other techniques” that may be used as part of the conversational language processor, citing prior art including “U.S.

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	patent application Ser. No. 11/200,164, entitled “System and Method of Supporting Adaptive Misrecognition in Conversational Speech filed Aug. 10, 2005, which issued as U.S. Pat. No. 7,620,549 on Nov. 17, 2009, and U.S. patent application Ser. No. 11/580,926, entitled “System and Method for a Cooperative Conversational Voice User Interface.” filed Oct. 16, 2006, both of which are hereby incorporated by reference in their entirety.” The specification cites unrelated U.S. patent application Ser. No. 11/200,164 specifically as describing the claimed models, demonstrating their conventionality. What disclosures do exist in the specification relating to this limitation indicate that what is claimed is well-understood, routine, and conventional, <i>e.g.</i>: “Furthermore, the user’s subsequent interaction with an advertisement may be tracked using tracking module 255. For example, tracking module 255 may determine whether a conversion or click-through occurs for each advertisement presented to users. Further, tracking module 255 may maintain accounting and/or billing information associated with advertisers 220. For example, advertisers 220 may specify a maximum insertion cost, a cost-per-click-through, an average insertion cost, or other criteria specifying a budget constraint for an advertisement. As such, tracking module 255 may track which advertisements are selected and/or presented, which advertisements result in a conversion or click-through, whether a click-through or conversion results in a transaction or sale, associations between advertisements and users, requests, concepts, semantic indicators, and/or other criteria. For example, tracking user interaction with advertisements may be used to build user-specific and/or global statistical profiles that map or cluster advertisements

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	to topics, semantic indicators, contexts, concepts, etc. based on user behavior, demographics, targeting constraints, content of advertisements, content of requests, actions associated with requests, or other statistically relevant information. Accordingly, the tracking information may be used to bill or invoice advertisers 220, as well as to improve Subsequent performance and relevance of advertisements selected using advertisement selection module 250. Other techniques and features of selecting and presenting advertisements based on Voice-based inputs may suitably be employed, as would be apparent.” (176 Patent at 6: 38-65)
[4] The method of claim 3, wherein updating one or more of the personalized cognitive model, the generalized cognitive model, or the environmental model builds statistical profiles for selecting subsequent advertisements in response to subsequent natural language utterances.	The claimed method of updating one or more of the personalized cognitive model, the generalized cognitive model, or the environmental model to build statistical profiles for selecting subsequent advertisements in response to subsequent natural language utterances was well understood, routine, and conventional in the relevant industry at the relevant time. There is no technical disclosure or explanation in the specification about how to specifically build statistical profiles from updated cognitive or environmental models to select future advertisements beyond general conceptual statements. This lack of technical detail indicates that these processes were well understood, routine, and conventional in the relevant industry at the relevant time period. Building statistical user profiles from tracked interaction data and updating those profiles to inform the selection of future advertisements was a well-established practice. For example, Plummer et al.’s <i>The Online Advertising Playbook</i> (2007) describes how behavioral targeting systems create and refine statistical user profiles based on prior user interactions to dynamically improve future ad

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	selection in response to evolving user behavior. Additionally, Kobsa’s <i>User Modeling and User-Adapted Interaction</i> (1993) discusses the development of user models for improving spoken dialog systems. As described above, the claim does not describe how these so-called cognitive and environmental models actually operate. And the specification merely points to prior art disclosures. The specification is similarly silent on describing how the models go about building statistical profiles for selecting subsequent advertisements, instead simply stating that it could be done in any number of ways known in the art, all of which would be “apparent”, namely: For example, tracking user interaction with advertisements may be used to build user-specific and/or global statistical profiles that map or cluster advertisements to topics, semantic indicators, contexts, concepts, etc. based on user behavior, demographics, targeting constraints, content of advertisements, content of requests, actions associated with requests, or other statistically relevant information. Accordingly, the tracking information may be used to bill or invoice advertisers 220, as well as to improve Subsequent performance and relevance of advertisements selected using advertisement selection module 250. Other techniques and features of selecting and presenting advertisements based on Voice-based inputs may suitably be employed, as would be apparent. 176 Patent at 6:53-65. That there is no disclosure or explanation in the specification about how these models build statistical profiles demonstrates that it was well understood, routine, and conventional in the relevant industry at the relevant time period.

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[5] The method of claim 4, wherein the statistical profiles identify affinities between the advertisement presented via the output device and one or more of the recognized words or phrases, the action associated with the request, the personalized cognitive model, the generalized cognitive model, or the environmental model.	The claimed method of using statistical profiles to identify affinities between the advertisement presented via the output device and one or more of the recognized words or phrases, the action associated with the request, the personalized cognitive model, the generalized cognitive model, or the environmental model was well understood, routine, and conventional in the relevant industry at the relevant time. There is no technical disclosure or explanation in the specification about how to specifically identify such affinities through statistical profiling beyond broad conceptual language. This lack of technical detail indicates that these processes were well understood, routine, and conventional in the relevant industry at the relevant time period. Identifying affinities between advertisements and various user-specific or contextual attributes through statistical profiling was a well-established practice prior to the relevant time. For example, Plummer et al.’s <i>The Online Advertising Playbook</i> (2007) explains how online advertising systems use behavioral, contextual, and cognitive signals—such as prior ad interactions, recognized language patterns, and environmental cues—to develop statistical affinities that guide more relevant future ad selection. These affinity models were commonly built from data associated with user actions, recognized language, and generalized behavioral segments. The limited disclosures provided in the specification confirm that the limitation recites generic, well-understood, routine, and conventional technology: It will be apparent that operation 320 may use various techniques to select advertisements based on Voice-based inputs and/or requests included therein. For example, an advertiser may specify a target audience, marketing criteria,

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	campaign strategies, budget constraints, concepts, semantic indicators, related topics, categories, and/or any other Suitable information to associate with an advertisement. For instance, advertisers may pay a premium to prioritize an advertisement in relation to similar advertisements (e.g., advertisements associated with competitors). In another example, Various statistical profiles may define affinities between advertisements, topics, users, etc. (e.g., based on click-through or conversion rates, or other tracking information, as described in more detail below). Thus, advertisements may be selected in operation 320 using various techniques, including content of the request, an activity/action associated with the request, user profiles, user preferences, statistical metrics, advertiser-specified criteria, to advance a conversation, to resolve ambiguous requests, or in various other ways, as will be apparent. 176 patent at 10: 10-29.
[6A] The method of claim 3, further comprising:	
[6B] building long-term shared knowledge and short-term shared knowledge in response to updating one or more of the personalized cognitive model, the generalized cognitive model, or the environmental model;	The claimed method of building long-term shared knowledge and short-term shared knowledge in response to updating one or more of the personalized cognitive model, the generalized cognitive model, or the environmental model was well understood, routine, and conventional in the relevant industry at the relevant time. There is no technical disclosure or explanation in the specification about how to specifically build or distinguish between long-term and short-term shared knowledge in response to cognitive or environmental model updates beyond high-level conceptual language. This lack of technical detail indicates that these processes were well understood, routine, and conventional in the relevant industry at the relevant time period.

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	Maintaining both short-term and long-term knowledge representations based on updated user or environmental models was a well-established approach in adaptive system design. For example, McTear’s <i>Spoken Dialogue Technology</i> (2004) describes systems that track short-term dialogue state alongside persistent, long-term user knowledge to support coherent conversational interaction and personalized system behavior. Additionally, Kobsa’s <i>User Modeling and User-Adapted Interaction</i> (1993) discusses how user interaction data is used in the context of spoken dialog systems. Consistently, that there is no technical disclosure or explanation in the specification about how short or long-term shared knowledge can be “built” by updating the “general cognitive model”, “environmental model”, and “personalized cognitive model” demonstrates that these steps were well understood, routine, and conventional in the relevant industry at the relevant time period. The disclosures that do exist in the specification suggest that the claimed long-term and short-term knowledge is merely “information” stored in a “knowledge source”: Conversational language processor 120 may build long term and/or short-term shared knowledge in one or more knowledge Source. For example, shared knowledge Sources may include information about previous utterances, requests, and other user interactions to inform generating an appropriate response to a current utterance. The shared knowledge may include public/non-private (i.e., environmental) knowledge, as well as personal/private (i.e., historical) knowledge.

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	For example, conversational language processor 120 may use context determination module 130 to establish a context for a current utterance by having domain agents 135 competitively generate a context-based interpretation of the utterance (e.g., by scoring possible interpretations and selecting a highest scoring interpretation). 176 Patent at 4:17-30. To the extent short-term and long-term shared knowledge consists merely of “storing and accessing data in memory”, the claims are not only routine and conventional, but are, as a matter of law, abstract. <i>Content Extraction & Transmission LLC v. Wells Fargo Bank, National Ass’n</i>, 776 F.3d 1343, 1347 (Fed. Cir. 2014). In addition, the intrinsic and extrinsic record supports that the claimed method element of accumulating short-term and long-term shared knowledge was well understood, routine, and conventional in the relevant industry at the relevant time. Namely, it supports that these claims reflect basic elements of human cognition and information processing. For example, the related ’681 patent describes how “just as humans rely on knowledge shared by participants to examine how much and what kind of information was available, Intelligent Hypothesis Builder 310 may leverage the identified conversation type and short-term and long-term shared knowledge to generate a degree of certainty for each hypothesis. Voice user interfaces that included the steps of receiving an utterance were well understood, routine, and conventional in the relevant industry at the relevant time.” ’681 patent at 15:49-54

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	’681 patent at 4:65 – 5:4: Moreover, because cooperative conversations model human conversations, short-term session data may be expired after a psychologically appropriate amount of time, thereby humanizing system behavior, reducing a likelihood of contextual confusion based on stale data, while also adding relevant information from an expired session context to long-term knowledge models. ’681 patent at 6:30-39: For example, humans frequently remember a number of recent utterances, especially when one or more previous utterances were misrecognized or unrecognized. Another participant in the conversation may limit correction to a part of the utterance that was misrecognized or unrecognized, or over subsequent utterances and/or other interactions, clues may be provided to indicate the initial interpretation was incorrect. Thus, by storing and analyzing multiple utterances, utterances from earlier in a conversation may be corrected as the conversation progresses. ’681 patent at 13:58-14:2: Moreover, because cooperative conversations 300 model human conversations, short-term session data may be expired after a psychologically appropriate amount of time, thereby humanizing system behavior. For example, a human is unlikely to recall a context of a conversation from two years ago, but because the context would be identifiable by a machine, session context is expired after a predetermined amount of time to reduce a likelihood of contextual confusion based on stale data. ’681 patent at 18:44-47. Further, there is no technical disclosure or explanation in the specification about how the claimed invention purportedly accumulates short-term knowledge. This demonstrates that it was well understood, routine, and conventional in the relevant industry at the relevant time period.

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	Freeman and Baldwin 2006 disclose how cooperative conversation concepts were first described by Paul Grice in 1975 and how human-to-computer speech should, ideally, “follow the same model of human-to-human conversation” described in a 1975 paper, <i>Logic and Conversation</i>, by Grice. In explaining Grice, Freeman and Baldwin explain how “There is shared short term (session) knowledge about what the user has said, what they have done and where they are.” Further, the inventors of the related ’681 patent have admitted under oath that the idea of “short-term” and “long-term” shared knowledge is well-understood, routine, and conventional: Q. And so the notion of -- the importance of using long-term and short-term shared knowledge to understand what is being said in a conversation is something that you got from Mr. Grice; right? A. This was part of the intellectual averment, and this was a very useful way of sharpening our vocabulary around this, the answer is yes, sir. Q. I just want to be clear, this was Mr. Grice's idea, that wasn't your idea? A. Correct. <i>Trial Tr. 289:4-16</i> <i>VB Assets v. Amazon.com Services LLC</i>, No. 19-cv-01410, at ECF No. 304 (D. Del. Dec. 12, 2023)

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[6C] receiving a subsequent natural language utterance at the input device; and	The claimed method of receiving a subsequent natural language utterance at the input device was well understood, routine, and conventional in the relevant industry at the relevant time. There is no technical disclosure or explanation in the specification about how to specifically receive a subsequent natural language utterance beyond broadly describing the process. This lack of technical detail indicates that these processes were well understood, routine, and conventional in the relevant industry at the relevant time period. Handling sequences of natural language utterances—such as receiving a follow-up utterance after an initial input—was a fundamental aspect of conversational and dialogue systems. For example, McTear’s <i>Spoken Dialogue Technology</i> (2004) describes dialogue systems that process user interactions as multi-turn conversations, with the system designed to receive and interpret successive utterances as part of an ongoing dialogue session. Likewise, as discussed above, receiving an utterance at an input device were well understood, routine, and conventional in the relevant industry at the relevant time. For example, the intrinsic record describes how: “According to various aspects of the invention, system 100 may receive a user input, including at least a voice-based user utterance, at an input device 105. Input device 105 may include any suitable device, or combination of devices, for receiving a voice-based input (e.g., a microphone). In various implementations, input device 105 may include a multi-modal input, such as a touch-screen interface, keypad, or other input.” 3:30–36.

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[6D] interpreting the subsequent natural language utterance at the conversational language processor using the long-term shared knowledge and the short-term shared knowledge.	The claimed method of interpreting the subsequent natural language utterance at the conversational language processor using the long-term shared knowledge and the short-term shared knowledge was well understood, routine, and conventional in the relevant industry at the relevant time. There is no technical disclosure or explanation in the specification about how to specifically interpret subsequent utterances using both long-term and short-term shared knowledge beyond general conceptual descriptions. This lack of technical detail indicates that these processes were well understood, routine, and conventional in the relevant industry at the relevant time period. Interpreting user utterances based on a combination of short-term conversational context and long-term accumulated user knowledge was a well-established practice in dialogue system design. For example, McTear’s <i>Spoken Dialogue Technology</i> (2004) describes systems that use a combination of immediate dialogue state and persistent user profiles to interpret and respond to user input in contextually appropriate ways. Moreover, the minimal information that is disclosed on the function of the conversational language processor demonstrates that it functions using conventional means. For instance the specification explains how “recogniz[ing] words or phrases” by “map[ping] a stream of phonemes . . . to one or more syllables,” (i.e., mapping sounds to syllables) is a pre-existing technique. ’176 patent at 3:39-41. (“Automatic Speech Recognizer 110 may interpret the utterance using techniques of phonetic dictation to recognize a stream of phonemes.”)

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	More specifically, the specification confirms that “map[ping]” phonemes to syllables and generating the interpretation from “syllables” are purely conventional. (<i>Id.</i> at 3:3-19, 3:46-51 (incorporating techniques from unrelated prior art patents); 3:39-41 (using conventional “phonetic dictation . . . techniques . . . to recognize a stream of phonemes”).) The specification offers no additional guidance about how the “conversational language processor” “interpret[s] the recognized words or phrases . . . [to] establish[] a context” for the utterance and refers to admittedly pre-existing solutions. (See <i>id.</i> at 4:34-44 (incorporating techniques for context-based interpretation from unrelated prior art patents); 7:52-56 (“conversational language processor may therefore use various techniques . . . described in [prior art patents]”).) With respect to interpreting the natural language utterance using the short-term and long-term shared knowledge, the specification provides no explanation of what this requires. To the extent that what is claimed as “short-term” and “long-term” shared knowledge merely reflects any and all information, the basis for this claim being well-understood, routine, and conventional mirrors the grounds for the claimed conversational language processor as, by definition, all conversational language processors interpret speech with the benefit of “information.” The specification incorporates by reference two prior-art references that purport to set out additional information regarding the claimed use of “context-based interpretations”. These prior art-references emphasize how the claimed interpretation of an utterance using “long-term shared knowledge and the short-term shared knowledge” are well-understood, routine, and conventional.

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[7] The method of claim 3, wherein the interaction pattern tracked for the advertisement includes an action performed in response to a subsequent request that identifies the advertisement.	The claimed method, wherein the interaction pattern tracked for the advertisement includes an action performed in response to a subsequent request that identifies the advertisement, was well understood, routine, and conventional in the relevant industry at the relevant time. There is no technical disclosure or explanation in the specification about how to specifically detect or process such subsequent actions linked to advertisement identification beyond broadly stating the concept. This lack of technical detail indicates that these processes were well understood, routine, and conventional in the relevant industry at the relevant time period. Tracking user actions related to previously presented advertisements—including follow-up behavior such as return visits, searches, or explicit requests referencing the ad—was a well-established practice in online advertising and user interaction tracking. For example, Plummer’s <i>The Online Advertising Playbook</i> (2007) discusses how advertising systems monitor post-ad behaviors and how such data contributes to campaign performance analysis and model refinement. The specification makes a single reference to the claimed “interaction pattern”, describing that it is means for “provid[ing] statistical abstracts of user interaction patterns” that can be used “to enhance responses to commands and questions by including a prediction of user behavior.” ’176 patent at 5:6-7 To the extent what is claimed here is a method of simply monitoring how the user interacts with an advertisement after it is presented, including instances of a subsequent user request that identifies an advertisement, the claim is simply claiming the method of tracking a user’s interactions with an ad. This type of interactive advertising was well-understood, routine, and conventional as of the priority date of this patent. Indeed, neither the patent claims nor specification

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	describe how this limitation should be practiced and essentially assume the reader’s familiarity claimed functionality. Cf. <i>Free Stream Media Corp. v. Alphonso Inc.</i>, (Fed Cir. 2021) (functional claims that do not describe how targeted advertising is performed are simply directed to abstract idea of targeted advertising). Additional relevant evidence that this element was well-understood, routine, and convention is below: Measuring The Effects And Effectiveness Of Interactive Advertising: A Research Agenda Paul A. Pavlou and David W. Stewart <i>Journal of Interactive Advertising</i>, Vol 1 No 1 (Fall 2000), pp. 62-78. Soe-Tsyr Yuan, Y.W. Tsao, A recommendation mechanism for contextualized mobile advertising, <i>Expert Systems with Applications</i>, Volume 24, Issue 4, 2003, Pages 399-414, ISSN 0957-4174. Gediminas Adomavicius, Ramesh Sankaranarayanan, Shahana Sen, and Alexander Tuzhilin. 2005. Incorporating contextual information in recommender systems using a multidimensional approach. <i>ACM Trans. Inf. Syst.</i> 23, 1 (January 2005), 103–145. Intelligent Techniques for Web Personalization IJCAI 2003 Workshop, ITWP 2003, Acapulco, Mexico, August 11, 2003, Revised Selected Papers Conference proceedings © 2005 Marko Balabanović and Yoav Shoham. 1997. Fab: content-based, collaborative recommendation. <i>Commun. ACM</i> 40, 3 (March 1997), 66–72. https://doi.org/10.1145/245108.245124

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[8] The method of claim 7, wherein the action includes executing a task or retrieving information based on the subsequent request that identifies the advertisement.	The claimed method, wherein the action includes executing a task or retrieving information based on the subsequent request that identifies the advertisement, was well understood, routine, and conventional in the relevant industry at the relevant time. There is no technical disclosure or explanation in the specification about how to specifically execute a task or retrieve information in response to a request identifying an advertisement beyond general conceptual language. This lack of technical detail indicates that these processes were well understood, routine, and conventional in the relevant industry at the relevant time period. Executing a system task or retrieving associated content in response to a user-initiated follow-up referencing a prior advertisement was a well-established technique in interactive and online advertising systems. For example, Plummer (2007) describes various systems that engage in this practice. Neither the claims nor the specification provide any description or explanation of how the claimed action of “executing a task or retrieving information” is performed. Functional claiming of this type is consistent with claims that are directed to technology that is well-understood, routine, and conventional. <i>See Free Stream Media Corp. v. Alphonso Inc.</i>, (Fed Cir. 2021) (functional claims that do not describe how targeted advertising is performed are simply directed to abstract idea of targeted advertising). To the extent what is claimed are simply the steps of executing a task or retrieving information, those steps have long been found to be well-understood, routine, and conventional. <i>See Bot M8 LLC v. Sony Corporation of America</i>, 4 F.4th 1342 (Fed. Cir. 2021) (Finding no inventive concept where only generic computer parts

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	are involved to perform the conventional computer tasks of gathering, manipulating, transmitting, and using data.)
[9] The method of claim 1, wherein the conversational language processor selects the advertisement to resolve the request in response to determining that the natural language utterance includes incomplete or ambiguous information.	The claimed method, wherein the conversational language processor selects the advertisement to resolve the request in response to determining that the natural language utterance includes incomplete or ambiguous information, was well understood, routine, and conventional in the relevant industry at the relevant time. There is no technical disclosure or explanation in the specification about how to detect incomplete or ambiguous information in a natural language utterance and resolve it by selecting an advertisement. This lack of technical detail indicates that these processes were well understood, routine, and conventional in the relevant industry at the relevant time period. Selecting advertisements or informational content to disambiguate or supplement partial user input was a known strategy in both dialogue systems and online advertising. For example, McTear’s <i>Spoken Dialogue Technology</i> (2004) describes systems that respond to under-specified or ambiguous user input by follow-up prompts or clarifying content based on dialogue context. Additionally, Plummer (2007) discusses how advertising systems present relevant ads in response to user queries, using context or inferred intent to assist the user in reaching a desired outcome Neither the claims nor the specification provide any description or explanation of how the conversational language processor would select the advertisement to resolve the request in response to determining that the natural language utterance includes incomplete or ambiguous information. Functional claiming of this type is consistent with claims that are directed to technology that is well-understood,

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	routine, and conventional. <i>See Free Stream Media Corp. v. Alphonso Inc.</i> (Fed Cir. 2021) (functional claims that do not describe how targeted advertising is performed are simply directed to abstract idea of targeted advertising). To the extent that what is described is one embodiment of the previously described conversational language processor, the patent admits that such conversational language processors were well-understood, routine, and conventional: The specification makes clear that the limitations reciting “recogniz[ing] words or phrases” by “map[ping] a stream of phonemes . . . to one or more syllables,” (i.e., mapping sounds to syllables) is a pre-existing technique. ’176 patent at 3:39-41. (“Automatic Speech Recognizer 110 may interpret the utterance using techniques of phonetic dictation to recognize a stream of phonemes.”) More specifically, the specification confirms that “map[ping]” phonemes to syllables and generating the interpretation from “syllables” are purely conventional. (<i>Id.</i> at 3:3-19, 3:46-51 (incorporating techniques from unrelated prior art patents); 3:39-41 (using conventional “phonetic dictation . . . techniques . . . to recognize a stream of phonemes”).) The specification offers no additional guidance about how the “conversational language processor” “interpret[s] the recognized words or phrases . . . [to] establish[] a context” for the utterance and refers to admittedly pre-existing solutions. (See <i>id.</i> at 4:34-44 (incorporating techniques for context-based interpretation from unrelated prior art patents); 7:52-56 (“conversational language processor may therefore use various techniques . . . described in [prior art patents]”).)

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	Similarly, Thomas Freeman, an inventor of the related '681 patent, has admitted that the so-called conversational speech engine was well-understood, routine, and conventional at the time of the priority date of the '681 patent: Q. Let's look at the patent again, please, Mr. Patterson, JTX-003. And let's look at Claim 40. Did you invent a conversational language processor? A. Did I invent a conversational language processor? Q. Yes, sir. A. I did not. <i>Trial Tr. 284:2-8</i> <i>VB Assets v. Amazon.com Services LLC, No. 19-cv-01410, at ECF No. 304 (D. Del. Dec. 12, 2023)</i>
[10] The method of claim 1, wherein the speech recognition engine recognizes the one or more words or phrases in the natural language utterance using a plurality of entries in one or more dictionary and phrase tables that are dynamically updated based on a history of a current dialog and one or more prior dialogs.	The claimed method, wherein the speech recognition engine recognizes one or more words or phrases in the natural language utterance using a plurality of entries in one or more dictionary and phrase tables that are dynamically updated based on a history of a current dialog and one or more prior dialogs, was well understood, routine, and conventional in the relevant industry at the relevant time. There is no technical disclosure or explanation in the specification about how to dynamically update dictionary or phrase tables based on dialogue history beyond general statements. This lack of technical detail indicates that these processes were well understood, routine, and conventional in the relevant industry at the relevant time period.

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	Adapting speech recognition components—such as dictionary and phrase tables—based on current and prior dialogue context was a well-established practice in conversational systems. For example, McTear’s <i>Spoken Dialogue Technology</i> (2004) describes systems that use adaptive language models, including dynamically maintained grammars, which are updated in response to user interaction history to improve recognition accuracy. These techniques were routinely implemented to refine recognition performance across multi-turn interactions. The specification admits that the claimed use of a speech recognition engine that uses words or phrases in an utterance in one or more dictionary and phrase tables was well-known, routine, and conventional at the time, namely: “For example, as described in U.S. patent application Ser. No. 10/452,147, the system 100 may include a speech recognition engine (e.g., an Automatic Speech Recognizer 110) that may recognize words and phrases in an utterance using entries in one or more dictionary and phrase tables. In addition, as further described therein, fuzzy set possibilities or prior probabilities for the words in the dictionary and phrase tables may be dynamically updated to maximize the probability of correct recognition at each stage of the dialog (e.g., the probabilities or possibilities may be dynamically updated based on application domains, questions or commands, contexts, user profiles and preferences, user dialog histories, recognizer dictionary and phrase tables, word spellings, and/or other criteria).” 176 patent at 3:14-27 Similarly, the limitation that the dictionary and phrase tables be “dynamically updated” is disclosed in U.S. Patent App. Ser. No. 10/452,147 (see, e.g., cl. 2)

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	Under oath, Mr. Kennewick has similarly admitted that such automated speech recognition engines were well-understood, routine, and conventional: Q. And that software section, let's go to the next page, 0194. And if we could on that page, if you could put just the top paragraph on the screen. And kind of put it to the side so you can see both at the same time. During the opening by Amazon's counsel, you indicated that the original Cybermind used some software from IBM, did you hear that? A. Yes. Q. What was that, sir? A. That was a component called the ASR, Automated Speech recognition engine and that was pretty much a commodity product at the same time. Q. Was that the recognition engine that could achieve maybe 95 percent? A. That's correct. <i>Trial Tr. 147:18-148:3</i> <i>VB Assets v. Amazon.com Services LLC</i>, No. 19-cv-01410, at ECF No. 304 (D. Del. Dec. 12, 2023)
[11] The method of claim 10, wherein the plurality of entries in the one or more dictionary and phrase tables are further dynamically updated based on one or more dynamic fuzzy set possibilities or prior probabilities derived from	The claimed method, wherein the plurality of entries in the one or more dictionary and phrase tables are further dynamically updated based on one or more dynamic fuzzy set possibilities or prior probabilities derived from the history of the current dialog and the prior dialogs, was well understood, routine, and conventional in the relevant industry at the relevant time.

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the history of the current dialog and the prior dialogs.	There is no technical disclosure or explanation in the specification about how to specifically use dynamic fuzzy set possibilities or prior probabilities to update dictionary or phrase table entries beyond broadly stating the concept. This lack of technical detail indicates that these processes were well understood, routine, and conventional in the relevant industry at the relevant time period. Using probabilistic models to dynamically update speech recognition dictionaries and phrase tables based on dialogue history was a known technique in adaptive language processing. For example, McTear's <i>Spoken Dialogue Technology</i> (2004) discusses such approaches to refining language models and improve recognition performance over time. These methods were part of standard practices in the design of robust, adaptive speech interfaces. Further, for the reasons explained above, the patent specification and inventors have admitted that the specification conceives of generic ASR and conversational language systems.
[12] The method of claim 1, further comprising determining that the conversational language processor incorrectly interpreted the words or phrases in response to an adaptive misrecognition engine detecting a predetermined event, wherein the conversational language processor reinterprets the words or phrases in response to the predetermined event.	The claimed method, further comprising determining that the conversational language processor incorrectly interpreted the words or phrases in response to an adaptive misrecognition engine detecting a predetermined event, wherein the conversational language processor reinterprets the words or phrases in response to the predetermined event, was well understood, routine, and conventional in the relevant industry at the relevant time. There is no technical disclosure or explanation in the specification about how to detect misrecognition events or how reinterpretation is triggered and executed by the system beyond high-level descriptions. This lack of technical detail indicates

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	that these processes were well understood, routine, and conventional in the relevant industry at the relevant time period. Detecting recognition or interpretation errors and triggering reinterpretation routines in response to specific events was a well-established feature in adaptive dialogue and speech systems. For example, McTear’s <i>Spoken Dialogue Technology</i> (2004) describes various systems that address when the system identifies misrecognition. These techniques were commonly used to improve robustness and maintain conversational coherence. The disclosures related to the claimed adaptive misrecognition engine simply incorporate unrelated prior art, namely: Conversational language processor 120 may use various other techniques as will be apparent, such as those described in U.S. patent application Ser. No. 11/200,164, entitled “System and Method of Supporting Adaptive Misrecognition in Conversational Speech,” filed Aug. 10, 2005, which issued as U.S. Pat. No. 7,620,549 on Nov. 17, 2009, and U.S. patent application Ser. No. 11/580,926, entitled “System and Method for a Cooperative Conversational Voice User Interface,” filed Oct. 16, 2006, both of which are hereby incorporated by reference in their entirety. 176 patent 4 at 55-64. Further, Inventor Mike Kennewick has admitted under oath that adaptive misrecognition engines were well-understood, routine, and conventional: And if you look at, towards the bottom of the blow out, it says an adaptive misrecognition engine. Do you see that? A. Yes, I do.

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	Q. Did you invent an adaptive misrecognition engine? A. I'm not aware of other representations. Q. My question is simple, this claim says an adaptive misrecognition engine. Did you invent an adaptive misrecognition engine or not? A. I don't know, there were other implementations, I don't know who was the first to do it, there were others. Trial Tr. 227:6-16 <i>VB Assets v. Amazon.com Services LLC</i>, No. 19-cv-01410, at ECF No. 304 (D. Del. Dec. 12, 2023)
[13] The method of claim 12, wherein the predetermined event includes receiving one or more of a subsequent input proximate in time to the natural language utterance, a subsequent input that stops the conversational language processor from processing the request contained in the natural language utterance, a subsequent input that overrides the request in a time shorter than an expected time to process the request, or a subsequent input that repeats the natural language utterance.	The claimed method, wherein the predetermined event includes receiving one or more of a subsequent input proximate in time to the natural language utterance, a subsequent input that stops the conversational language processor from processing the request contained in the natural language utterance, a subsequent input that overrides the request in a time shorter than an expected time to process the request, or a subsequent input that repeats the natural language utterance, was well understood, routine, and conventional in the relevant industry at the relevant time. There is no technical disclosure or explanation in the specification about how these specific input patterns are used to detect misrecognition or trigger reinterpretation beyond broadly describing their occurrence. This lack of technical detail indicates that these processes were well understood, routine, and conventional in the relevant industry at the relevant time period.

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	Using temporal proximity, user interruptions, overrides, or repetition of input as signals to detect misunderstanding and initiate reinterpretation was a well-known approach in dialogue system design. For example, McTear’s Spoken Dialogue Technology (2004) discusses various such strategies, including handling user corrections, repeated inputs, and interruptions as indicators that the system has misrecognized or misinterpreted a prior utterance. These patterns were commonly used to improve interaction robustness and support adaptive conversational repair mechanisms. The disclosures related to the claimed adaptive misrecognition engine simply incorporate unrelated prior art, namely: Conversational language processor 120 may use various other techniques as will be apparent, such as those described in U.S. patent application Ser. No. 11/200,164, entitled “System and Method of Supporting Adaptive Misrecognition in Conversational Speech,” filed Aug. 10, 2005, which issued as U.S. Pat. No. 7,620,549 on Nov. 17, 2009, and U.S. patent application Ser. No. 11/580,926, entitled “System and Method for a Cooperative Conversational Voice User Interface,” filed Oct. 16, 2006, both of which are hereby incorporated by reference in their entirety. 176 patent 4 at 55-64. Further, Inventor Mike Kennewick has admitted under oath that adaptive misrecognition engines were well-understood, routine, and conventional: And if you look at, towards the bottom of the blow out, it says an adaptive misrecognition engine. Do you see that? A. Yes, I do. Q. Did you invent an adaptive misrecognition engine?

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	A. I'm not aware of other representations. Q. My question is simple, this claim says an adaptive misrecognition engine. Did you invent an adaptive misrecognition engine or not? A. I don't know, there were other implementations, I don't know who was the first to do it, there were others. Trial Tr. 227:6-16 <i>VB Assets v. Amazon.com Services LLC</i>, No. 19-cv-01410, at ECF No. 304 (D. Del. Dec. 12, 2023)
[14P] A method for selecting and presenting advertisements in response to processing natural language utterances, comprising:	Claim element 14P is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [1P].
[14A] receiving a natural language utterance containing at least one request at an input device;	Claim element 14A is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [1A].
[14B] recognizing one or more words or phrases in the natural language utterance at a speech recognition engine coupled to the input device;	Claim element 14B is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [1B].
[14C] interpreting the recognized words or phrases at a conversational language processor coupled to the speech recognition engine, wherein interpreting the recognized words or	Claim element 14C is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [1E].

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phrases includes establishing a context for the natural language utterance;	
[14D] selecting an advertisement in the context established for the natural language utterance;	Claim element 14D is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [1F].
[14E] presenting the selected advertisement via an output device coupled to the conversational language processor; and	Claim element 14E is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [1G].
[14F] determining that the conversational language processor incorrectly interpreted the words or phrases in response to an adaptive misrecognition engine detecting a predetermined event, wherein the conversational language processor reinterprets the words or phrases in response to the predetermined event.	The claimed method of determining that the conversational language processor incorrectly interpreted the words or phrases in response to an adaptive misrecognition engine detecting a predetermined event, wherein the conversational language processor reinterprets the words or phrases in response to the predetermined event, was well understood, routine, and conventional in the relevant industry at the relevant time. There is no technical disclosure or explanation in the specification about how an adaptive misrecognition engine detects predetermined events or how reinterpretation is performed by the conversational language processor beyond high-level conceptual statements. This lack of technical detail indicates that these processes were well understood, routine, and conventional in the relevant industry at the relevant time period. Detecting misinterpretation through predefined input patterns a well-established feature in spoken dialogue systems. For example, McTear’s <i>Spoken Dialogue Technology</i> (2004) describes mechanisms for detecting conversational failures through various indicators and initiating clarification or reinterpretation routines. These approaches were commonly used to improve system accuracy and interaction resilience by adapting to user behavior in real time.

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[15] The method of claim 14, wherein the predetermined event includes receiving one or more of a subsequent input proximate in time to the natural language utterance, a subsequent input that stops the conversational language processor from processing the request contained in the natural language utterance, a subsequent input that overrides the request in a time shorter than an expected time to process the request, or a subsequent input that repeats the natural language utterance.	Claim element 15 is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [13].
[16A] The method of claim 14, wherein recognizing the words or phrases in the natural language utterance includes: mapping a stream of phonemes contained in the natural language utterance to one or more syllables that are phonemically represented in an acoustic grammar; and	Claim element 16A is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [1C].
[16B] generating a preliminary interpretation for the natural language utterance from the one or more syllables, wherein the preliminary interpretation generated from the one or more syllables includes the recognized words or phrases.	Claim element 16B is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [1D].

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[17] The method of claim 14, wherein the conversational language processor selects the advertisement to resolve the request in response to determining that the natural language utterance includes incomplete or ambiguous information.	Claim element 17 is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [9].
[18] The method of claim 14, wherein the conversational language processor selects the advertisement based on information related to one or more of the recognized words or phrases, an action associated with the request, a personalized cognitive model derived from an interaction pattern for a specific user, a generalized cognitive model derived from an interaction pattern for a plurality of users, or an environmental model derived from environmental conditions or surroundings associated with the specific user.	Claim element 18 is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [2].
[19] The method of claim 18, further comprising: tracking an interaction pattern with the advertisement presented via the output device; and updating one or more of the personalized cognitive model, the generalized cognitive model, or the environmental model based on the interaction pattern tracked for the advertisement.	Claim element 19 is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [3].

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[20] The method of claim 19, wherein updating one or more of the personalized cognitive model, the generalized cognitive model, or the environmental model builds statistical profiles for selecting subsequent advertisements in response to subsequent natural language utterances.	Claim element 20 is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [4].
[21] The method of claim 20, wherein the statistical profiles identify affinities between the advertisement presented via the output device and one or more of the recognized words or phrases, the action associated with the request, the personalized cognitive model, the generalized cognitive model, or the environmental model.	Claim element 21 is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [5].
[22] The method of claim 19, further comprising: building long-term shared knowledge and short-term shared knowledge in response to updating one or more of the personalized cognitive model, the generalized cognitive model, or the environmental model; receiving a subsequent natural language utterance at the input device; and interpreting the subsequent natural language utterance at the conversational language processor using the	Claim element 22 is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [6].

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long-term shared knowledge and the short-term shared knowledge.	
[23] The method of claim 19, wherein the interaction pattern tracked for the advertisement includes an action performed in response to a subsequent request that identifies the advertisement.	Claim element 23 is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [7].
[24] The method of claim 23, wherein the action includes executing a task or retrieving information based on the subsequent request that identifies the advertisement.	Claim element 24 is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [8].
[25] The method of claim 14, wherein the speech recognition engine recognizes the one or more words or phrases in the natural language utterance using a plurality of entries in one or more dictionary and phrase tables that are dynamically updated based on a history of a current dialog and one or more prior dialogs.	Claim element 25 is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [10].
[26] The method of claim 25, wherein the plurality of entries in the one or more dictionary and phrase tables are further dynamically updated based on one or more dynamic fuzzy set possibilities or prior probabilities derived from the history of the current dialog and the prior dialogs.	Claim element 26 is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [11].

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[27P] A system for selecting and presenting advertisements in response to processing natural language utterances, comprising:	Claim element 27P is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [1P].
[27A] an input device that receives a natural language utterance containing at least one request at an input device;	Claim element X is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [1A].
[27B] a speech recognition engine coupled to the input device, wherein the speech recognition engine recognizes one or more words or phrases in the natural language utterance, wherein to recognize the words or phrases in the natural language utterance, the speech recognition engine is configured to:	Claim element 27B is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [1B].
[27C] map a stream of phonemes contained in the natural language utterance to one or more syllables that are phonemically represented in an acoustic grammar; and	Claim element 27C is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [1C].
[27D] generate a preliminary interpretation for the natural language utterance from the one or more syllables, wherein the preliminary interpretation generated from the one or more syllables includes the recognized words or phrases;	Claim element 27D is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [1D].

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[27E] a conversational language processor coupled to the speech recognition engine, wherein the conversational language processor is configured to:	Claim element 27E is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [1E].
[27F] interpret the recognized words or phrases, wherein interpreting the recognized words or phrases includes establishing a context for the natural language utterance;	Claim element 27F is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [1E].
[27G] select an advertisement in the context established for the natural language utterance; and	Claim element 27G is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [1F].
[27H] present the selected advertisement via an output device.	Claim element 27H is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [1G].
[28] The system of claim 27, wherein the conversational language processor selects the advertisement based on information related to one or more of the recognized words or phrases, an action associated with the request, a personalized cognitive model derived from an interaction pattern for a specific user, a generalized cognitive model derived from an interaction pattern for a plurality of users, or an environmental model derived from	Claim element 28 is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [2].

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environmental conditions or surroundings associated with the specific user.	
[29] The system of claim 28 wherein the conversational language processor is further configured to: track an interaction pattern with the advertisement presented via the output device; and update one or more of the personalized cognitive model, the generalized cognitive model, or the environmental model based on the interaction pattern tracked for the advertisement.	Claim element 29 is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [3].
[30] The system of claim 29, wherein the conversational language processor updates one or more of the personalized cognitive model, the generalized cognitive model, or the environmental model to build statistical profiles for selecting subsequent advertisements in response to subsequent natural language utterances.	Claim element 30 is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [4].
[31] The system of claim 30, wherein the statistical profiles identify affinities between the advertisement presented via the output device and one or more of the recognized words or phrases, the action associated with the request, the personalized cognitive model, the	Claim element 31 is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [5].

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generalized cognitive model, or the environmental model.	
[32] The system of claim 29, wherein the conversational language processor is further configured to: build long-term shared knowledge and short-term shared knowledge in response to updating one or more of the personalized cognitive model, the generalized cognitive model, or the environmental model; and interpret a subsequent natural language utterance received at the input device language processor using the long-term shared knowledge and the short-term shared knowledge.	Claim element 32 is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [6].
[33] The system of claim 29, wherein the interaction pattern tracked for the advertisement includes an action performed in response to a subsequent request that identifies the advertisement.	Claim element 33 is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [7].
[34] The system of claim 33, wherein the action includes executing a task or retrieving information based on the subsequent request that identifies the advertisement.	Claim element 34 is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [8].
[35] The system of claim 27, wherein the conversational language processor selects the advertisement to resolve the request in response	Claim element 35 is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [9].

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to determining that the natural language utterance includes incomplete or ambiguous information.	
[36] The system of claim 27 wherein the speech recognition engine recognizes the one or more words or phrases in the natural language utterance using a plurality of entries in one or more dictionary and phrase tables that are dynamically updated based on a history of a current dialog and one or more prior dialogs.	Claim element 36 is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [10].
[37] The system of claim 36, wherein the plurality of entries in the one or more dictionary and phrase tables are further dynamically updated based on one or more dynamic fuzzy set possibilities or prior probabilities derived from the history of the current dialog and the prior dialogs.	Claim element 37 is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [11].
[38] The system of claim 27, further comprising an adaptive misrecognition engine configured to determine that the conversational language incorrectly interpreted the words or phrases in response to detecting a predetermined event, wherein the conversational language processor reinterprets the words or phrases in response to the predetermined event.	Claim element 38X is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [12].

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[39] The system of claim 38, wherein the predetermined event includes receiving one or more of a subsequent input proximate in time to the natural language utterance, a subsequent input that stops the conversational language processor from processing the request contained in the, natural language utterance, a subsequent input that overrides the request in a time shorter than an expected time to process the request, or a subsequent input that repeats the natural language utterance.	Claim element 39 is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [13].
[40P] A system for selecting and presenting advertisements in response to processing natural language utterances, comprising:	Claim element 40P is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [1P].
[40A] an input device that receives a natural language utterance containing at least one request at an input device;	Claim element 40A is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [1A].
[40B] a speech recognition engine coupled to the input device, wherein the speech recognition engine recognizes one or more words or phrases in the natural language utterance;	Claim element 40B is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [1B].
[40C] a conversational language processor coupled to the speech recognition engine,	Claim element 40B is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [1C].

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wherein the conversational language processor is configured to:	
[40D] interpret the recognized words or phrases, wherein interpreting the recognized words or phrases includes establishing a context for the natural language utterance;	Claim element 40D is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [1E].
[40E] select an advertisement in the context established for the natural language utterance; and	Claim element 40E is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [1F].
[40F] present the selected advertisement via an output device; and	Claim element 40F is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [1G].
[40G] an adaptive misrecognition engine configured to determine that the conversational language incorrectly interpreted the words or phrases in response to detecting a predetermined event, wherein the conversational language processor reinterprets the words or phrases in response to the predetermined event.	Claim element 40G is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [14F].
[41] The system of claim 40, wherein the predetermined event includes receiving one or more of a subsequent input proximate in time to the natural language utterance, a subsequent input that stops the conversational language processor from processing the request contained	Claim element 41 is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [13].

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in the natural language utterance, a subsequent input that overrides the request in a time shorter than an expected time to process the request, or a subsequent input that repeats the natural language utterance.	
[42A] The system of claim 40, wherein to recognize the words or phrases in the natural language utterance, the speech recognition engine is configured to: map a stream of phonemes contained in the natural language utterance to one or more syllables that are phonemically represented in an acoustic grammar; and	Claim element 42A is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [1C].
[42B] generate a preliminary interpretation for the natural language utterance from the one or more syllables, wherein the preliminary interpretation generated from the one or more syllables includes the recognized words or phrases.	Claim element 42B is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [1D].
[43] The system of claim 40, wherein the conversational language processor selects the advertisement to resolve the request in response to determining that the natural language utterance includes incomplete or ambiguous information.	Claim element 43 is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [9].

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[44] The system of claim 40, wherein the conversational language processor selects the advertisement based on information related to one or more of the recognized words or phrases, an action associated with the request, a personalized cognitive model derived from an interaction pattern for a specific user, a generalized cognitive model derived from an interaction pattern for a plurality of users, or an environmental model derived from environmental conditions or surroundings associated with the specific user.	Claim element 44 is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [8].
[45] The system of claim 44, wherein the conversational language processor is further configured to track an interaction pattern with the advertisement presented via the output device; and update one or more of the personalized cognitive model, the generalized cognitive model, or the environmental model based on the interaction pattern tracked for the advertisement.	Claim element 45 is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [3].
[46] The system of claim 45, wherein the conversational language processor updates one or more of the personalized cognitive model, the generalized cognitive model, or the environmental model to build statistical profiles for selecting subsequent advertisements in	Claim element 46 is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [4].

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response to subsequent natural language utterances.	
[47] The system of claim 46, wherein the statistical profiles identify affinities between the advertisement presented via the output device and one or more of the recognized words or phrases, the action associated with the request, the personalized cognitive model, the generalized cognitive model, or the environmental model.	Claim element 47 is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [5].
[48] The system of claim 45, wherein the conversational language processor is further configured to: build long-term shared knowledge and short-term shared knowledge in response to updating one or more of the personalized cognitive model, the generalized cognitive model, or the environmental model; and interpret a subsequent natural language utterance received at the input device language processor using the long-term shared knowledge and the short-term shared knowledge.	Claim element 48 is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [6].
[49] The system of claim 45, wherein the interaction pattern tracked for the advertisement includes an action performed in response to a subsequent request that identifies the advertisement.	Claim element 49 is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [7].

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[50] The system of claim 49, wherein the action includes executing a task or retrieving information based on the subsequent request that identifies the advertisement.	Claim element 50 is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [8].
[51] The system of claim 40, wherein the speech recognition engine recognizes the one or more words or phrases in the natural language utterance using a plurality of entries in one or more dictionary and phrase tables that are dynamically updated based on a history of a current dialog and one or more prior dialogs.	Claim element 51 is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [10].
[52] The system of claim 51 wherein the plurality of entries in the one or more dictionary and phrase tables are further dynamically updated based on one or more dynamic fuzzy set possibilities or prior probabilities derived from the history of the current dialog and the prior dialogs.	Claim element 52 is well-understood, routine, and conventional for at least the reasons set forth above. <i>See</i> claim element [11].

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Pursuant to Judge Gilstrap’s Standing Order Regarding Subject Matter Eligibility Contentions, Samsung provides the following chart identifying any other factual or legal basis for why the Challenged Claims are otherwise ineligible for patent protection.

Challenged Claims	Other Bases for Why the Challenged Claims are Patent-Ineligible
1-52	The challenged claims reflect long-understood and well-known concepts in linguistics, computational linguistics, and natural language understanding, as reflected in the cited references, in addition to the following: Bub, T., Wahlster, W., & Waibel, A. Verbmobil: The combination of deep and shallow processing for spontaneous speech translation. German Research Center for Artificial Intelligence; Carnegie Mellon University. Oh, A. H., & Rudnicky, A. I.. Stochastic language generation for spoken dialogue systems. Carnegie Mellon University. Batliner, A., Zeißler, V., Frank, C., Adelhardt, J., Shi, R. P., & Nöth, E. (2003). We are not amused – But how do you know? User states in a multi-modal dialogue system. University of Erlangen-Nuremberg. Aust, H., Oerder, M., Seide, F., & Steinbiss, V. (1995). A spoken language inquiry system for automatic train timetable information. Philips Research Laboratories. Jönsson, A.. A dialogue manager using initiative-response units and distributed control. Linköping University. Aust, H., Oerder, M., Seide, F., & Steinbiss, V. (1994). Experience with the Philips automatic train timetable information system. Philips Research Laboratories. Juneja, A. (2004). Approaches to dialogue system design. Carnegie Mellon University.

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Challenged Claims	Other Bases for Why the Challenged Claims are Patent-Ineligible
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Challenged Claims	Other Bases for Why the Challenged Claims are Patent-Ineligible
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Challenged Claims	Other Bases for Why the Challenged Claims are Patent-Ineligible
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Challenged Claims	Other Bases for Why the Challenged Claims are Patent-Ineligible
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Challenged Claims	Other Bases for Why the Challenged Claims are Patent-Ineligible
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