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Rocky Mountain Patent LLC c/o Hall Estill 1600 Stout Street, Suite 500 Denver, CO 80202			EXAMINER JACKSON, JAKIEDA R	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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DETAILED ACTION

Notice of Pre-AIA or AIA Status

The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

Response to Amendment

In response to the Office Action mailed November 21, 2008, applicant submitted an amendment filed on February 23, 2008, in which the applicant traversed and requested reconsideration.

Response to Arguments

Applicants argue that the prior art cited fails to teach the claims as amended. With regards to claims 1-10, the arguments are persuasive, but are moot in view of new grounds of rejection. With regards to remaining claims, the rejection has been withdrawn.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim(s) 1 and 9 is/are rejected under 35 U.S.C. 103 as being unpatentable over Negreiro (USPN 7,110,963) in view of Berg et al. (PGPUB 2017/0109843), hereinafter referenced as Berg.

Regarding **claim 1**, Negreiro discloses a method of comprising the steps of:

- providing an audio stream of customer ordering transactions (figure 11, element 507 with dialog to place order; column 3, line 39 – column 4, line 65 with column 6, lines 1-41);
- slicing the audio stream into short clips (parsing stream; column 5, lines 25-50);
- transcribing the short clips into text using a transcription unit (figure 5, element 227 and column 3, line 39 – column 4, line 65);
- adding metadata tags to the transcribed text using the transcription unit (codes; column 3, line 39 – column 4, line 65);
- training a speech-to-text system by populating the artificially intelligent order processing system with the transcribed text having the metadata tags (training data; column 3, line 39 – column 4, line 65), but does not specifically teach recognizing an identity of a customer with a business processor, correlating the identity of the customer with at least one past order with the business processor and querying the customer with an order addition based on the at least one past order as directed by the business processor.

Berg discloses a method comprising:

- recognizing an identity of a customer with a business processor (paragraphs 0009, 0148-0149);

correlating the identity of the customer with at least one past order with the business processor (paragraph 0097); and

querying the customer with an order addition based on the at least one past order as directed by the business processor (paragraph 0097), to customize a user's experience.

Therefore, it would have been obvious to one of ordinary skill of the art to modify the method as described above, to allow a convenient and easy ordering processing method.

Regarding **claim 9**, Negreiro discloses a method wherein the audio stream used for text transcription is a stream from a customer accessible microphone to a base station (figure 3 with column 3, lines 4-38 and column 6, lines 1-41).

Claim 2 is/are rejected under 35 U.S.C. 103 as being unpatentable over Negreiro in view of Berg and in further view of Breilig et al (9,646,286), hereinafter referenced as Breilig.

Regarding **claim 2**, Negreiro and Berg disclose a method as described above, but does not specifically teach wherein the transcription unit is a crowd source platform.

Breilig discloses a method wherein the transcription unit is a crowd source platform (column 7, lines 9-35), to identify product profile.

Therefore, it would have been obvious to one of ordinary skill of the art to modify the method as described above, to provide new and useful data to automating ordering processing.

Claim 3 is/are rejected under 35 U.S.C. 103 as being unpatentable over Negreiro in view of Berg and in further view of Sankaranarayanan (USPN 8,879,242).

Regarding **claim 3**, Negreiro and Berg disclose a method as described above, but does not specifically teach wherein the metadata tags provide data regarding tone or inflection that would be lost in a traditional speech-to-text conversion.

Sankaranarayanan discloses a method wherein the metadata tags provide data regarding tone or inflection that would be lost in a traditional speech-to-text conversion (column 4, lines 19-50), to allow synthesis.

Therefore, it would have been obvious to one of ordinary skill of the art to modify the method as described above, to mark the customer interaction for classification and analysis.

Claim 3 is *alternately* rejected under 35 U.S.C. 103 as being unpatentable over Negreiro in view of Berg and in further view of Erbey et al. (PGPUB 2012/0317038), hereinafter referenced as Erbey.

Regarding **claim 3**, Negreiro in view of Berg disclose a method as described above, but does not specifically teach wherein the metadata tags provide data regarding tone or inflection that would be lost in a traditional speech-to-text conversion.

Erbey discloses a method wherein the metadata tags provide data regarding tone or inflection that would be lost in a traditional speech-to-text conversion (paragraph 0011), to receive desired outcome based on real-time changes.

Therefore, it would have been obvious to one of ordinary skill of the art to modify the method as described above, to output data that reflects changes and sounds natural.

Claim 4 is/are rejected under 35 U.S.C. 103 as being unpatentable over Negreiro in view of Berg and in further view of Tsao (USPN 9,239,987).

Regarding **claim 4**, Negreiro in view of Berg disclose a method as described above, but does not specifically teach a method wherein the speech-to-text system employs a deep neural network.

Tsao discloses a method wherein the speech-to-text system employs a deep neural network (column 7, lines 53-67), to help estimate likelihoods.

Therefore, it would have been obvious to one of ordinary skill of the art to modify the method as described above, to assist with predictive modeling.

Claim 5 is/are rejected under 35 U.S.C. 103 as being unpatentable over Negreiro in view of Berg and in further view of Szabo (USPN 7,184,438).

Regarding **claim 5**, Negreiro of Berg disclose a method further comprising the steps of:

identifying a word or phrase in the text (keywords; figures 5 and 7) using the speech-to-text processor (speech to text; column 3, lines 51 – column 4, line 65), but

does not specifically teach providing meaning for the identified word or phrase using a natural language processor.

Szabo discloses a method providing meaning for the identified word or phrase using a natural language processor (column 72, line 63 – column 73, line 57), to provide an intelligent system for providing definitions.

Therefore, it would have been obvious to one of ordinary skill of the art to modify the method as described above, for clarity.

Regarding **claim 6**, Negreiro discloses a method further comprising the step of generating an order with a business processor using the identified word or phrase from the natural language processor (naturally ordering; column 3, line 39 – column 4, line 65).

Claims 7 and 8 is/are rejected under 35 U.S.C. 103 as being unpatentable over Negreiro in view Berg and Szabo and in further view of Sankaranarayanan,

Regarding **claim 7**, it is interpreted and rejected for similar reasons as set forth in the combination of claims 3 and 5. In addition, Sankaranarayanan discloses a method wherein the natural language processor is configured to trigger an alert when a warning condition is encountered (column 4, lines 19-50).

Regarding **claim 8**, it is interpreted and rejected for similar reasons as set forth in the combination of claims 3 and 5. In addition, Sankaranarayanan discloses a method wherein the warning condition is a word or phrase indicative of customer dissatisfaction or confusion (column 4, lines 19-50).

Claim 10 is/are rejected under 35 U.S.C. 103 as being unpatentable over Negreiro in view of Berg and in further view of Kim (PGPUB 2018/0277107).

Regarding **claim 10**, Negreiro in view of Berg disclose a method as described above, but does not specifically teach a method further comprising the step of decreasing the strength of the audio stream prior to transmission to the transcription unit.

Kim discloses a method further comprising the step of decreasing the strength of the audio stream prior to transmission to the transcription unit (paragraph 0060), to enhance speech recognition.

Therefore, it would have been obvious to one of ordinary skill of the art to modify the method as described above, to modify audio transition.

Allowable Subject Matter

Claims 11-17 and 19-22 are allowed.

The following is a statement of reasons for allowance:

As for independent claims 11 and 17, they recite a method for artificially intelligent order processing. Prior art of record discloses a similar method, but fails to teach the claims in combination with switching the order processor from an autonomous mode to an auditor-assist mode in response to the comparison of the audio stream with the generated order alerting an auditor of detected exceptions in the order, wherein the auditor is located off-site and connected to the order processor via a data connection, deactivating the order processor with the auditor in response to the

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detected exceptions in the order and prompting an on-site employee to engage the customer and complete the order.

Dependent claims 12-16 and 19-22 are allowed because they further limit their parent claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. This information has been detailed in the PTO 892 attached (Notice of References Cited).

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAKIEDA R JACKSON whose telephone number is (571)272-7619. The examiner can normally be reached on Mon - Fri 6:30a-2:30p.

Examiner interviews are available via telephone, in-person, and video conferencing using a USPTO supplied web-based collaboration tool. To schedule an interview, applicant is encouraged to use the USPTO Automated Interview Request (AIR) at <http://www.uspto.gov/interviewpractice>.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Washburn can be reached on 571.272.5551. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JAKIEDA R JACKSON/
Primary Examiner, Art Unit 2657