Exhibit D-Ross
Invalidity Chart for U.S. Patent No. 9,263,039 in view of U.S. Patent No. 7,085,723 ("Ross")

U.S. Patent No. 7,085,723 ("Ross") was filed Jan. 12, 2001. Ross qualifies as prior art to U.S. Patent No. 9,263,039 (the "'039 Patent") at least under one or more applicable provisions of 35 U.S.C. §§ 102(a), (b), (e), and/or (g). Ross discloses and/or renders obvious one or more of claims 13, 14, 15, 17, and 18 of the '039 Patent alone and/or in combination with other references, as set forth in the chart below. To the extent Ross does not disclose one or more limitations of the claims, such limitations would have been inherent and/or it would have been obvious to combine the disclosures of Ross with the knowledge of one of ordinary skill in the art and/or with one or more other references, including as identified herein and/or in the Cover Pleading, for the reasons identified herein and/or in the Cover Pleading, to render the claims at-issue in the '039 Patent invalid.

Defendant Bank of America, N.A. ("Bank") incorporates in this chart all applicable qualifications, clarifications, and other statements made in Bank's Invalidity Contentions. This invalidity claim chart is based on Bank's present understanding of claims 13, 14, 15, 17, 18, and Plaintiff Dialect, LLC ("Dialect") apparent construction of the claims, as set forth in Dialect's Infringement Contentions. These invalidity assertions are not an admission that Bank concedes or acquiesces to any claim construction(s) implied or suggested by Dialect the associated infringement claim charts. Nor is Bank asserting any claim construction positions through these charts, including whether the preamble is a limitation. Bank also does not concede or acquiesce that any asserted claim satisfies the requirements of 35 U.S.C. §§ 112 or 101, and submits these invalidity contentions only to the extent Dialect's assertions may be understood.

The excerpts cited herein are exemplary. For any claim limitation, Bank may rely on excerpts cited for any other limitation and/or additional excerpts not set forth fully herein to the extent necessary to provide a more comprehensive explanation for a reference's disclosure of a limitation. Where an excerpt refers to or discusses a figure or figure items, that figure and any additional descriptions of that figure should be understood to be incorporated by reference as if set forth fully herein. To the extent any cell lacks citations to the charted reference(s), this should not be taken as an admission that the reference(s) do(es) not disclose the corresponding limitation but rather indicates that Bank does not presently have sufficient information regarding the charted reference(s) based on Bank's present understanding of the claim limitation.

These invalidity contentions are not an admission by Bank that the accused products or components, including any current or past version of the products or components, are covered by, or infringe the asserted claims, particularly when these claims are properly construed and applied.

1. Claim 13

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[p] A method of processing speech and non-speech communications, comprising:	To the extent the preamble is limiting, Ross discloses a "method of processing speech and non-speech communications[.]" *E.g.*, Ross at Abstract: A speech center coordinates speech services for a number of speech-enabled applications performing on a computer system. The speech center includes a conversation manager that manages conversations between a user and the speech-enabled applications. The conversation manager includes a context manager that maintains a context list of speech-enabled applications that the user has accessed. If the user speaks an utterance, the context manager determines which speech-enabled application should receive a translation of the utterance from the context list, such as by determining the most recently accessed application. Ross at 1:23-46: In particular a user may communicate through a microphone with a software application that displays output in a window on the display screen of the computer system. For example, a user can communicate with a word processing application to input text that is entered into a document file being presented in a window. Next, the user can select another speech-enabled application with an input device, such as a mouse or keyboard. The user can also select another speech-enabled application by explicitly giving a spoken command to select that application (e.g., "switch to calendar"). Then, the user can provide speech input through the microphone to that application. For example, a user can use the mouse to select the window for a calendar application (or provide an explicit selection command for that application), which then pops to the foreground, obscuring the previously displayed foreground application, such as a word processing application. Then, the user can provide a speech utterance, such as commands or sentence fragments, to be entered to the calendar application. After speaking to the calendar application, the user can use an input device to select the window for another application, such as the word processing application, bring the

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	window forward for that application and then commence providing a speech utterance for that application, and so on. Ross at 2:49-50: The message handler receives a representation of a spoken utterance. Ross at 2:50-54: The context manager receives the representations of the spoken utterance from the message handler and directs the representation of the spoken utterance to a selected speech enabled application based upon the evaluation of the contexts. Ross at 2:58-61: In another aspect of the invention, the context manager identifies each context based on a persistent grammar, a foreground grammar, or a background grammar for each speech enabled application. Ross at 3:45-48: The input spoken utterance 14 is a voice command or other speech input from a user of the computer system 10 (e.g., into a microphone connected to the computer system 10). Ross at 3:50-52: The output 16 is a command or other input based on the spoken utterance 14 directed to the speech enabled external application 26 (see. FIG. 2) selected by the conversation manager 28 based on the context 70. Ross at 5:28-33:

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	Instead, the speech center 20 has a detailed model of what a user might say to a particular application 26, and how to respond. That knowledge is 30 provided individually on an application 26 by application 26 basis, and is incorporated into the speech center through the application model interface 42. Ross at 5:34-43: The GUI manager 40 provides an interface to the speech center 20. Even though the speech center 20 operates primarily through a speech interface, there will still be some cases of graphical user interface interaction with the user. Recognition feedback, dictation correction, and preference setting are all cases where traditional GUI interface elements may be desirable. The GUI manager 40 abstracts the details of exactly how these services are implemented, and provides an abstract interface to the rest of the speech center 20. Ross at 5:43-48: The conversation manager 28 is the central component of the speech center 20 that integrates the information from all the other modules 30, 32, 34, 36, 38, 40, 42. In a preferred embodiment, the conversation manager 28 is not a separate component, but is the internals of the speech center 20. Ross at 5:65-6:3: FIG. 4 shows the components of the context manager 50 65 according to the present invention. The context manager 50 includes a context list 62. The context list includes contexts 70 (e.g., 70-1, 70-1, 70-3, etc.) for speech-enabled applications 26, which represent the grammars for the applications 26. Ross at 6:12-18:

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	Recognition messages 68 from the speech engine interface 30 are tested by the context manager 50 against the active grammars in the context list 62 in priority order. When a successful match is found, the cor responding translation 74 is dispatched to the Script engine 38 for execution, and the priority of the matching grammar (i.e., selected context 72) is raised. Ross at 6:40-53: One grammar from each application 26 is active simultaneously, but since there will always be overlap between what the different application grammars will accept, the speech center 20 does not necessarily dispatch a command back to the application 26 whose grammar recognized it. Instead, when an utterance is recognized, it will be tested against each application's grammar to see if the grammar will accept it. The order of testing is based on a dynamic speech focus priority. The first application's gram mar which will accept the utterance is then used for trans lation, and the command dispatched to the corresponding application 26. The speech focus priority is established by maintaining an ordered list of applications (e.g., context list 62). Ross at 7:16-34: In step 106, if the message received in step 100 is determined to be a recognition message 68, the context manager 50 receives the recognition message 68 and selects a context 70 for a speech enabled application 26 by checking the speech representation against contexts 70, starting at top of context list 62 to determine the highest priority context 70 that can process the speech representation. For example, the context manager 50 uses the grammar associated with each context 70 to determine if the recognition message 68 is capable of being processed by that grammar In step 108, the context manager 50 directs the speech representation to be translated according to the selected context 72 and directs the translation to the script engine 38. In step 110, the context manager 50 sends the translated utterance 74 to the speech enabled application 26 indicated by the selected context 72 to perform the action indicated by the translated utterance 74. In step 112, the context manager 50 places the selected context 72 at the top of the context list 62. Ross at 7:46-54:

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	The speech center 20 may also have a speech center context that stores native grammars that can be used in translating a recognition message 68. After the context manager 50 determines the context 70 to which the utterance contained in the recognition message 68 should be directed, the translation of the utterance is first tried using the native grammars stored by the speech center 20. Then a translation is tried using the one or more grammars indicated by the context 70 for that application 26. Ross at 8:37-45: If the sentence is "print it however, both grammars are capable of accepting the utterance. The context manager 50 therefore has to make a choice by referring to the context list 62 of applications in order of recency of access. The context manager 50 tests the utterance against these grammars (indicated by the contexts 70 in the context list 62) in priority order, and passes the commands on to the first application 26 that has a grammar that will accept the phrase. Ross at 9:7-9: Thus, the context manager 50 resolves the ambiguous phrase (e.g., "print this' or "print it') by looking in the context list 62 to determine the top priority context 70. To the extent it is found that Ross does not expressly disclose this limitation, the limitation is inherent. And to the extent it is found that Ross does not anticipate this claim, Ross renders it obvious, standing alone, in combination with the knowledge of a person of ordinary skill in the art, and/or in combination with one or more other prior art references identified in the Cover Pleading or herein, for the reasons identified herein or in the Cover Pleading. A person of ordinary skill in the art would have been motivated to combine Ross with any of the other prior art references identified in the Cover Pleading or herein with a reasonable expectation of success because each of these references contains familiar elements within the similar fields of endeavor to address similar known problems, according to known methods which would yield predictable results.

Claim 13 of the '039 Patent	**Exemplary Citations to Ross**
[a] receiving the speech and non-speech communications;	Ross discloses "receiving the speech and non-speech communications[.]" *E.g.*, Ross at Abstract: A speech center coordinates speech services for a number of speech-enabled applications performing on a computer system. The speech center includes a conversation manager that manages conversations between a user and the speech-enabled applications. The conversation manager includes a context manager that maintains a context list of speech-enabled applications that the user has accessed. If the user speaks an utterance, the context manager determines which speech-enabled application should receive a translation of the utterance from the context list, such as by determining the most recently accessed application. Ross at 1:23-46: In particular a user may communicate through a microphone with a software application that displays output in a window on the display screen of the computer system. For example, a user can communicate with a word processing application to input text that is entered into a document file being presented in a window. Next, the user can select another speech-enabled application with an input device, such as a mouse or keyboard. The user can also select another speech-enabled application by explicitly giving a spoken command to select that application (e.g., "switch to calendar"). Then, the user can provide speech input through the microphone to that application. For example, a user can use the mouse to select the window for a calendar application (or provide an explicit selection command for that application), which then pops to the foreground, obscuring the previously displayed foreground application, such as a word processing application. Then, the user can provide a speech utterance, such as commands or sentence fragments, to be entered to the calendar application. After speaking to the calendar application, the user can use an input device to select the window for another application, such as the word processing application, bring the window forward for that application and then commence providing a speech utterance for that application, and so on. Ross at 2:49-50:

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	The message handler receives a representation of a spoken utterance. Ross at 2:50-54: The context manager receives the representations of the spoken utterance from the message handler and directs the representation of the spoken utterance to a selected speech enabled application based upon the evaluation of the contexts. Ross at 2:58-61: In another aspect of the invention, the context manager identifies each context based on a persistent grammar, a foreground grammar, or a background grammar for each speech enabled application. Ross at 3:45-48: The input spoken utterance 14 is a voice command or other speech input from a user of the computer system 10 (e.g., into a microphone connected to the computer system 10). Ross at 3:50-52: The output 16 is a command or other input based on the spoken utterance 14 directed to the speech enabled external application 26 (see. FIG. 2) selected by the conversation manager 28 based on the context 70. Ross at 5:28-33: Instead, the speech center 20 has a detailed model of what a user might say to a particular application 26, and how to respond. That knowledge is 30 provided individually on an application

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	26 by application 26 basis, and is incorporated into the speech center through the application model interface 42. Ross at 5:34-43: The GUI manager 40 provides an interface to the speech center 20. Even though the speech center 20 operates primarily through a speech interface, there will still be some cases of graphical user interface interaction with the user. Recognition feedback, dictation correction, and preference setting are all cases where traditional GUI interface elements may be desirable. The GUI manager 40 abstracts the details of exactly how these services are implemented, and provides an abstract interface to the rest of the speech center 20. Ross at 5:43-48: The conversation manager 28 is the central component of the speech center 20 that integrates the information from all the other modules 30, 32, 34, 36, 38, 40, 42. In a preferred embodiment, the conversation manager 28 is not a separate component, but is the internals of the speech center 20. Ross at 5:65-6:3: FIG. 4 shows the components of the context manager 50 65 according to the present invention. The context manager 50 includes a context list 62. The context list includes contexts 70 (e.g., 70-1, 70-1, 70-3, etc.) for speech-enabled applications 26, which represent the grammars for the applications 26. Ross at 6:12-18: Recognition messages 68 from the speech engine interface 30 are tested by the context manager 50 against the active grammars in the context list 62 in priority order. When a successful match is found, the cor responding translation 74 is dispatched to the Script engine 38 for execution, and the priority of the matching grammar (i.e., selected context 72) is raised.

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	Ross at 6:40-53: One grammar from each application 26 is active simultaneously, but since there will always be overlap between what the different application grammars will accept, the speech center 20 does not necessarily dispatch a command back to the application 26 whose grammar recognized it. Instead, when an utterance is recognized, it will be tested against each application's grammar to see if the grammar will accept it. The order of testing is based on a dynamic speech focus priority. The first application's gram mar which will accept the utterance is then used for trans lation, and the command dispatched to the corresponding application 26. The speech focus priority is established by maintaining an ordered list of applications (e.g., context list 62). Ross at 7:16-34: In step 106, if the message received in step 100 is determined to be a recognition message 68, the context manager 50 receives the recognition message 68 and selects a context 70 for a speech enabled application 26 by checking the speech representation against contexts 70, starting at top of context list 62 to determine the highest priority context 70 that can process the speech representation. For example, the context manager 50 uses the grammar associated with each context 70 to determine if the recognition message 68 is capable of being processed by that grammar In step 108, the context manager 50 directs the speech representation to be translated according to the selected context 72 and directs the translation to the script engine 38. In step 110, the context manager 50 sends the translated utterance 74 to the speech enabled application 26 indicated by the selected context 72 to perform the action indicated by the translated utterance 74. In step 112, the context manager 50 places the selected context 72 at the top of the context list 62. Ross at 7:46-54: The speech center 20 may also have a speech center context that stores native grammars that can be used in translating a recognition message 68. After the context manager 50 determines the context 70 to which the utterance contained in the recognition message 68 should be directed, the

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	translation of the utterance is first tried using the native grammars stored by the speech center 20. Then a translation is tried using the one or more grammars indicated by the context 70 for that application 26. Ross at 8:37-45: If the sentence is "print it however, both grammars are capable of accepting the utterance. The context manager 50 therefore has to make a choice by referring to the context list 62 of applications in order of recency of access. The context manager 50 tests the utterance against these grammars (indicated by the contexts 70 in the context list 62) in priority order, and passes the commands on to the first application 26 that has a grammar that will accept the phrase. Ross at 9:7-9: Thus, the context manager 50 resolves the ambiguous phrase (e.g., "print this' or "print it') by looking in the context list 62 to determine the top priority context 70. To the extent it is found that Ross does not expressly disclose this limitation, the limitation is inherent. And to the extent it is found that Ross does not anticipate this claim, Ross renders it obvious, standing alone, in combination with the knowledge of a person of ordinary skill in the art, and/or in combination with one or more other prior art references identified in the Cover Pleading or herein, for the reasons identified herein or in the Cover Pleading. A person of ordinary skill in the art would have been motivated to combine Ross with any of the other prior art references identified in the Cover Pleading or herein with a reasonable expectation of success because each of these references contains familiar elements within the similar fields of endeavor to address similar known problems, according to known methods which would yield predictable results.
[b] transcribing the speech and non-speech communications to create a speech-based textual message and a non-speech-based textual message;	Ross discloses "transcribing the speech and non-speech communications to create a speech-based textual message and a non-speech-based textual message[.]" *E.g.*, Ross at Abstract:

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	A speech center coordinates speech services for a number of speech-enabled applications performing on a computer system. The speech center includes a conversation manager that manages conversations between a user and the speech-enabled applications. The conversation manager includes a context manager that maintains a context list of speech-enabled applications that the user has accessed. If the user speaks an utterance, the context manager determines which speech-enabled application should receive a translation of the utterance from the context list, such as by determining the most recently accessed application. Ross at 1:23-46: In particular a user may communicate through a microphone with a software application that displays output in a window on the display screen of the computer system. For example, a user can communicate with a word processing application to input text that is entered into a document file being presented in a window. Next, the user can select another speech-enabled application with an input device, such as a mouse or keyboard. The user can also select another speech-enabled application by explicitly giving a spoken command to select that application (e.g., "switch to calendar"). Then, the user can provide speech input through the microphone to that application. For example, a user can use the mouse to select the window for a calendar application (or provide an explicit selection command for that application), which then pops to the foreground, obscuring the previously displayed foreground application, such as a word processing application. Then, the user can provide a speech utterance, such as commands or sentence fragments, to be entered to the calendar application. After speaking to the calendar application, the user can use an input device to select the window for another application, such as the word processing application, bring the window forward for that application and then commence providing a speech utterance for that application, and so on. Ross at 2:49-50: The message handler receives a representation of a spoken utterance. Ross at 2:50-54:

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	The context manager receives the representations of the spoken utterance from the message handler and directs the representation of the spoken utterance to a selected speech enabled application based upon the evaluation of the contexts. Ross at 2:58-61: In another aspect of the invention, the context manager identifies each context based on a persistent grammar, a foreground grammar, or a background grammar for each speech enabled application. Ross at 3:45-48: The input spoken utterance 14 is a voice command or other speech input from a user of the computer system 10 (e.g., into a microphone connected to the computer system 10). Ross at 3:50-52: The output 16 is a command or other input based on the spoken utterance 14 directed to the speech enabled external application 26 (see. FIG. 2) selected by the conversation manager 28 based on the context 70. Ross at 5:28-33: Instead, the speech center 20 has a detailed model of what a user might say to a particular application 26, and how to respond. That knowledge is 30 provided individually on an application 26 by application 26 basis, and is incorporated into the speech center through the application model interface 42. Ross at 5:34-43:

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	The GUI manager 40 provides an interface to the speech center 20. Even though the speech center 20 operates primarily through a speech interface, there will still be some cases of graphical user interface interaction with the user. Recognition feedback, dictation correction, and preference setting are all cases where traditional GUI interface elements may be desirable. The GUI manager 40 abstracts the details of exactly how these services are implemented, and provides an abstract interface to the rest of the speech center 20. Ross at 5:43-48: The conversation manager 28 is the central component of the speech center 20 that integrates the information from all the other modules 30, 32, 34, 36, 38, 40, 42. In a preferred embodiment, the conversation manager 28 is not a separate component, but is the internals of the speech center 20. Ross at 5:65-6:3: FIG. 4 shows the components of the context manager 50 65 according to the present invention. The context manager 50 includes a context list 62. The context list includes contexts 70 (e.g., 70-1, 70-1, 70-3, etc.) for speech-enabled applications 26, which represent the grammars for the applications 26. Ross at 6:12-18: Recognition messages 68 from the speech engine interface 30 are tested by the context manager 50 against the active grammars in the context list 62 in priority order. When a successful match is found, the cor responding translation 74 is dispatched to the Script engine 38 for execution, and the priority of the matching grammar (i.e., selected context 72) is raised. Ross at 6:40-53: One grammar from each application 26 is active simultaneously, but since there will always be overlap between what the different application grammars will accept, the speech center 20 does

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	not necessarily dispatch a command back to the application 26 whose grammar recognized it. Instead, when an utterance is recognized, it will be tested against each application's grammar to see if the grammar will accept it. The order of testing is based on a dynamic speech focus priority. The first application's gram mar which will accept the utterance is then used for trans lation, and the command dispatched to the corresponding application 26. The speech focus priority is established by maintaining an ordered list of applications (e.g., context list 62). Ross at 7:16-34: In step 106, if the message received in step 100 is determined to be a recognition message 68, the context manager 50 receives the recognition message 68 and selects a context 70 for a speech enabled application 26 by checking the speech representation against contexts 70, starting at top of context list 62 to determine the highest priority context 70 that can process the speech representation. For example, the context manager 50 uses the grammar associated with each context 70 to determine if the recognition message 68 is capable of being processed by that grammar In step 108, the context manager 50 directs the speech representation to be translated according to the selected context 72 and directs the translation to the script engine 38. In step 110, the context manager 50 sends the translated utterance 74 to the speech enabled application 26 indicated by the selected context 72 to perform the action indicated by the translated utterance 74. In step 112, the context manager 50 places the selected context 72 at the top of the context list 62. Ross at 7:46-54: The speech center 20 may also have a speech center context that stores native grammars that can be used in translating a recognition message 68. After the context manager 50 determines the context 70 to which the utterance contained in the recognition message 68 should be directed, the translation of the utterance is first tried using the native grammars stored by the speech center 20. Then a translation is tried using the one or more grammars indicated by the context 70 for that application 26. Ross at 8:37-45:

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	If the sentence is "print it however, both grammars are capable of accepting the utterance. The context manager 50 therefore has to make a choice by referring to the context list 62 of applications in order of recency of access. The context manager 50 tests the utterance against these grammars (indicated by the contexts 70 in the context list 62) in priority order, and passes the commands on to the first application 26 that has a grammar that will accept the phrase. Ross at 9:7-9: Thus, the context manager 50 resolves the ambiguous phrase (e.g., "print this' or "print it') by looking in the context list 62 to determine the top priority context 70. To the extent it is found that Ross does not expressly disclose this limitation, the limitation is inherent. And to the extent it is found that Ross does not anticipate this claim, Ross renders it obvious, standing alone, in combination with the knowledge of a person of ordinary skill in the art, and/or in combination with one or more other prior art references identified in the Cover Pleading or herein, for the reasons identified herein or in the Cover Pleading. A person of ordinary skill in the art would have been motivated to combine Ross with any of the other prior art references identified in the Cover Pleading or herein with a reasonable expectation of success because each of these references contains familiar elements within the similar fields of endeavor to address similar known problems, according to known methods which would yield predictable results.
[c] merging the speech-based textual message and the non-speech-based textual message to generate a query;	Ross discloses "merging the speech-based textual message and the non-speech-based textual message to generate a query[.]" *E.g.*, Ross at Abstract: A speech center coordinates speech services for a number of speech-enabled applications performing on a computer system. The speech center includes a conversation manager that manages conversations between a user and the speech-enabled applications. The conversation manager includes a context manager that maintains a context list of speech-enabled applications that the user has accessed. If the user speaks an utterance, the context manager determines which

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	speech-enabled application should receive a translation of the utterance from the context list, such as by determining the most recently accessed application. Ross at 1:23-46: In particular a user may communicate through a microphone with a software application that displays output in a window on the display screen of the computer system. For example, a user can communicate with a word processing application to input text that is entered into a document file being presented in a window. Next, the user can select another speech-enabled application with an input device, such as a mouse or keyboard. The user can also select another speech-enabled application by explicitly giving a spoken command to select that application (e.g., "switch to calendar"). Then, the user can provide speech input through the microphone to that application. For example, a user can use the mouse to select the window for a calendar application (or provide an explicit selection command for that application), which then pops to the foreground, obscuring the previously displayed foreground application, such as a word processing application. Then, the user can provide a speech utterance, such as commands or sentence fragments, to be entered to the calendar application. After speaking to the calendar application, the user can use an input device to select the window for another application, such as the word processing application, bring the window forward for that application and then commence providing a speech utterance for that application, and so on. Ross at 2:49-50: The message handler receives a representation of a spoken utterance. Ross at 2:50-54: The context manager receives the representations of the spoken utterance from the message handler and directs the representation of the spoken utterance to a selected speech enabled application based upon the evaluation of the contexts.

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	Ross at 2:58-61: In another aspect of the invention, the context manager identifies each context based on a persistent grammar, a foreground grammar, or a background grammar for each speech enabled application. Ross at 3:45-48: The input spoken utterance 14 is a voice command or other speech input from a user of the computer system 10 (e.g., into a microphone connected to the computer system 10). Ross at 3:50-52: The output 16 is a command or other input based on the spoken utterance 14 directed to the speech enabled external application 26 (see. FIG. 2) selected by the conversation manager 28 based on the context 70. Ross at 5:28-33: Instead, the speech center 20 has a detailed model of what a user might say to a particular application 26, and how to respond. That knowledge is 30 provided individually on an application 26 by application 26 basis, and is incorporated into the speech center through the application model interface 42. Ross at 5:34-43: The GUI manager 40 provides an interface to the speech center 20. Even though the speech center 20 operates primarily through a speech interface, there will still be some cases of graphical user interface interaction with the user. Recognition feedback, dictation correction, and preference setting are all cases where traditional GUI interface elements may be desirable. The GUI manager

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	40 abstracts the details of exactly how these services are implemented, and provides an abstract interface to the rest of the speech center 20. Ross at 5:43-48: The conversation manager 28 is the central component of the speech center 20 that integrates the information from all the other modules 30, 32, 34, 36, 38, 40, 42. In a preferred embodiment, the conversation manager 28 is not a separate component, but is the internals of the speech center 20. Ross at 5:65-6:3: FIG. 4 shows the components of the context manager 50 65 according to the present invention. The context manager 50 includes a context list 62. The context list includes contexts 70 (e.g., 70-1, 70-1, 70-3, etc.) for speech-enabled applications 26, which represent the grammars for the applications 26. Ross at 6:12-18: Recognition messages 68 from the speech engine interface 30 are tested by the context manager 50 against the active grammars in the context list 62 in priority order. When a successful match is found, the cor responding translation 74 is dispatched to the Script engine 38 for execution, and the priority of the matching grammar (i.e., selected context 72) is raised. Ross at 6:40-53: One grammar from each application 26 is active simultaneously, but since there will always be overlap between what the different application grammars will accept, the speech center 20 does not necessarily dispatch a command back to the application 26 whose grammar recognized it. Instead, when an utterance is recognized, it will be tested against each application's grammar to see if the grammar will accept it. The order of testing is based on a dynamic speech focus priority. The first application's gram mar which will accept the utterance is then used for trans lation, and

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	the command dispatched to the corresponding application 26. The speech focus priority is established by maintaining an ordered list of applications (e.g., context list 62). Ross at 7:16-34: In step 106, if the message received in step 100 is determined to be a recognition message 68, the context manager 50 receives the recognition message 68 and selects a context 70 for a speech enabled application 26 by checking the speech representation against contexts 70, starting at top of context list 62 to determine the highest priority context 70 that can process the speech representation. For example, the context manager 50 uses the grammar associated with each context 70 to determine if the recognition message 68 is capable of being processed by that grammar In step 108, the context manager 50 directs the speech representation to be translated according to the selected context 72 and directs the translation to the script engine 38. In step 110, the context manager 50 sends the translated utterance 74 to the speech enabled application 26 indicated by the selected context 72 to perform the action indicated by the translated utterance 74. In step 112, the context manager 50 places the selected context 72 at the top of the context list 62. Ross at 7:46-54: The speech center 20 may also have a speech center context that stores native grammars that can be used in translating a recognition message 68. After the context manager 50 determines the context 70 to which the utterance contained in the recognition message 68 should be directed, the translation of the utterance is first tried using the native grammars stored by the speech center 20. Then a translation is tried using the one or more grammars indicated by the context 70 for that application 26. Ross at 8:37-45: If the sentence is "print it however, both grammars are capable of accepting the utterance. The context manager 50 therefore has to make a choice by referring to the context list 62 of applications in order of recency of access. The context manager 50 tests the utterance against these

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	grammars (indicated by the contexts 70 in the context list 62) in priority order, and passes the commands on to the first application 26 that has a grammar that will accept the phrase. Ross at 9:7-9: Thus, the context manager 50 resolves the ambiguous phrase (e.g., "print this' or "print it') by looking in the context list 62 to determine the top priority context 70. To the extent it is found that Ross does not expressly disclose this limitation, the limitation is inherent. And to the extent it is found that Ross does not anticipate this claim, Ross renders it obvious, standing alone, in combination with the knowledge of a person of ordinary skill in the art, and/or in combination with one or more other prior art references identified in the Cover Pleading or herein, for the reasons identified herein or in the Cover Pleading. A person of ordinary skill in the art would have been motivated to combine Ross with any of the other prior art references identified in the Cover Pleading or herein with a reasonable expectation of success because each of these references contains familiar elements within the similar fields of endeavor to address similar known problems, according to known methods which would yield predictable results.
[d] searching the query for text combinations;	Ross discloses "searching the query for text combinations[.]" *E.g.*, Ross at Abstract: A speech center coordinates speech services for a number of speech-enabled applications performing on a computer system. The speech center includes a conversation manager that manages conversations between a user and the speech-enabled applications. The conversation manager includes a context manager that maintains a context list of speech-enabled applications that the user has accessed. If the user speaks an utterance, the context manager determines which speech-enabled application should receive a translation of the utterance from the context list, such as by determining the most recently accessed application. Ross at 1:23-46:

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	In particular a user may communicate through a microphone with a software application that displays output in a window on the display screen of the computer system. For example, a user can communicate with a word processing application to input text that is entered into a document file being presented in a window. Next, the user can select another speech-enabled application with an input device, such as a mouse or keyboard. The user can also select another speech-enabled application by explicitly giving a spoken command to select that application (e.g., "switch to calendar"). Then, the user can provide speech input through the microphone to that application. For example, a user can use the mouse to select the window for a calendar application (or provide an explicit selection command for that application), which then pops to the foreground, obscuring the previously displayed foreground application, such as a word processing application. Then, the user can provide a speech utterance, such as commands or sentence fragments, to be entered to the calendar application. After speaking to the calendar application, the user can use an input device to select the window for another application, such as the word processing application, bring the window forward for that application and then commence providing a speech utterance for that application, and so on. Ross at 2:49-50: The message handler receives a representation of a spoken utterance. Ross at 2:50-54: The context manager receives the representations of the spoken utterance from the message handler and directs the representation of the spoken utterance to a selected speech enabled application based upon the evaluation of the contexts. Ross at 2:58-61: In another aspect of the invention, the context manager identifies each context based on a persistent grammar, a foreground grammar, or a background grammar for each speech enabled application.

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	Ross at 3:45-48: The input spoken utterance 14 is a voice command or other speech input from a user of the computer system 10 (e.g., into a microphone connected to the computer system 10). Ross at 3:50-52: The output 16 is a command or other input based on the spoken utterance 14 directed to the speech enabled external application 26 (see. FIG. 2) selected by the conversation manager 28 based on the context 70. Ross at 5:28-33: Instead, the speech center 20 has a detailed model of what a user might say to a particular application 26, and how to respond. That knowledge is 30 provided individually on an application 26 by application 26 basis, and is incorporated into the speech center through the application model interface 42. Ross at 5:34-43: The GUI manager 40 provides an interface to the speech center 20. Even though the speech center 20 operates primarily through a speech interface, there will still be some cases of graphical user interface interaction with the user. Recognition feedback, dictation correction, and preference setting are all cases where traditional GUI interface elements may be desirable. The GUI manager 40 abstracts the details of exactly how these services are implemented, and provides an abstract interface to the rest of the speech center 20. Ross at 5:43-48:

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	The conversation manager 28 is the central component of the speech center 20 that integrates the information from all the other modules 30, 32, 34, 36, 38, 40, 42. In a preferred embodiment, the conversation manager 28 is not a separate component, but is the internals of the speech center 20. Ross at 5:65-6:3: FIG. 4 shows the components of the context manager 50 65 according to the present invention. The context manager 50 includes a context list 62. The context list includes contexts 70 (e.g., 70-1, 70-1, 70-3, etc.) for speech-enabled applications 26, which represent the grammars for the applications 26. Ross at 6:12-18: Recognition messages 68 from the speech engine interface 30 are tested by the context manager 50 against the active grammars in the context list 62 in priority order. When a successful match is found, the cor responding translation 74 is dispatched to the Script engine 38 for execution, and the priority of the matching grammar (i.e., selected context 72) is raised. Ross at 6:40-53: One grammar from each application 26 is active simultaneously, but since there will always be overlap between what the different application grammars will accept, the speech center 20 does not necessarily dispatch a command back to the application 26 whose grammar recognized it. Instead, when an utterance is recognized, it will be tested against each application's grammar to see if the grammar will accept it. The order of testing is based on a dynamic speech focus priority. The first application's gram mar which will accept the utterance is then used for trans lation, and the command dispatched to the corresponding application 26. The speech focus priority is established by maintaining an ordered list of applications (e.g., context list 62). Ross at 7:16-34:

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	In step 106, if the message received in step 100 is determined to be a recognition message 68, the context manager 50 receives the recognition message 68 and selects a context 70 for a speech enabled application 26 by checking the speech representation against contexts 70, starting at top of context list 62 to determine the highest priority context 70 that can process the speech representation. For example, the context manager 50 uses the grammar associated with each context 70 to determine if the recognition message 68 is capable of being processed by that grammar In step 108, the context manager 50 directs the speech representation to be translated according to the selected context 72 and directs the translation to the script engine 38. In step 110, the context manager 50 sends the translated utterance 74 to the speech enabled application 26 indicated by the selected context 72 to perform the action indicated by the translated utterance 74. In step 112, the context manager 50 places the selected context 72 at the top of the context list 62. Ross at 7:46-54: The speech center 20 may also have a speech center context that stores native grammars that can be used in translating a recognition message 68. After the context manager 50 determines the context 70 to which the utterance contained in the recognition message 68 should be directed, the translation of the utterance is first tried using the native grammars stored by the speech center 20. Then a translation is tried using the one or more grammars indicated by the context 70 for that application 26. Ross at 8:37-45: If the sentence is "print it however, both grammars are capable of accepting the utterance. The context manager 50 therefore has to make a choice by referring to the context list 62 of applications in order of recency of access. The context manager 50 tests the utterance against these grammars (indicated by the contexts 70 in the context list 62) in priority order, and passes the commands on to the first application 26 that has a grammar that will accept the phrase. Ross at 9:7-9:

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	Thus, the context manager 50 resolves the ambiguous phrase (e.g., "print this' or "print it') by looking in the context list 62 to determine the top priority context 70. To the extent it is found that Ross does not expressly disclose this limitation, the limitation is inherent. And to the extent it is found that Ross does not anticipate this claim, Ross renders it obvious, standing alone, in combination with the knowledge of a person of ordinary skill in the art, and/or in combination with one or more other prior art references identified in the Cover Pleading or herein, for the reasons identified herein or in the Cover Pleading. A person of ordinary skill in the art would have been motivated to combine Ross with any of the other prior art references identified in the Cover Pleading or herein with a reasonable expectation of success because each of these references contains familiar elements within the similar fields of endeavor to address similar known problems, according to known methods which would yield predictable results.
[e] comparing the text combinations to entries in a context description grammar;	Ross discloses "comparing the text combinations to entries in a context description grammar[.]" *E.g.*, Ross at Abstract: A speech center coordinates speech services for a number of speech-enabled applications performing on a computer system. The speech center includes a conversation manager that manages conversations between a user and the speech-enabled applications. The conversation manager includes a context manager that maintains a context list of speech-enabled applications that the user has accessed. If the user speaks an utterance, the context manager determines which speech-enabled application should receive a translation of the utterance from the context list, such as by determining the most recently accessed application. Ross at 1:23-46: In particular a user may communicate through a microphone with a software application that displays output in a window on the display screen of the computer system. For example, a user can communicate with a word processing application to input text that is entered into a document file being presented in a window. Next, the user can select another speech-enabled application with an input device, such as a mouse or keyboard. The user can also select another speech-enabled

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	application by explicitly giving a spoken command to select that application (e.g., "switch to calendar"). Then, the user can provide speech input through the microphone to that application. For example, a user can use the mouse to select the window for a calendar application (or provide an explicit selection command for that application), which then pops to the foreground, obscuring the previously displayed foreground application, such as a word processing application. Then, the user can provide a speech utterance, such as commands or sentence fragments, to be entered to the calendar application. After speaking to the calendar application, the user can use an input device to select the window for another application, such as the word processing application, bring the window forward for that application and then commence providing a speech utterance for that application, and so on. Ross at 2:49-50: The message handler receives a representation of a spoken utterance. Ross at 2:50-54: The context manager receives the representations of the spoken utterance from the message handler and directs the representation of the spoken utterance to a selected speech enabled application based upon the evaluation of the contexts. Ross at 2:58-61: In another aspect of the invention, the context manager identifies each context based on a persistent grammar, a foreground grammar, or a background grammar for each speech enabled application. Ross at 3:45-48: The input spoken utterance 14 is a voice command or other speech input from a user of the computer system 10 (e.g., into a microphone connected to the computer system 10).

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	Ross at 3:50-52: The output 16 is a command or other input based on the spoken utterance 14 directed to the speech enabled external application 26 (see. FIG. 2) selected by the conversation manager 28 based on the context 70. Ross at 5:28-33: Instead, the speech center 20 has a detailed model of what a user might say to a particular application 26, and how to respond. That knowledge is 30 provided individually on an application 26 by application 26 basis, and is incorporated into the speech center through the application model interface 42. Ross at 5:34-43: The GUI manager 40 provides an interface to the speech center 20. Even though the speech center 20 operates primarily through a speech interface, there will still be some cases of graphical user interface interaction with the user. Recognition feedback, dictation correction, and preference setting are all cases where traditional GUI interface elements may be desirable. The GUI manager 40 abstracts the details of exactly how these services are implemented, and provides an abstract interface to the rest of the speech center 20. Ross at 5:43-48: The conversation manager 28 is the central component of the speech center 20 that integrates the information from all the other modules 30, 32, 34, 36, 38, 40, 42. In a preferred embodiment, the conversation manager 28 is not a separate component, but is the internals of the speech center 20. Ross at 5:65-6:3:

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	FIG. 4 shows the components of the context manager 50 65 according to the present invention. The context manager 50 includes a context list 62. The context list includes contexts 70 (e.g., 70-1, 70-1, 70-3, etc.) for speech-enabled applications 26, which represent the grammars for the applications 26. Ross at 6:12-18: Recognition messages 68 from the speech engine interface 30 are tested by the context manager 50 against the active grammars in the context list 62 in priority order. When a successful match is found, the cor responding translation 74 is dispatched to the Script engine 38 for execution, and the priority of the matching grammar (i.e., selected context 72) is raised. Ross at 6:40-53: One grammar from each application 26 is active simultaneously, but since there will always be overlap between what the different application grammars will accept, the speech center 20 does not necessarily dispatch a command back to the application 26 whose grammar recognized it. Instead, when an utterance is recognized, it will be tested against each application's grammar to see if the grammar will accept it. The order of testing is based on a dynamic speech focus priority. The first application's gram mar which will accept the utterance is then used for trans lation, and the command dispatched to the corresponding application 26. The speech focus priority is established by maintaining an ordered list of applications (e.g., context list 62). Ross at 7:16-34: In step 106, if the message received in step 100 is determined to be a recognition message 68, the context manager 50 receives the recognition message 68 and selects a context 70 for a speech enabled application 26 by checking the speech representation against contexts 70, starting at top of context list 62 to determine the highest priority context 70 that can process the speech representation. For example, the context manager 50 uses the grammar associated with each context 70 to determine if the recognition message 68 is capable of being processed by that

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	grammar In step 108, the context manager 50 directs the speech representation to be translated according to the selected context 72 and directs the translation to the script engine 38. In step 110, the context manager 50 sends the translated utterance 74 to the speech enabled application 26 indicated by the selected context 72 to perform the action indicated by the translated utterance 74. In step 112, the context manager 50 places the selected context 72 at the top of the context list 62. Ross at 7:46-54: The speech center 20 may also have a speech center context that stores native grammars that can be used in translating a recognition message 68. After the context manager 50 determines the context 70 to which the utterance contained in the recognition message 68 should be directed, the translation of the utterance is first tried using the native grammars stored by the speech center 20. Then a translation is tried using the one or more grammars indicated by the context 70 for that application 26. Ross at 8:37-45: If the sentence is "print it however, both grammars are capable of accepting the utterance. The context manager 50 therefore has to make a choice by referring to the context list 62 of applications in order of recency of access. The context manager 50 tests the utterance against these grammars (indicated by the contexts 70 in the context list 62) in priority order, and passes the commands on to the first application 26 that has a grammar that will accept the phrase. Ross at 9:7-9: Thus, the context manager 50 resolves the ambiguous phrase (e.g., "print this' or "print it') by looking in the context list 62 to determine the top priority context 70. To the extent it is found that Ross does not expressly disclose this limitation, the limitation is inherent. And to the extent it is found that Ross does not anticipate this claim, Ross renders it obvious, standing alone, in combination with the knowledge of a person of ordinary skill in the art,

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	and/or in combination with one or more other prior art references identified in the Cover Pleading or herein, for the reasons identified herein or in the Cover Pleading. A person of ordinary skill in the art would have been motivated to combine Ross with any of the other prior art references identified in the Cover Pleading or herein with a reasonable expectation of success because each of these references contains familiar elements within the similar fields of endeavor to address similar known problems, according to known methods which would yield predictable results.
[f] accessing a plurality of domain agents that are associated with the context description grammar;	Ross discloses "accessing a plurality of domain agents that are associated with the context description grammar[.]" *E.g.*, Ross at Abstract: A speech center coordinates speech services for a number of speech-enabled applications performing on a computer system. The speech center includes a conversation manager that manages conversations between a user and the speech-enabled applications. The conversation manager includes a context manager that maintains a context list of speech-enabled applications that the user has accessed. If the user speaks an utterance, the context manager determines which speech-enabled application should receive a translation of the utterance from the context list, such as by determining the most recently accessed application. Ross at 1:23-46: In particular a user may communicate through a microphone with a software application that displays output in a window on the display screen of the computer system. For example, a user can communicate with a word processing application to input text that is entered into a document file being presented in a window. Next, the user can select another speech-enabled application with an input device, such as a mouse or keyboard. The user can also select another speech-enabled application by explicitly giving a spoken command to select that application (e.g., "switch to calendar"). Then, the user can provide speech input through the microphone to that application. For example, a user can use the mouse to select the window for a calendar application (or provide an explicit selection command for that application), which then pops to the foreground, obscuring the previously displayed foreground application, such as a word processing application. Then, the

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	user can provide a speech utterance, such as commands or sentence fragments, to be entered to the calendar application. After speaking to the calendar application, the user can use an input device to select the window for another application, such as the word processing application, bring the window forward for that application and then commence providing a speech utterance for that application, and so on. Ross at 2:49-50: The message handler receives a representation of a spoken utterance. Ross at 2:50-54: The context manager receives the representations of the spoken utterance from the message handler and directs the representation of the spoken utterance to a selected speech enabled application based upon the evaluation of the contexts. Ross at 2:58-61: In another aspect of the invention, the context manager identifies each context based on a persistent grammar, a foreground grammar, or a background grammar for each speech enabled application. Ross at 3:45-48: The input spoken utterance 14 is a voice command or other speech input from a user of the computer system 10 (e.g., into a microphone connected to the computer system 10). Ross at 3:50-52:

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	The output 16 is a command or other input based on the spoken utterance 14 directed to the speech enabled external application 26 (see. FIG. 2) selected by the conversation manager 28 based on the context 70. Ross at 5:28-33: Instead, the speech center 20 has a detailed model of what a user might say to a particular application 26, and how to respond. That knowledge is 30 provided individually on an application 26 by application 26 basis, and is incorporated into the speech center through the application model interface 42. Ross at 5:34-43: The GUI manager 40 provides an interface to the speech center 20. Even though the speech center 20 operates primarily through a speech interface, there will still be some cases of graphical user interface interaction with the user. Recognition feedback, dictation correction, and preference setting are all cases where traditional GUI interface elements may be desirable. The GUI manager 40 abstracts the details of exactly how these services are implemented, and provides an abstract interface to the rest of the speech center 20. Ross at 5:43-48: The conversation manager 28 is the central component of the speech center 20 that integrates the information from all the other modules 30, 32, 34, 36, 38, 40, 42. In a preferred embodiment, the conversation manager 28 is not a separate component, but is the internals of the speech center 20. Ross at 5:65-6:3: FIG. 4 shows the components of the context manager 50 65 according to the present invention. The context manager 50 includes a context list 62. The context list includes contexts 70 (e.g., 70-

Claim 13 of the '039 Patent	Exemplary Citations to Ross
	1, 70-1, 70-3, etc.) for speech-enabled applications 26, which represent the grammars for the applications 26. Ross at 6:12-18: Recognition messages 68 from the speech engine interface 30 are tested by the context manager 50 against the active grammars in the context list 62 in priority order. When a successful match is found, the cor responding translation 74 is dispatched to the Script engine 38 for execution, and the priority of the matching grammar (i.e., selected context 72) is raised. Ross at 6:40-53: One grammar from each application 26 is active simultaneously, but since there will always be overlap between what the different application grammars will accept, the speech center 20 does not necessarily dispatch a command back to the application 26 whose grammar recognized it. Instead, when an utterance is recognized, it will be tested against each application's grammar to see if the grammar will accept it. The order of testing is based on a dynamic speech focus priority. The first application's gram mar which will accept the utterance is then used for trans lation, and the command dispatched to the corresponding application 26. The speech focus priority is established by maintaining an ordered list of applications (e.g., context list 62). Ross at 7:16-34: In step 106, if the message received in step 100 is determined to be a recognition message 68, the context manager 50 receives the recognition message 68 and selects a context 70 for a speech enabled application 26 by checking the speech representation against contexts 70, starting at top of context list 62 to determine the highest priority context 70 that can process the speech representation. For example, the context manager 50 uses the grammar associated with each context 70 to determine if the recognition message 68 is capable of being processed by that grammar In step 108, the context manager 50 directs the speech representation to be translated according to the selected context 72 and directs the translation to the script engine 38. In step 110,

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	the context manager 50 sends the translated utterance 74 to the speech enabled application 26 indicated by the selected context 72 to perform the action indicated by the translated utterance 74. In step 112, the context manager 50 places the selected context 72 at the top of the context list 62. Ross at 7:46-54: The speech center 20 may also have a speech center context that stores native grammars that can be used in translating a recognition message 68. After the context manager 50 determines the context 70 to which the utterance contained in the recognition message 68 should be directed, the translation of the utterance is first tried using the native grammars stored by the speech center 20. Then a translation is tried using the one or more grammars indicated by the context 70 for that application 26. Ross at 8:37-45: If the sentence is "print it however, both grammars are capable of accepting the utterance. The context manager 50 therefore has to make a choice by referring to the context list 62 of applications in order of recency of access. The context manager 50 tests the utterance against these grammars (indicated by the contexts 70 in the context list 62) in priority order, and passes the commands on to the first application 26 that has a grammar that will accept the phrase. Ross at 9:7-9: Thus, the context manager 50 resolves the ambiguous phrase (e.g., "print this' or "print it') by looking in the context list 62 to determine the top priority context 70. To the extent it is found that Ross does not expressly disclose this limitation, the limitation is inherent. And to the extent it is found that Ross does not anticipate this claim, Ross renders it obvious, standing alone, in combination with the knowledge of a person of ordinary skill in the art, and/or in combination with one or more other prior art references identified in the Cover Pleading or herein, for the reasons identified herein or in the Cover Pleading. A person of ordinary skill in

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	the art would have been motivated to combine Ross with any of the other prior art references identified in the Cover Pleading or herein with a reasonable expectation of success because each of these references contains familiar elements within the similar fields of endeavor to address similar known problems, according to known methods which would yield predictable results.
[g] generating a relevance score based on results from comparing the text combinations to entries in the context description grammar;	Ross discloses "generating a relevance score based on results from comparing the text combinations to entries in the context description grammar[.]" *E.g.*, Ross at Abstract: A speech center coordinates speech services for a number of speech-enabled applications performing on a computer system. The speech center includes a conversation manager that manages conversations between a user and the speech-enabled applications. The conversation manager includes a context manager that maintains a context list of speech-enabled applications that the user has accessed. If the user speaks an utterance, the context manager determines which speech-enabled application should receive a translation of the utterance from the context list, such as by determining the most recently accessed application. Ross at 1:23-46: In particular a user may communicate through a microphone with a software application that displays output in a window on the display screen of the computer system. For example, a user can communicate with a word processing application to input text that is entered into a document file being presented in a window. Next, the user can select another speech-enabled application with an input device, such as a mouse or keyboard. The user can also select another speech-enabled application by explicitly giving a spoken command to select that application (e.g., "switch to calendar"). Then, the user can provide speech input through the microphone to that application. For example, a user can use the mouse to select the window for a calendar application (or provide an explicit selection command for that application), which then pops to the foreground, obscuring the previously displayed foreground application, such as a word processing application. Then, the user can provide a speech utterance, such as commands or sentence fragments, to be entered to the calendar application. After speaking to the calendar application, the user can use an input device to

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	select the window for another application, such as the word processing application, bring the window forward for that application and then commence providing a speech utterance for that application, and so on. Ross at 2:49-50: The message handler receives a representation of a spoken utterance. Ross at 2:50-54: The context manager receives the representations of the spoken utterance from the message handler and directs the representation of the spoken utterance to a selected speech enabled application based upon the evaluation of the contexts. Ross at 2:58-61: In another aspect of the invention, the context manager identifies each context based on a persistent grammar, a foreground grammar, or a background grammar for each speech enabled application. Ross at 3:45-48: The input spoken utterance 14 is a voice command or other speech input from a user of the computer system 10 (e.g., into a microphone connected to the computer system 10). Ross at 3:50-52: The output 16 is a command or other input based on the spoken utterance 14 directed to the speech enabled external application 26 (see. FIG. 2) selected by the conversation manager 28 based on the context 70.

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	Ross at 5:28-33: Instead, the speech center 20 has a detailed model of what a user might say to a particular application 26, and how to respond. That knowledge is 30 provided individually on an application 26 by application 26 basis, and is incorporated into the speech center through the application model interface 42. Ross at 5:34-43: The GUI manager 40 provides an interface to the speech center 20. Even though the speech center 20 operates primarily through a speech interface, there will still be some cases of graphical user interface interaction with the user. Recognition feedback, dictation correction, and preference setting are all cases where traditional GUI interface elements may be desirable. The GUI manager 40 abstracts the details of exactly how these services are implemented, and provides an abstract interface to the rest of the speech center 20. Ross at 5:43-48: The conversation manager 28 is the central component of the speech center 20 that integrates the information from all the other modules 30, 32, 34, 36, 38, 40, 42. In a preferred embodiment, the conversation manager 28 is not a separate component, but is the internals of the speech center 20. Ross at 5:65-6:3: FIG. 4 shows the components of the context manager 50 65 according to the present invention. The context manager 50 includes a context list 62. The context list includes contexts 70 (e.g., 70-1, 70-1, 70-3, etc.) for speech-enabled applications 26, which represent the grammars for the applications 26. Ross at 6:12-18:

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	Recognition messages 68 from the speech engine interface 30 are tested by the context manager 50 against the active grammars in the context list 62 in priority order. When a successful match is found, the cor responding translation 74 is dispatched to the Script engine 38 for execution, and the priority of the matching grammar (i.e., selected context 72) is raised. Ross at 6:40-53: One grammar from each application 26 is active simultaneously, but since there will always be overlap between what the different application grammars will accept, the speech center 20 does not necessarily dispatch a command back to the application 26 whose grammar recognized it. Instead, when an utterance is recognized, it will be tested against each application's grammar to see if the grammar will accept it. The order of testing is based on a dynamic speech focus priority. The first application's gram mar which will accept the utterance is then used for trans lation, and the command dispatched to the corresponding application 26. The speech focus priority is established by maintaining an ordered list of applications (e.g., context list 62). Ross at 7:16-34: In step 106, if the message received in step 100 is determined to be a recognition message 68, the context manager 50 receives the recognition message 68 and selects a context 70 for a speech enabled application 26 by checking the speech representation against contexts 70, starting at top of context list 62 to determine the highest priority context 70 that can process the speech representation. For example, the context manager 50 uses the grammar associated with each context 70 to determine if the recognition message 68 is capable of being processed by that grammar In step 108, the context manager 50 directs the speech representation to be translated according to the selected context 72 and directs the translation to the script engine 38. In step 110, the context manager 50 sends the translated utterance 74 to the speech enabled application 26 indicated by the selected context 72 to perform the action indicated by the translated utterance 74. In step 112, the context manager 50 places the selected context 72 at the top of the context list 62. Ross at 7:46-54:

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	The speech center 20 may also have a speech center context that stores native grammars that can be used in translating a recognition message 68. After the context manager 50 determines the context 70 to which the utterance contained in the recognition message 68 should be directed, the translation of the utterance is first tried using the native grammars stored by the speech center 20. Then a translation is tried using the one or more grammars indicated by the context 70 for that application 26. Ross at 8:37-45: If the sentence is "print it however, both grammars are capable of accepting the utterance. The context manager 50 therefore has to make a choice by referring to the context list 62 of applications in order of recency of access. The context manager 50 tests the utterance against these grammars (indicated by the contexts 70 in the context list 62) in priority order, and passes the commands on to the first application 26 that has a grammar that will accept the phrase. Ross at 9:7-9: Thus, the context manager 50 resolves the ambiguous phrase (e.g., "print this' or "print it') by looking in the context list 62 to determine the top priority context 70. To the extent it is found that Ross does not expressly disclose this limitation, the limitation is inherent. And to the extent it is found that Ross does not anticipate this claim, Ross renders it obvious, standing alone, in combination with the knowledge of a person of ordinary skill in the art, and/or in combination with one or more other prior art references identified in the Cover Pleading or herein, for the reasons identified herein or in the Cover Pleading. A person of ordinary skill in the art would have been motivated to combine Ross with any of the other prior art references identified in the Cover Pleading or herein with a reasonable expectation of success because each of these references contains familiar elements within the similar fields of endeavor to address similar known problems, according to known methods which would yield predictable results.

Claim 13 of the '039 Patent	**Exemplary Citations to Ross**
[h] selecting one or more domain agents based on results from the relevance score;	Ross discloses "selecting one or more domain agents based on results from the relevance score[.]" *E.g.*, Ross at Abstract: A speech center coordinates speech services for a number of speech-enabled applications performing on a computer system. The speech center includes a conversation manager that manages conversations between a user and the speech-enabled applications. The conversation manager includes a context manager that maintains a context list of speech-enabled applications that the user has accessed. If the user speaks an utterance, the context manager determines which speech-enabled application should receive a translation of the utterance from the context list, such as by determining the most recently accessed application. Ross at 1:23-46: In particular a user may communicate through a microphone with a software application that displays output in a window on the display screen of the computer system. For example, a user can communicate with a word processing application to input text that is entered into a document file being presented in a window. Next, the user can select another speech-enabled application with an input device, such as a mouse or keyboard. The user can also select another speech-enabled application by explicitly giving a spoken command to select that application (e.g., "switch to calendar"). Then, the user can provide speech input through the microphone to that application. For example, a user can use the mouse to select the window for a calendar application (or provide an explicit selection command for that application), which then pops to the foreground, obscuring the previously displayed foreground application, such as a word processing application. Then, the user can provide a speech utterance, such as commands or sentence fragments, to be entered to the calendar application. After speaking to the calendar application, the user can use an input device to select the window for another application, such as the word processing application, bring the window forward for that application and then commence providing a speech utterance for that application, and so on. Ross at 2:49-50:

Claim 13 of the '039 Patent	Exemplary Citations to Ross
	The message handler receives a representation of a spoken utterance. Ross at 2:50-54: The context manager receives the representations of the spoken utterance from the message handler and directs the representation of the spoken utterance to a selected speech enabled application based upon the evaluation of the contexts. Ross at 2:58-61: In another aspect of the invention, the context manager identifies each context based on a persistent grammar, a foreground grammar, or a background grammar for each speech enabled application. Ross at 3:45-48: The input spoken utterance 14 is a voice command or other speech input from a user of the computer system 10 (e.g., into a microphone connected to the computer system 10). Ross at 3:50-52: The output 16 is a command or other input based on the spoken utterance 14 directed to the speech enabled external application 26 (see. FIG. 2) selected by the conversation manager 28 based on the context 70. Ross at 5:28-33: Instead, the speech center 20 has a detailed model of what a user might say to a particular application 26, and how to respond. That knowledge is 30 provided individually on an application

Claim 13 of the '039 Patent	Exemplary Citations to Ross
	26 by application 26 basis, and is incorporated into the speech center through the application model interface 42. Ross at 5:34-43: The GUI manager 40 provides an interface to the speech center 20. Even though the speech center 20 operates primarily through a speech interface, there will still be some cases of graphical user interface interaction with the user. Recognition feedback, dictation correction, and preference setting are all cases where traditional GUI interface elements may be desirable. The GUI manager 40 abstracts the details of exactly how these services are implemented, and provides an abstract interface to the rest of the speech center 20. Ross at 5:43-48: The conversation manager 28 is the central component of the speech center 20 that integrates the information from all the other modules 30, 32, 34, 36, 38, 40, 42. In a preferred embodiment, the conversation manager 28 is not a separate component, but is the internals of the speech center 20. Ross at 5:65-6:3: FIG. 4 shows the components of the context manager 50 65 according to the present invention. The context manager 50 includes a context list 62. The context list includes contexts 70 (e.g., 70-1, 70-1, 70-3, etc.) for speech-enabled applications 26, which represent the grammars for the applications 26. Ross at 6:12-18: Recognition messages 68 from the speech engine interface 30 are tested by the context manager 50 against the active grammars in the context list 62 in priority order. When a successful match is found, the cor responding translation 74 is dispatched to the Script engine 38 for execution, and the priority of the matching grammar (i.e., selected context 72) is raised.

Claim 13 of the '039 Patent	Exemplary Citations to Ross
	Ross at 6:40-53: One grammar from each application 26 is active simultaneously, but since there will always be overlap between what the different application grammars will accept, the speech center 20 does not necessarily dispatch a command back to the application 26 whose grammar recognized it. Instead, when an utterance is recognized, it will be tested against each application's grammar to see if the grammar will accept it. The order of testing is based on a dynamic speech focus priority. The first application's gram mar which will accept the utterance is then used for trans lation, and the command dispatched to the corresponding application 26. The speech focus priority is established by maintaining an ordered list of applications (e.g., context list 62). Ross at 7:16-34: In step 106, if the message received in step 100 is determined to be a recognition message 68, the context manager 50 receives the recognition message 68 and selects a context 70 for a speech enabled application 26 by checking the speech representation against contexts 70, starting at top of context list 62 to determine the highest priority context 70 that can process the speech representation. For example, the context manager 50 uses the grammar associated with each context 70 to determine if the recognition message 68 is capable of being processed by that grammar In step 108, the context manager 50 directs the speech representation to be translated according to the selected context 72 and directs the translation to the script engine 38. In step 110, the context manager 50 sends the translated utterance 74 to the speech enabled application 26 indicated by the selected context 72 to perform the action indicated by the translated utterance 74. In step 112, the context manager 50 places the selected context 72 at the top of the context list 62. Ross at 7:46-54: The speech center 20 may also have a speech center context that stores native grammars that can be used in translating a recognition message 68. After the context manager 50 determines the context 70 to which the utterance contained in the recognition message 68 should be directed, the

Claim 13 of the '039 Patent	Exemplary Citations to Ross
	translation of the utterance is first tried using the native grammars stored by the speech center 20. Then a translation is tried using the one or more grammars indicated by the context 70 for that application 26. Ross at 8:37-45: If the sentence is "print it however, both grammars are capable of accepting the utterance. The context manager 50 therefore has to make a choice by referring to the context list 62 of applications in order of recency of access. The context manager 50 tests the utterance against these grammars (indicated by the contexts 70 in the context list 62) in priority order, and passes the commands on to the first application 26 that has a grammar that will accept the phrase. Ross at 9:7-9: Thus, the context manager 50 resolves the ambiguous phrase (e.g., "print this' or "print it') by looking in the context list 62 to determine the top priority context 70. To the extent it is found that Ross does not expressly disclose this limitation, the limitation is inherent. And to the extent it is found that Ross does not anticipate this claim, Ross renders it obvious, standing alone, in combination with the knowledge of a person of ordinary skill in the art, and/or in combination with one or more other prior art references identified in the Cover Pleading or herein, for the reasons identified herein or in the Cover Pleading. A person of ordinary skill in the art would have been motivated to combine Ross with any of the other prior art references identified in the Cover Pleading or herein with a reasonable expectation of success because each of these references contains familiar elements within the similar fields of endeavor to address similar known problems, according to known methods which would yield predictable results.
[i] obtaining content that is gathered by the selected domain agents; and	Ross discloses "obtaining content that is gathered by the selected domain agents[.]" *E.g.*, Ross at Abstract:

Claim 13 of the '039 Patent	Exemplary Citations to Ross
	A speech center coordinates speech services for a number of speech-enabled applications performing on a computer system. The speech center includes a conversation manager that manages conversations between a user and the speech-enabled applications. The conversation manager includes a context manager that maintains a context list of speech-enabled applications that the user has accessed. If the user speaks an utterance, the context manager determines which speech-enabled application should receive a translation of the utterance from the context list, such as by determining the most recently accessed application. Ross at 1:23-46: In particular a user may communicate through a microphone with a software application that displays output in a window on the display screen of the computer system. For example, a user can communicate with a word processing application to input text that is entered into a document file being presented in a window. Next, the user can select another speech-enabled application with an input device, such as a mouse or keyboard. The user can also select another speech-enabled application by explicitly giving a spoken command to select that application (e.g., "switch to calendar"). Then, the user can provide speech input through the microphone to that application. For example, a user can use the mouse to select the window for a calendar application (or provide an explicit selection command for that application), which then pops to the foreground, obscuring the previously displayed foreground application, such as a word processing application. Then, the user can provide a speech utterance, such as commands or sentence fragments, to be entered to the calendar application. After speaking to the calendar application, the user can use an input device to select the window for another application, such as the word processing application, bring the window forward for that application and then commence providing a speech utterance for that application, and so on. Ross at 2:49-50: The message handler receives a representation of a spoken utterance. Ross at 2:50-54:

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	The context manager receives the representations of the spoken utterance from the message handler and directs the representation of the spoken utterance to a selected speech enabled application based upon the evaluation of the contexts. Ross at 2:58-61: In another aspect of the invention, the context manager identifies each context based on a persistent grammar, a foreground grammar, or a background grammar for each speech enabled application. Ross at 3:45-48: The input spoken utterance 14 is a voice command or other speech input from a user of the computer system 10 (e.g., into a microphone connected to the computer system 10). Ross at 3:50-52: The output 16 is a command or other input based on the spoken utterance 14 directed to the speech enabled external application 26 (see. FIG. 2) selected by the conversation manager 28 based on the context 70. Ross at 5:28-33: Instead, the speech center 20 has a detailed model of what a user might say to a particular application 26, and how to respond. That knowledge is 30 provided individually on an application 26 by application 26 basis, and is incorporated into the speech center through the application model interface 42. Ross at 5:34-43:

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	The GUI manager 40 provides an interface to the speech center 20. Even though the speech center 20 operates primarily through a speech interface, there will still be some cases of graphical user interface interaction with the user. Recognition feedback, dictation correction, and preference setting are all cases where traditional GUI interface elements may be desirable. The GUI manager 40 abstracts the details of exactly how these services are implemented, and provides an abstract interface to the rest of the speech center 20. Ross at 5:43-48: The conversation manager 28 is the central component of the speech center 20 that integrates the information from all the other modules 30, 32, 34, 36, 38, 40, 42. In a preferred embodiment, the conversation manager 28 is not a separate component, but is the internals of the speech center 20. Ross at 5:65-6:3: FIG. 4 shows the components of the context manager 50 65 according to the present invention. The context manager 50 includes a context list 62. The context list includes contexts 70 (e.g., 70-1, 70-1, 70-3, etc.) for speech-enabled applications 26, which represent the grammars for the applications 26. Ross at 6:12-18: Recognition messages 68 from the speech engine interface 30 are tested by the context manager 50 against the active grammars in the context list 62 in priority order. When a successful match is found, the cor responding translation 74 is dispatched to the Script engine 38 for execution, and the priority of the matching grammar (i.e., selected context 72) is raised. Ross at 6:40-53: One grammar from each application 26 is active simultaneously, but since there will always be overlap between what the different application grammars will accept, the speech center 20 does

Claim 13 of the '039 Patent	Exemplary Citations to Ross
	not necessarily dispatch a command back to the application 26 whose grammar recognized it. Instead, when an utterance is recognized, it will be tested against each application's grammar to see if the grammar will accept it. The order of testing is based on a dynamic speech focus priority. The first application's gram mar which will accept the utterance is then used for trans lation, and the command dispatched to the corresponding application 26. The speech focus priority is established by maintaining an ordered list of applications (e.g., context list 62). Ross at 7:16-34: In step 106, if the message received in step 100 is determined to be a recognition message 68, the context manager 50 receives the recognition message 68 and selects a context 70 for a speech enabled application 26 by checking the speech representation against contexts 70, starting at top of context list 62 to determine the highest priority context 70 that can process the speech representation. For example, the context manager 50 uses the grammar associated with each context 70 to determine if the recognition message 68 is capable of being processed by that grammar In step 108, the context manager 50 directs the speech representation to be translated according to the selected context 72 and directs the translation to the script engine 38. In step 110, the context manager 50 sends the translated utterance 74 to the speech enabled application 26 indicated by the selected context 72 to perform the action indicated by the translated utterance 74. In step 112, the context manager 50 places the selected context 72 at the top of the context list 62. Ross at 7:46-54: The speech center 20 may also have a speech center context that stores native grammars that can be used in translating a recognition message 68. After the context manager 50 determines the context 70 to which the utterance contained in the recognition message 68 should be directed, the translation of the utterance is first tried using the native grammars stored by the speech center 20. Then a translation is tried using the one or more grammars indicated by the context 70 for that application 26. Ross at 8:37-45:

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	If the sentence is "print it however, both grammars are capable of accepting the utterance. The context manager 50 therefore has to make a choice by referring to the context list 62 of applications in order of recency of access. The context manager 50 tests the utterance against these grammars (indicated by the contexts 70 in the context list 62) in priority order, and passes the commands on to the first application 26 that has a grammar that will accept the phrase. Ross at 9:7-9: Thus, the context manager 50 resolves the ambiguous phrase (e.g., "print this' or "print it') by looking in the context list 62 to determine the top priority context 70. To the extent it is found that Ross does not expressly disclose this limitation, the limitation is inherent. And to the extent it is found that Ross does not anticipate this claim, Ross renders it obvious, standing alone, in combination with the knowledge of a person of ordinary skill in the art, and/or in combination with one or more other prior art references identified in the Cover Pleading or herein, for the reasons identified herein or in the Cover Pleading. A person of ordinary skill in the art would have been motivated to combine Ross with any of the other prior art references identified in the Cover Pleading or herein with a reasonable expectation of success because each of these references contains familiar elements within the similar fields of endeavor to address similar known problems, according to known methods which would yield predictable results.
[j] generating a response from the content, wherein the content is arranged in a selected order based on results from the relevance score.	Ross discloses "generating a response from the content, wherein the content is arranged in a selected order based on results from the relevance score[.]" *E.g.*, Ross at Abstract: A speech center coordinates speech services for a number of speech-enabled applications performing on a computer system. The speech center includes a conversation manager that manages conversations between a user and the speech-enabled applications. The conversation manager includes a context manager that maintains a context list of speech-enabled applications that the user has accessed. If the user speaks an utterance, the context manager determines which

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	speech-enabled application should receive a translation of the utterance from the context list, such as by determining the most recently accessed application. Ross at 1:23-46: In particular a user may communicate through a microphone with a software application that displays output in a window on the display screen of the computer system. For example, a user can communicate with a word processing application to input text that is entered into a document file being presented in a window. Next, the user can select another speech-enabled application with an input device, such as a mouse or keyboard. The user can also select another speech-enabled application by explicitly giving a spoken command to select that application (e.g., "switch to calendar"). Then, the user can provide speech input through the microphone to that application. For example, a user can use the mouse to select the window for a calendar application (or provide an explicit selection command for that application), which then pops to the foreground, obscuring the previously displayed foreground application, such as a word processing application. Then, the user can provide a speech utterance, such as commands or sentence fragments, to be entered to the calendar application. After speaking to the calendar application, the user can use an input device to select the window for another application, such as the word processing application, bring the window forward for that application and then commence providing a speech utterance for that application, and so on. Ross at 2:49-50: The message handler receives a representation of a spoken utterance. Ross at 2:50-54: The context manager receives the representations of the spoken utterance from the message handler and directs the representation of the spoken utterance to a selected speech enabled application based upon the evaluation of the contexts.

Claim 13 of the '039 Patent	Exemplary Citations to Ross
	Ross at 2:58-61: In another aspect of the invention, the context manager identifies each context based on a persistent grammar, a foreground grammar, or a background grammar for each speech enabled application. Ross at 3:45-48: The input spoken utterance 14 is a voice command or other speech input from a user of the computer system 10 (e.g., into a microphone connected to the computer system 10). Ross at 3:50-52: The output 16 is a command or other input based on the spoken utterance 14 directed to the speech enabled external application 26 (see. FIG. 2) selected by the conversation manager 28 based on the context 70. Ross at 5:28-33: Instead, the speech center 20 has a detailed model of what a user might say to a particular application 26, and how to respond. That knowledge is 30 provided individually on an application 26 by application 26 basis, and is incorporated into the speech center through the application model interface 42. Ross at 5:34-43: The GUI manager 40 provides an interface to the speech center 20. Even though the speech center 20 operates primarily through a speech interface, there will still be some cases of graphical user interface interaction with the user. Recognition feedback, dictation correction, and preference setting are all cases where traditional GUI interface elements may be desirable. The GUI manager

Claim 13 of the '039 Patent	Exemplary Citations to Ross
	40 abstracts the details of exactly how these services are implemented, and provides an abstract interface to the rest of the speech center 20. Ross at 5:43-48: The conversation manager 28 is the central component of the speech center 20 that integrates the information from all the other modules 30, 32, 34, 36, 38, 40, 42. In a preferred embodiment, the conversation manager 28 is not a separate component, but is the internals of the speech center 20. Ross at 5:65-6:3: FIG. 4 shows the components of the context manager 50 65 according to the present invention. The context manager 50 includes a context list 62. The context list includes contexts 70 (e.g., 70-1, 70-1, 70-3, etc.) for speech-enabled applications 26, which represent the grammars for the applications 26. Ross at 6:12-18: Recognition messages 68 from the speech engine interface 30 are tested by the context manager 50 against the active grammars in the context list 62 in priority order. When a successful match is found, the cor responding translation 74 is dispatched to the Script engine 38 for execution, and the priority of the matching grammar (i.e., selected context 72) is raised. Ross at 6:40-53: One grammar from each application 26 is active simultaneously, but since there will always be overlap between what the different application grammars will accept, the speech center 20 does not necessarily dispatch a command back to the application 26 whose grammar recognized it. Instead, when an utterance is recognized, it will be tested against each application's grammar to see if the grammar will accept it. The order of testing is based on a dynamic speech focus priority. The first application's gram mar which will accept the utterance is then used for trans lation, and

Claim 13 of the '039 Patent	Exemplary Citations to Ross
	the command dispatched to the corresponding application 26. The speech focus priority is established by maintaining an ordered list of applications (e.g., context list 62). Ross at 7:16-34: In step 106, if the message received in step 100 is determined to be a recognition message 68, the context manager 50 receives the recognition message 68 and selects a context 70 for a speech enabled application 26 by checking the speech representation against contexts 70, starting at top of context list 62 to determine the highest priority context 70 that can process the speech representation. For example, the context manager 50 uses the grammar associated with each context 70 to determine if the recognition message 68 is capable of being processed by that grammar In step 108, the context manager 50 directs the speech representation to be translated according to the selected context 72 and directs the translation to the script engine 38. In step 110, the context manager 50 sends the translated utterance 74 to the speech enabled application 26 indicated by the selected context 72 to perform the action indicated by the translated utterance 74. In step 112, the context manager 50 places the selected context 72 at the top of the context list 62. Ross at 7:46-54: The speech center 20 may also have a speech center context that stores native grammars that can be used in translating a recognition message 68. After the context manager 50 determines the context 70 to which the utterance contained in the recognition message 68 should be directed, the translation of the utterance is first tried using the native grammars stored by the speech center 20. Then a translation is tried using the one or more grammars indicated by the context 70 for that application 26. Ross at 8:37-45: If the sentence is "print it however, both grammars are capable of accepting the utterance. The context manager 50 therefore has to make a choice by referring to the context list 62 of applications in order of recency of access. The context manager 50 tests the utterance against these

Claim 13 of the '039 Patent	Exemplary Citations to Ross
	grammars (indicated by the contexts 70 in the context list 62) in priority order, and passes the commands on to the first application 26 that has a grammar that will accept the phrase. Ross at 9:7-9: Thus, the context manager 50 resolves the ambiguous phrase (e.g., "print this' or "print it') by looking in the context list 62 to determine the top priority context 70. To the extent it is found that Ross does not expressly disclose this limitation, the limitation is inherent. And to the extent it is found that Ross does not anticipate this claim, Ross renders it obvious, standing alone, in combination with the knowledge of a person of ordinary skill in the art, and/or in combination with one or more other prior art references identified in the Cover Pleading or herein, for the reasons identified herein or in the Cover Pleading. A person of ordinary skill in the art would have been motivated to combine Ross with any of the other prior art references identified in the Cover Pleading or herein with a reasonable expectation of success because each of these references contains familiar elements within the similar fields of endeavor to address similar known problems, according to known methods which would yield predictable results.

2. Claim 14

Claim 14 of the '039 Patent	Exemplary Citations to Ross
The method according to claim 13, further comprising generating an aggregate response that includes the content that is gathered by the selected domain agents.	Ross discloses "generating an aggregate response that includes the content that is gathered by the selected domain agents[.]" *E.g.*, Ross at Abstract: A speech center coordinates speech services for a number of speech-enabled applications performing on a computer system. The speech center includes a conversation manager that manages conversations between a user and the speech-enabled applications. The conversation manager includes a context manager that maintains a context list of speech-enabled applications

Claim 14 of the '039 Patent	Exemplary Citations to Ross
	that the user has accessed. If the user speaks an utterance, the context manager determines which speech-enabled application should receive a translation of the utterance from the context list, such as by determining the most recently accessed application. Ross at 1:23-46: In particular a user may communicate through a microphone with a software application that displays output in a window on the display screen of the computer system. For example, a user can communicate with a word processing application to input text that is entered into a document file being presented in a window. Next, the user can select another speech-enabled application with an input device, such as a mouse or keyboard. The user can also select another speech-enabled application by explicitly giving a spoken command to select that application (e.g., "switch to calendar"). Then, the user can provide speech input through the microphone to that application. For example, a user can use the mouse to select the window for a calendar application (or provide an explicit selection command for that application), which then pops to the foreground, obscuring the previously displayed foreground application, such as a word processing application. Then, the user can provide a speech utterance, such as commands or sentence fragments, to be entered to the calendar application. After speaking to the calendar application, the user can use an input device to select the window for another application, such as the word processing application, bring the window forward for that application and then commence providing a speech utterance for that application, and so on. Ross at 2:49-50: The message handler receives a representation of a spoken utterance. Ross at 2:50-54: The context manager receives the representations of the spoken utterance from the message handler and directs the representation of the spoken utterance to a selected speech enabled application based upon the evaluation of the contexts.

Claim 14 of the '039 Patent	Exemplary Citations to Ross
	Ross at 2:58-61: In another aspect of the invention, the context manager identifies each context based on a persistent grammar, a foreground grammar, or a background grammar for each speech enabled application. Ross at 3:45-48: The input spoken utterance 14 is a voice command or other speech input from a user of the computer system 10 (e.g., into a microphone connected to the computer system 10). Ross at 3:50-52: The output 16 is a command or other input based on the spoken utterance 14 directed to the speech enabled external application 26 (see. FIG. 2) selected by the conversation manager 28 based on the context 70. Ross at 5:28-33: Instead, the speech center 20 has a detailed model of what a user might say to a particular application 26, and how to respond. That knowledge is 30 provided individually on an application 26 by application 26 basis, and is incorporated into the speech center through the application model interface 42. Ross at 5:34-43: The GUI manager 40 provides an interface to the speech center 20. Even though the speech center 20 operates primarily through a speech interface, there will still be some cases of graphical user interface interaction with the user. Recognition feedback, dictation correction, and preference setting are all cases where traditional GUI interface elements may be desirable. The GUI manager

Claim 14 of the '039 Patent	Exemplary Citations to Ross
	40 abstracts the details of exactly how these services are implemented, and provides an abstract interface to the rest of the speech center 20. Ross at 5:43-48: The conversation manager 28 is the central component of the speech center 20 that integrates the information from all the other modules 30, 32, 34, 36, 38, 40, 42. In a preferred embodiment, the conversation manager 28 is not a separate component, but is the internals of the speech center 20. Ross at 5:65-6:3: FIG. 4 shows the components of the context manager 50 65 according to the present invention. The context manager 50 includes a context list 62. The context list includes contexts 70 (e.g., 70-1, 70-1, 70-3, etc.) for speech-enabled applications 26, which represent the grammars for the applications 26. Ross at 6:12-18: Recognition messages 68 from the speech engine interface 30 are tested by the context manager 50 against the active grammars in the context list 62 in priority order. When a successful match is found, the cor responding translation 74 is dispatched to the Script engine 38 for execution, and the priority of the matching grammar (i.e., selected context 72) is raised. Ross at 6:40-53: One grammar from each application 26 is active simultaneously, but since there will always be overlap between what the different application grammars will accept, the speech center 20 does not necessarily dispatch a command back to the application 26 whose grammar recognized it. Instead, when an utterance is recognized, it will be tested against each application's grammar to see if the grammar will accept it. The order of testing is based on a dynamic speech focus priority. The first application's gram mar which will accept the utterance is then used for trans lation, and

Claim 14 of the '039 Patent	Exemplary Citations to Ross
	the command dispatched to the corresponding application 26. The speech focus priority is established by maintaining an ordered list of applications (e.g., context list 62). Ross at 7:16-34: In step 106, if the message received in step 100 is determined to be a recognition message 68, the context manager 50 receives the recognition message 68 and selects a context 70 for a speech enabled application 26 by checking the speech representation against contexts 70, starting at top of context list 62 to determine the highest priority context 70 that can process the speech representation. For example, the context manager 50 uses the grammar associated with each context 70 to determine if the recognition message 68 is capable of being processed by that grammar In step 108, the context manager 50 directs the speech representation to be translated according to the selected context 72 and directs the translation to the script engine 38. In step 110, the context manager 50 sends the translated utterance 74 to the speech enabled application 26 indicated by the selected context 72 to perform the action indicated by the translated utterance 74. In step 112, the context manager 50 places the selected context 72 at the top of the context list 62. Ross at 7:46-54: The speech center 20 may also have a speech center context that stores native grammars that can be used in translating a recognition message 68. After the context manager 50 determines the context 70 to which the utterance contained in the recognition message 68 should be directed, the translation of the utterance is first tried using the native grammars stored by the speech center 20. Then a translation is tried using the one or more grammars indicated by the context 70 for that application 26. Ross at 8:37-45: If the sentence is "print it however, both grammars are capable of accepting the utterance. The context manager 50 therefore has to make a choice by referring to the context list 62 of applications in order of recency of access. The context manager 50 tests the utterance against these

Claim 14 of the '039 Patent	Exemplary Citations to Ross
	grammars (indicated by the contexts 70 in the context list 62) in priority order, and passes the commands on to the first application 26 that has a grammar that will accept the phrase. Ross at 9:7-9: Thus, the context manager 50 resolves the ambiguous phrase (e.g., "print this' or "print it') by looking in the context list 62 to determine the top priority context 70. To the extent it is found that Ross does not expressly disclose this limitation, the limitation is inherent. And to the extent it is found that Ross does not anticipate this claim, Ross renders it obvious, standing alone, in combination with the knowledge of a person of ordinary skill in the art, and/or in combination with one or more other prior art references identified in the Cover Pleading or herein, for the reasons identified herein or in the Cover Pleading. A person of ordinary skill in the art would have been motivated to combine Ross with any of the other prior art references identified in the Cover Pleading or herein with a reasonable expectation of success because each of these references contains familiar elements within the similar fields of endeavor to address similar known problems, according to known methods which would yield predictable results.

3. Claim 15

Claim 15 of the '039 Patent	Exemplary Citations to Ross
[a] The method according to claim 13, further comprising: receiving a follow-up speech and non-speech communications;	Ross discloses "receiving a follow-up speech and non-speech communications[.]" *E.g.*, Ross at Abstract: A speech center coordinates speech services for a number of speech-enabled applications performing on a computer system. The speech center includes a conversation manager that manages conversations between a user and the speech-enabled applications. The conversation manager includes a context manager that maintains a context list of speech-enabled applications that the user has accessed. If the user speaks an utterance, the context manager determines which

Claim 15 of the '039 Patent	Exemplary Citations to Ross
	speech-enabled application should receive a translation of the utterance from the context list, such as by determining the most recently accessed application. Ross at 1:23-46: In particular a user may communicate through a microphone with a software application that displays output in a window on the display screen of the computer system. For example, a user can communicate with a word processing application to input text that is entered into a document file being presented in a window. Next, the user can select another speech-enabled application with an input device, such as a mouse or keyboard. The user can also select another speech-enabled application by explicitly giving a spoken command to select that application (e.g., "switch to calendar"). Then, the user can provide speech input through the microphone to that application. For example, a user can use the mouse to select the window for a calendar application (or provide an explicit selection command for that application), which then pops to the foreground, obscuring the previously displayed foreground application, such as a word processing application. Then, the user can provide a speech utterance, such as commands or sentence fragments, to be entered to the calendar application. After speaking to the calendar application, the user can use an input device to select the window for another application, such as the word processing application, bring the window forward for that application and then commence providing a speech utterance for that application, and so on. Ross at 2:49-50: The message handler receives a representation of a spoken utterance. Ross at 2:50-54: The context manager receives the representations of the spoken utterance from the message handler and directs the representation of the spoken utterance to a selected speech enabled application based upon the evaluation of the contexts.

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	Ross at 2:58-61: In another aspect of the invention, the context manager identifies each context based on a persistent grammar, a foreground grammar, or a background grammar for each speech enabled application. Ross at 3:45-48: The input spoken utterance 14 is a voice command or other speech input from a user of the computer system 10 (e.g., into a microphone connected to the computer system 10). Ross at 3:50-52: The output 16 is a command or other input based on the spoken utterance 14 directed to the speech enabled external application 26 (see. FIG. 2) selected by the conversation manager 28 based on the context 70. Ross at 5:28-33: Instead, the speech center 20 has a detailed model of what a user might say to a particular application 26, and how to respond. That knowledge is 30 provided individually on an application 26 by application 26 basis, and is incorporated into the speech center through the application model interface 42. Ross at 5:34-43: The GUI manager 40 provides an interface to the speech center 20. Even though the speech center 20 operates primarily through a speech interface, there will still be some cases of graphical user interface interaction with the user. Recognition feedback, dictation correction, and preference setting are all cases where traditional GUI interface elements may be desirable. The GUI manager

Claim 15 of the '039 Patent	Exemplary Citations to Ross
	40 abstracts the details of exactly how these services are implemented, and provides an abstract interface to the rest of the speech center 20. Ross at 5:43-48: The conversation manager 28 is the central component of the speech center 20 that integrates the information from all the other modules 30, 32, 34, 36, 38, 40, 42. In a preferred embodiment, the conversation manager 28 is not a separate component, but is the internals of the speech center 20. Ross at 5:65-6:3: FIG. 4 shows the components of the context manager 50 65 according to the present invention. The context manager 50 includes a context list 62. The context list includes contexts 70 (e.g., 70-1, 70-1, 70-3, etc.) for speech-enabled applications 26, which represent the grammars for the applications 26. Ross at 6:12-18: Recognition messages 68 from the speech engine interface 30 are tested by the context manager 50 against the active grammars in the context list 62 in priority order. When a successful match is found, the cor responding translation 74 is dispatched to the Script engine 38 for execution, and the priority of the matching grammar (i.e., selected context 72) is raised. Ross at 6:40-53: One grammar from each application 26 is active simultaneously, but since there will always be overlap between what the different application grammars will accept, the speech center 20 does not necessarily dispatch a command back to the application 26 whose grammar recognized it. Instead, when an utterance is recognized, it will be tested against each application's grammar to see if the grammar will accept it. The order of testing is based on a dynamic speech focus priority. The first application's gram mar which will accept the utterance is then used for trans lation, and

Claim 15 of the '039 Patent	Exemplary Citations to Ross
	the command dispatched to the corresponding application 26. The speech focus priority is established by maintaining an ordered list of applications (e.g., context list 62). Ross at 7:16-34: In step 106, if the message received in step 100 is determined to be a recognition message 68, the context manager 50 receives the recognition message 68 and selects a context 70 for a speech enabled application 26 by checking the speech representation against contexts 70, starting at top of context list 62 to determine the highest priority context 70 that can process the speech representation. For example, the context manager 50 uses the grammar associated with each context 70 to determine if the recognition message 68 is capable of being processed by that grammar In step 108, the context manager 50 directs the speech representation to be translated according to the selected context 72 and directs the translation to the script engine 38. In step 110, the context manager 50 sends the translated utterance 74 to the speech enabled application 26 indicated by the selected context 72 to perform the action indicated by the translated utterance 74. In step 112, the context manager 50 places the selected context 72 at the top of the context list 62. Ross at 7:46-54: The speech center 20 may also have a speech center context that stores native grammars that can be used in translating a recognition message 68. After the context manager 50 determines the context 70 to which the utterance contained in the recognition message 68 should be directed, the translation of the utterance is first tried using the native grammars stored by the speech center 20. Then a translation is tried using the one or more grammars indicated by the context 70 for that application 26. Ross at 8:37-45: If the sentence is "print it however, both grammars are capable of accepting the utterance. The context manager 50 therefore has to make a choice by referring to the context list 62 of applications in order of recency of access. The context manager 50 tests the utterance against these

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	grammars (indicated by the contexts 70 in the context list 62) in priority order, and passes the commands on to the first application 26 that has a grammar that will accept the phrase. Ross at 9:7-9: Thus, the context manager 50 resolves the ambiguous phrase (e.g., "print this' or "print it') by looking in the context list 62 to determine the top priority context 70. To the extent it is found that Ross does not expressly disclose this limitation, the limitation is inherent. And to the extent it is found that Ross does not anticipate this claim, Ross renders it obvious, standing alone, in combination with the knowledge of a person of ordinary skill in the art, and/or in combination with one or more other prior art references identified in the Cover Pleading or herein, for the reasons identified herein or in the Cover Pleading. A person of ordinary skill in the art would have been motivated to combine Ross with any of the other prior art references identified in the Cover Pleading or herein with a reasonable expectation of success because each of these references contains familiar elements within the similar fields of endeavor to address similar known problems, according to known methods which would yield predictable results.
[b] transcribing the follow-up speech and non-speech communications to create a follow-up speech-based textual message and a follow-up non-speech-based textual message; and	Ross discloses "transcribing the follow-up speech and non-speech communications to create a follow-up speech-based textual message and a follow-up non-speech-based textual message[.]" *E.g.*, Ross at Abstract: A speech center coordinates speech services for a number of speech-enabled applications performing on a computer system. The speech center includes a conversation manager that manages conversations between a user and the speech-enabled applications. The conversation manager includes a context manager that maintains a context list of speech-enabled applications that the user has accessed. If the user speaks an utterance, the context manager determines which speech-enabled application should receive a translation of the utterance from the context list, such as by determining the most recently accessed application. Ross at 1:23-46:

Claim 15 of the '039 Patent	Exemplary Citations to Ross
	In particular a user may communicate through a microphone with a software application that displays output in a window on the display screen of the computer system. For example, a user can communicate with a word processing application to input text that is entered into a document file being presented in a window. Next, the user can select another speech-enabled application with an input device, such as a mouse or keyboard. The user can also select another speech-enabled application by explicitly giving a spoken command to select that application (e.g., "switch to calendar"). Then, the user can provide speech input through the microphone to that application. For example, a user can use the mouse to select the window for a calendar application (or provide an explicit selection command for that application), which then pops to the foreground, obscuring the previously displayed foreground application, such as a word processing application. Then, the user can provide a speech utterance, such as commands or sentence fragments, to be entered to the calendar application. After speaking to the calendar application, the user can use an input device to select the window for another application, such as the word processing application, bring the window forward for that application and then commence providing a speech utterance for that application, and so on. Ross at 2:49-50: The message handler receives a representation of a spoken utterance. Ross at 2:50-54: The context manager receives the representations of the spoken utterance from the message handler and directs the representation of the spoken utterance to a selected speech enabled application based upon the evaluation of the contexts. Ross at 2:58-61:

Claim 15 of the '039 Patent	Exemplary Citations to Ross
	In another aspect of the invention, the context manager identifies each context based on a persistent grammar, a foreground grammar, or a background grammar for each speech enabled application. Ross at 3:45-48: The input spoken utterance 14 is a voice command or other speech input from a user of the computer system 10 (e.g., into a microphone connected to the computer system 10). Ross at 3:50-52: The output 16 is a command or other input based on the spoken utterance 14 directed to the speech enabled external application 26 (see. FIG. 2) selected by the conversation manager 28 based on the context 70. Ross at 5:28-33: Instead, the speech center 20 has a detailed model of what a user might say to a particular application 26, and how to respond. That knowledge is 30 provided individually on an application 26 by application 26 basis, and is incorporated into the speech center through the application model interface 42. Ross at 5:34-43: The GUI manager 40 provides an interface to the speech center 20. Even though the speech center 20 operates primarily through a speech interface, there will still be some cases of graphical user interface interaction with the user. Recognition feedback, dictation correction, and preference setting are all cases where traditional GUI interface elements may be desirable. The GUI manager 40 abstracts the details of exactly how these services are implemented, and provides an abstract interface to the rest of the speech center 20.

Claim 15 of the '039 Patent	Exemplary Citations to Ross
	Ross at 5:43-48: The conversation manager 28 is the central component of the speech center 20 that integrates the information from all the other modules 30, 32, 34, 36, 38, 40, 42. In a preferred embodiment, the conversation manager 28 is not a separate component, but is the internals of the speech center 20. Ross at 5:65-6:3: FIG. 4 shows the components of the context manager 50 65 according to the present invention. The context manager 50 includes a context list 62. The context list includes contexts 70 (e.g., 70-1, 70-1, 70-3, etc.) for speech-enabled applications 26, which represent the grammars for the applications 26. Ross at 6:12-18: Recognition messages 68 from the speech engine interface 30 are tested by the context manager 50 against the active grammars in the context list 62 in priority order. When a successful match is found, the cor responding translation 74 is dispatched to the Script engine 38 for execution, and the priority of the matching grammar (i.e., selected context 72) is raised. Ross at 6:40-53: One grammar from each application 26 is active simultaneously, but since there will always be overlap between what the different application grammars will accept, the speech center 20 does not necessarily dispatch a command back to the application 26 whose grammar recognized it. Instead, when an utterance is recognized, it will be tested against each application's grammar to see if the grammar will accept it. The order of testing is based on a dynamic speech focus priority. The first application's gram mar which will accept the utterance is then used for trans lation, and the command dispatched to the corresponding application 26. The speech focus priority is established by maintaining an ordered list of applications (e.g., context list 62).

Claim 15 of the '039 Patent	Exemplary Citations to Ross
	Ross at 7:16-34: In step 106, if the message received in step 100 is determined to be a recognition message 68, the context manager 50 receives the recognition message 68 and selects a context 70 for a speech enabled application 26 by checking the speech representation against contexts 70, starting at top of context list 62 to determine the highest priority context 70 that can process the speech representation. For example, the context manager 50 uses the grammar associated with each context 70 to determine if the recognition message 68 is capable of being processed by that grammar In step 108, the context manager 50 directs the speech representation to be translated according to the selected context 72 and directs the translation to the script engine 38. In step 110, the context manager 50 sends the translated utterance 74 to the speech enabled application 26 indicated by the selected context 72 to perform the action indicated by the translated utterance 74. In step 112, the context manager 50 places the selected context 72 at the top of the context list 62. Ross at 7:46-54: The speech center 20 may also have a speech center context that stores native grammars that can be used in translating a recognition message 68. After the context manager 50 determines the context 70 to which the utterance contained in the recognition message 68 should be directed, the translation of the utterance is first tried using the native grammars stored by the speech center 20. Then a translation is tried using the one or more grammars indicated by the context 70 for that application 26. Ross at 8:37-45: If the sentence is "print it however, both grammars are capable of accepting the utterance. The context manager 50 therefore has to make a choice by referring to the context list 62 of applications in order of recency of access. The context manager 50 tests the utterance against these grammars (indicated by the contexts 70 in the context list 62) in priority order, and passes the commands on to the first application 26 that has a grammar that will accept the phrase.

Claim 15 of the '039 Patent	Exemplary Citations to Ross
	Ross at 9:7-9: Thus, the context manager 50 resolves the ambiguous phrase (e.g., "print this' or "print it') by looking in the context list 62 to determine the top priority context 70. To the extent it is found that Ross does not expressly disclose this limitation, the limitation is inherent. And to the extent it is found that Ross does not anticipate this claim, Ross renders it obvious, standing alone, in combination with the knowledge of a person of ordinary skill in the art, and/or in combination with one or more other prior art references identified in the Cover Pleading or herein, for the reasons identified herein or in the Cover Pleading. A person of ordinary skill in the art would have been motivated to combine Ross with any of the other prior art references identified in the Cover Pleading or herein with a reasonable expectation of success because each of these references contains familiar elements within the similar fields of endeavor to address similar known problems, according to known methods which would yield predictable results.
[c] merging the follow-up speech-based textual message and the follow-up non-speech-based textual message to generate a follow-up query.	Ross discloses "merging the follow-up speech-based textual message and the follow-up non-speech-based textual message to generate a follow-up query[.]" *E.g.*, Ross at Abstract: A speech center coordinates speech services for a number of speech-enabled applications performing on a computer system. The speech center includes a conversation manager that manages conversations between a user and the speech-enabled applications. The conversation manager includes a context manager that maintains a context list of speech-enabled applications that the user has accessed. If the user speaks an utterance, the context manager determines which speech-enabled application should receive a translation of the utterance from the context list, such as by determining the most recently accessed application. Ross at 1:23-46:

Claim 15 of the '039 Patent	Exemplary Citations to Ross
	In particular a user may communicate through a microphone with a software application that displays output in a window on the display screen of the computer system. For example, a user can communicate with a word processing application to input text that is entered into a document file being presented in a window. Next, the user can select another speech-enabled application with an input device, such as a mouse or keyboard. The user can also select another speech-enabled application by explicitly giving a spoken command to select that application (e.g., "switch to calendar"). Then, the user can provide speech input through the microphone to that application. For example, a user can use the mouse to select the window for a calendar application (or provide an explicit selection command for that application), which then pops to the foreground, obscuring the previously displayed foreground application, such as a word processing application. Then, the user can provide a speech utterance, such as commands or sentence fragments, to be entered to the calendar application. After speaking to the calendar application, the user can use an input device to select the window for another application, such as the word processing application, bring the window forward for that application and then commence providing a speech utterance for that application, and so on. Ross at 2:49-50: The message handler receives a representation of a spoken utterance. Ross at 2:50-54: The context manager receives the representations of the spoken utterance from the message handler and directs the representation of the spoken utterance to a selected speech enabled application based upon the evaluation of the contexts. Ross at 2:58-61: In another aspect of the invention, the context manager identifies each context based on a persistent grammar, a foreground grammar, or a background grammar for each speech enabled application.

Claim 15 of the '039 Patent	Exemplary Citations to Ross
	Ross at 3:45-48: The input spoken utterance 14 is a voice command or other speech input from a user of the computer system 10 (e.g., into a microphone connected to the computer system 10). Ross at 3:50-52: The output 16 is a command or other input based on the spoken utterance 14 directed to the speech enabled external application 26 (see. FIG. 2) selected by the conversation manager 28 based on the context 70. Ross at 5:28-33: Instead, the speech center 20 has a detailed model of what a user might say to a particular application 26, and how to respond. That knowledge is 30 provided individually on an application 26 by application 26 basis, and is incorporated into the speech center through the application model interface 42. Ross at 5:34-43: The GUI manager 40 provides an interface to the speech center 20. Even though the speech center 20 operates primarily through a speech interface, there will still be some cases of graphical user interface interaction with the user. Recognition feedback, dictation correction, and preference setting are all cases where traditional GUI interface elements may be desirable. The GUI manager 40 abstracts the details of exactly how these services are implemented, and provides an abstract interface to the rest of the speech center 20. Ross at 5:43-48:

Claim 15 of the '039 Patent	Exemplary Citations to Ross
	The conversation manager 28 is the central component of the speech center 20 that integrates the information from all the other modules 30, 32, 34, 36, 38, 40, 42. In a preferred embodiment, the conversation manager 28 is not a separate component, but is the internals of the speech center 20. Ross at 5:65-6:3: FIG. 4 shows the components of the context manager 50 65 according to the present invention. The context manager 50 includes a context list 62. The context list includes contexts 70 (e.g., 70-1, 70-1, 70-3, etc.) for speech-enabled applications 26, which represent the grammars for the applications 26. Ross at 6:12-18: Recognition messages 68 from the speech engine interface 30 are tested by the context manager 50 against the active grammars in the context list 62 in priority order. When a successful match is found, the cor responding translation 74 is dispatched to the Script engine 38 for execution, and the priority of the matching grammar (i.e., selected context 72) is raised. Ross at 6:40-53: One grammar from each application 26 is active simultaneously, but since there will always be overlap between what the different application grammars will accept, the speech center 20 does not necessarily dispatch a command back to the application 26 whose grammar recognized it. Instead, when an utterance is recognized, it will be tested against each application's grammar to see if the grammar will accept it. The order of testing is based on a dynamic speech focus priority. The first application's gram mar which will accept the utterance is then used for trans lation, and the command dispatched to the corresponding application 26. The speech focus priority is established by maintaining an ordered list of applications (e.g., context list 62). Ross at 7:16-34:

Claim 15 of the '039 Patent	Exemplary Citations to Ross
	In step 106, if the message received in step 100 is determined to be a recognition message 68, the context manager 50 receives the recognition message 68 and selects a context 70 for a speech enabled application 26 by checking the speech representation against contexts 70, starting at top of context list 62 to determine the highest priority context 70 that can process the speech representation. For example, the context manager 50 uses the grammar associated with each context 70 to determine if the recognition message 68 is capable of being processed by that grammar In step 108, the context manager 50 directs the speech representation to be translated according to the selected context 72 and directs the translation to the script engine 38. In step 110, the context manager 50 sends the translated utterance 74 to the speech enabled application 26 indicated by the selected context 72 to perform the action indicated by the translated utterance 74. In step 112, the context manager 50 places the selected context 72 at the top of the context list 62. Ross at 7:46-54: The speech center 20 may also have a speech center context that stores native grammars that can be used in translating a recognition message 68. After the context manager 50 determines the context 70 to which the utterance contained in the recognition message 68 should be directed, the translation of the utterance is first tried using the native grammars stored by the speech center 20. Then a translation is tried using the one or more grammars indicated by the context 70 for that application 26. Ross at 8:37-45: If the sentence is "print it however, both grammars are capable of accepting the utterance. The context manager 50 therefore has to make a choice by referring to the context list 62 of applications in order of recency of access. The context manager 50 tests the utterance against these grammars (indicated by the contexts 70 in the context list 62) in priority order, and passes the commands on to the first application 26 that has a grammar that will accept the phrase. Ross at 9:7-9:

Claim 15 of the '039 Patent	Exemplary Citations to Ross
	Thus, the context manager 50 resolves the ambiguous phrase (e.g., "print this' or "print it') by looking in the context list 62 to determine the top priority context 70. To the extent it is found that Ross does not expressly disclose this limitation, the limitation is inherent. And to the extent it is found that Ross does not anticipate this claim, Ross renders it obvious, standing alone, in combination with the knowledge of a person of ordinary skill in the art, and/or in combination with one or more other prior art references identified in the Cover Pleading or herein, for the reasons identified herein or in the Cover Pleading. A person of ordinary skill in the art would have been motivated to combine Ross with any of the other prior art references identified in the Cover Pleading or herein with a reasonable expectation of success because each of these references contains familiar elements within the similar fields of endeavor to address similar known problems, according to known methods which would yield predictable results.

4. Claim 17

Claim 17 of the '039 Patent	Exemplary Citations to Ross
The method according to claim 13, further comprising generating a context stack that includes one or more contexts that are selected based on the query.	Ross discloses "generating a context stack that includes one or more contexts that are selected based on the query[.]" *E.g.*, Ross at Abstract: A speech center coordinates speech services for a number of speech-enabled applications performing on a computer system. The speech center includes a conversation manager that manages conversations between a user and the speech-enabled applications. The conversation manager includes a context manager that maintains a context list of speech-enabled applications that the user has accessed. If the user speaks an utterance, the context manager determines which speech-enabled application should receive a translation of the utterance from the context list, such as by determining the most recently accessed application. Ross at 1:23-46:

Claim 17 of the '039 Patent	Exemplary Citations to Ross
	In particular a user may communicate through a microphone with a software application that displays output in a window on the display screen of the computer system. For example, a user can communicate with a word processing application to input text that is entered into a document file being presented in a window. Next, the user can select another speech-enabled application with an input device, such as a mouse or keyboard. The user can also select another speech-enabled application by explicitly giving a spoken command to select that application (e.g., "switch to calendar"). Then, the user can provide speech input through the microphone to that application. For example, a user can use the mouse to select the window for a calendar application (or provide an explicit selection command for that application), which then pops to the foreground, obscuring the previously displayed foreground application, such as a word processing application. Then, the user can provide a speech utterance, such as commands or sentence fragments, to be entered to the calendar application. After speaking to the calendar application, the user can use an input device to select the window for another application, such as the word processing application, bring the window forward for that application and then commence providing a speech utterance for that application, and so on. Ross at 2:49-50: The message handler receives a representation of a spoken utterance. Ross at 2:50-54: The context manager receives the representations of the spoken utterance from the message handler and directs the representation of the spoken utterance to a selected speech enabled application based upon the evaluation of the contexts. Ross at 2:58-61:

Claim 17 of the '039 Patent	Exemplary Citations to Ross
	In another aspect of the invention, the context manager identifies each context based on a persistent grammar, a foreground grammar, or a background grammar for each speech enabled application. Ross at 3:45-48: The input spoken utterance 14 is a voice command or other speech input from a user of the computer system 10 (e.g., into a microphone connected to the computer system 10). Ross at 3:50-52: The output 16 is a command or other input based on the spoken utterance 14 directed to the speech enabled external application 26 (see. FIG. 2) selected by the conversation manager 28 based on the context 70. Ross at 5:28-33: Instead, the speech center 20 has a detailed model of what a user might say to a particular application 26, and how to respond. That knowledge is 30 provided individually on an application 26 by application 26 basis, and is incorporated into the speech center through the application model interface 42. Ross at 5:34-43: The GUI manager 40 provides an interface to the speech center 20. Even though the speech center 20 operates primarily through a speech interface, there will still be some cases of graphical user interface interaction with the user. Recognition feedback, dictation correction, and preference setting are all cases where traditional GUI interface elements may be desirable. The GUI manager 40 abstracts the details of exactly how these services are implemented, and provides an abstract interface to the rest of the speech center 20.

Claim 17 of the '039 Patent	Exemplary Citations to Ross
	Ross at 5:43-48: The conversation manager 28 is the central component of the speech center 20 that integrates the information from all the other modules 30, 32, 34, 36, 38, 40, 42. In a preferred embodiment, the conversation manager 28 is not a separate component, but is the internals of the speech center 20. Ross at 5:65-6:3: FIG. 4 shows the components of the context manager 50 65 according to the present invention. The context manager 50 includes a context list 62. The context list includes contexts 70 (e.g., 70-1, 70-1, 70-3, etc.) for speech-enabled applications 26, which represent the grammars for the applications 26. Ross at 6:12-18: Recognition messages 68 from the speech engine interface 30 are tested by the context manager 50 against the active grammars in the context list 62 in priority order. When a successful match is found, the cor responding translation 74 is dispatched to the Script engine 38 for execution, and the priority of the matching grammar (i.e., selected context 72) is raised. Ross at 6:40-53: One grammar from each application 26 is active simultaneously, but since there will always be overlap between what the different application grammars will accept, the speech center 20 does not necessarily dispatch a command back to the application 26 whose grammar recognized it. Instead, when an utterance is recognized, it will be tested against each application's grammar to see if the grammar will accept it. The order of testing is based on a dynamic speech focus priority. The first application's gram mar which will accept the utterance is then used for trans lation, and the command dispatched to the corresponding application 26. The speech focus priority is established by maintaining an ordered list of applications (e.g., context list 62).

Claim 17 of the '039 Patent	Exemplary Citations to Ross
	Ross at 7:16-34: In step 106, if the message received in step 100 is determined to be a recognition message 68, the context manager 50 receives the recognition message 68 and selects a context 70 for a speech enabled application 26 by checking the speech representation against contexts 70, starting at top of context list 62 to determine the highest priority context 70 that can process the speech representation. For example, the context manager 50 uses the grammar associated with each context 70 to determine if the recognition message 68 is capable of being processed by that grammar In step 108, the context manager 50 directs the speech representation to be translated according to the selected context 72 and directs the translation to the script engine 38. In step 110, the context manager 50 sends the translated utterance 74 to the speech enabled application 26 indicated by the selected context 72 to perform the action indicated by the translated utterance 74. In step 112, the context manager 50 places the selected context 72 at the top of the context list 62. Ross at 7:46-54: The speech center 20 may also have a speech center context that stores native grammars that can be used in translating a recognition message 68. After the context manager 50 determines the context 70 to which the utterance contained in the recognition message 68 should be directed, the translation of the utterance is first tried using the native grammars stored by the speech center 20. Then a translation is tried using the one or more grammars indicated by the context 70 for that application 26. Ross at 8:37-45: If the sentence is "print it however, both grammars are capable of accepting the utterance. The context manager 50 therefore has to make a choice by referring to the context list 62 of applications in order of recency of access. The context manager 50 tests the utterance against these grammars (indicated by the contexts 70 in the context list 62) in priority order, and passes the commands on to the first application 26 that has a grammar that will accept the phrase.

Claim 17 of the '039 Patent	Exemplary Citations to Ross
	Ross at 9:7-9: Thus, the context manager 50 resolves the ambiguous phrase (e.g., "print this' or "print it') by looking in the context list 62 to determine the top priority context 70. To the extent it is found that Ross does not expressly disclose this limitation, the limitation is inherent. And to the extent it is found that Ross does not anticipate this claim, Ross renders it obvious, standing alone, in combination with the knowledge of a person of ordinary skill in the art, and/or in combination with one or more other prior art references identified in the Cover Pleading or herein, for the reasons identified herein or in the Cover Pleading. A person of ordinary skill in the art would have been motivated to combine Ross with any of the other prior art references identified in the Cover Pleading or herein with a reasonable expectation of success because each of these references contains familiar elements within the similar fields of endeavor to address similar known problems, according to known methods which would yield predictable results.

5. Claim 18

Claim 18 of the '039 Patent	Exemplary Citations to Ross
The method according to claim 17, wherein the one or more contexts are generated based on applying prior probabilities or fuzzy possibilities to (i) keyword matching, (ii) user profiles, (iii) a dialog history, or any combination of (i) to (iii).	Ross discloses "wherein the one or more contexts are generated based on applying prior probabilities or fuzzy possibilities to (i) keyword matching, (ii) user profiles, (iii) a dialog history, or any combination of (i) to (iii)[.]" *E.g.*, Ross at Abstract: A speech center coordinates speech services for a number of speech-enabled applications performing on a computer system. The speech center includes a conversation manager that manages conversations between a user and the speech-enabled applications. The conversation manager includes a context manager that maintains a context list of speech-enabled applications that the user has accessed. If the user speaks an utterance, the context manager determines which

Claim 18 of the '039 Patent	Exemplary Citations to Ross
	speech-enabled application should receive a translation of the utterance from the context list, such as by determining the most recently accessed application. Ross at 1:23-46: In particular a user may communicate through a microphone with a software application that displays output in a window on the display screen of the computer system. For example, a user can communicate with a word processing application to input text that is entered into a document file being presented in a window. Next, the user can select another speech-enabled application with an input device, such as a mouse or keyboard. The user can also select another speech-enabled application by explicitly giving a spoken command to select that application (e.g., "switch to calendar"). Then, the user can provide speech input through the microphone to that application. For example, a user can use the mouse to select the window for a calendar application (or provide an explicit selection command for that application), which then pops to the foreground, obscuring the previously displayed foreground application, such as a word processing application. Then, the user can provide a speech utterance, such as commands or sentence fragments, to be entered to the calendar application. After speaking to the calendar application, the user can use an input device to select the window for another application, such as the word processing application, bring the window forward for that application and then commence providing a speech utterance for that application, and so on. Ross at 2:49-50: The message handler receives a representation of a spoken utterance. Ross at 2:50-54: The context manager receives the representations of the spoken utterance from the message handler and directs the representation of the spoken utterance to a selected speech enabled application based upon the evaluation of the contexts.

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	Ross at 2:58-61: In another aspect of the invention, the context manager identifies each context based on a persistent grammar, a foreground grammar, or a background grammar for each speech enabled application. Ross at 3:45-48: The input spoken utterance 14 is a voice command or other speech input from a user of the computer system 10 (e.g., into a microphone connected to the computer system 10). Ross at 3:50-52: The output 16 is a command or other input based on the spoken utterance 14 directed to the speech enabled external application 26 (see. FIG. 2) selected by the conversation manager 28 based on the context 70. Ross at 5:28-33: Instead, the speech center 20 has a detailed model of what a user might say to a particular application 26, and how to respond. That knowledge is 30 provided individually on an application 26 by application 26 basis, and is incorporated into the speech center through the application model interface 42. Ross at 5:34-43: The GUI manager 40 provides an interface to the speech center 20. Even though the speech center 20 operates primarily through a speech interface, there will still be some cases of graphical user interface interaction with the user. Recognition feedback, dictation correction, and preference setting are all cases where traditional GUI interface elements may be desirable. The GUI manager

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	40 abstracts the details of exactly how these services are implemented, and provides an abstract interface to the rest of the speech center 20. Ross at 5:43-48: The conversation manager 28 is the central component of the speech center 20 that integrates the information from all the other modules 30, 32, 34, 36, 38, 40, 42. In a preferred embodiment, the conversation manager 28 is not a separate component, but is the internals of the speech center 20. Ross at 5:65-6:3: FIG. 4 shows the components of the context manager 50 65 according to the present invention. The context manager 50 includes a context list 62. The context list includes contexts 70 (e.g., 70-1, 70-1, 70-3, etc.) for speech-enabled applications 26, which represent the grammars for the applications 26. Ross at 6:12-18: Recognition messages 68 from the speech engine interface 30 are tested by the context manager 50 against the active grammars in the context list 62 in priority order. When a successful match is found, the cor responding translation 74 is dispatched to the Script engine 38 for execution, and the priority of the matching grammar (i.e., selected context 72) is raised. Ross at 6:40-53: One grammar from each application 26 is active simultaneously, but since there will always be overlap between what the different application grammars will accept, the speech center 20 does not necessarily dispatch a command back to the application 26 whose grammar recognized it. Instead, when an utterance is recognized, it will be tested against each application's grammar to see if the grammar will accept it. The order of testing is based on a dynamic speech focus priority. The first application's gram mar which will accept the utterance is then used for trans lation, and

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	the command dispatched to the corresponding application 26. The speech focus priority is established by maintaining an ordered list of applications (e.g., context list 62). Ross at 7:16-34: In step 106, if the message received in step 100 is determined to be a recognition message 68, the context manager 50 receives the recognition message 68 and selects a context 70 for a speech enabled application 26 by checking the speech representation against contexts 70, starting at top of context list 62 to determine the highest priority context 70 that can process the speech representation. For example, the context manager 50 uses the grammar associated with each context 70 to determine if the recognition message 68 is capable of being processed by that grammar In step 108, the context manager 50 directs the speech representation to be translated according to the selected context 72 and directs the translation to the script engine 38. In step 110, the context manager 50 sends the translated utterance 74 to the speech enabled application 26 indicated by the selected context 72 to perform the action indicated by the translated utterance 74. In step 112, the context manager 50 places the selected context 72 at the top of the context list 62. Ross at 7:46-54: The speech center 20 may also have a speech center context that stores native grammars that can be used in translating a recognition message 68. After the context manager 50 determines the context 70 to which the utterance contained in the recognition message 68 should be directed, the translation of the utterance is first tried using the native grammars stored by the speech center 20. Then a translation is tried using the one or more grammars indicated by the context 70 for that application 26. Ross at 8:37-45: If the sentence is "print it however, both grammars are capable of accepting the utterance. The context manager 50 therefore has to make a choice by referring to the context list 62 of applications in order of recency of access. The context manager 50 tests the utterance against these

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	grammars (indicated by the contexts 70 in the context list 62) in priority order, and passes the commands on to the first application 26 that has a grammar that will accept the phrase. Ross at 9:7-9: Thus, the context manager 50 resolves the ambiguous phrase (e.g., "print this' or "print it') by looking in the context list 62 to determine the top priority context 70. To the extent it is found that Ross does not expressly disclose this limitation, the limitation is inherent. And to the extent it is found that Ross does not anticipate this claim, Ross renders it obvious, standing alone, in combination with the knowledge of a person of ordinary skill in the art, and/or in combination with one or more other prior art references identified in the Cover Pleading or herein, for the reasons identified herein or in the Cover Pleading. A person of ordinary skill in the art would have been motivated to combine Ross with any of the other prior art references identified in the Cover Pleading or herein with a reasonable expectation of success because each of these references contains familiar elements within the similar fields of endeavor to address similar known problems, according to known methods which would yield predictable results.