

EXHIBIT 7



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RAJIV P. PATEL
FENWICK & WEST LLP
801 California Street
Mountain View, CA 94041

EX PARTE REEXAMINATION COMMUNICATION TRANSMITTAL FORM

REEXAMINATION CONTROL NO. 90/009,155.

PATENT NO. 6411947.

ART UNIT 3992.

Enclosed is a copy of the latest communication from the United States Patent and Trademark Office in the above identified *ex parte* reexamination proceeding (37 CFR 1.550(f)).

Where this copy is supplied after the reply by requester, 37 CFR 1.535, or the time for filing a reply has passed, no submission on behalf of the *ex parte* reexamination requester will be acknowledged or considered (37 CFR 1.550(g)).

Office Action in Ex Parte Reexamination	Control No. 90/009,155	Patent Under Reexamination 6411947	
	Examiner MARY STEELMAN	Art Unit 3992	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

- a Responsive to the communication(s) filed on 08/12/09, 10/06/09 . b This action is made FINAL.
c A statement under 37 CFR 1.530 has not been received from the patent owner.

A shortened statutory period for response to this action is set to expire 2 month(s) from the mailing date of this letter. Failure to respond within the period for response will result in termination of the proceeding and issuance of an *ex parte* reexamination certificate in accordance with this action. 37 CFR 1.550(d). **EXTENSIONS OF TIME ARE GOVERNED BY 37 CFR 1.550(c)**. If the period for response specified above is less than thirty (30) days, a response within the statutory minimum of thirty (30) days will be considered timely.

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

1. Notice of References Cited by Examiner, PTO-892. 3. Interview Summary, PTO-474.
2. Information Disclosure Statement, PTO/SB/08. 4. _____.

Part II SUMMARY OF ACTION

- 1a. Claims 1-68 are subject to reexamination.
1b. Claims _____ are not subject to reexamination.
2. Claims _____ have been canceled in the present reexamination proceeding.
3. Claims 9, 10, 14, 33, 50, 51, 57-61 and 66 are patentable and/or confirmed.
4. Claims 1-8, 11-13, 15-32, 34-49, 52-56, 62-65, and 67-68 are rejected.
5. Claims _____ are objected to.
6. The drawings, filed on _____ are acceptable.
7. The proposed drawing correction, filed on _____ has been (7a) approved (7b) disapproved.
8. Acknowledgment is made of the priority claim under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some* c) None of the certified copies have
1 been received.
2 not been received.
3 been filed in Application No. _____ .
4 been filed in reexamination Control No. _____ .
5 been received by the International Bureau in PCT application No. _____ .
* See the attached detailed Office action for a list of the certified copies not received.
9. Since the proceeding appears to be in condition for issuance of an *ex parte* reexamination certificate except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte* Quayle, 1935 C.D. 11, 453 O.G. 213.
10. Other: _____

cc: Requester (if third party requester)

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DETAILED ACTION

This Office Action is in response to Amendments and Remarks received 08/12/2009. Per Patent Owner's request, claims 22, 52, and 53 are amended. Patent Owner has proposed to add new claims 67 and 68. New claims 67 and 68 have been entered. Claims 1-68 of USPN 6,411,947 B2 to Rice et al. are subject to reexamination. Claims 9, 10, 14, 33, 50, 51, 57-61, and 66 are confirmed. The Non Final Office Action 06/13/2009 is hereby withdrawn. A new Non Final Office Action is hereby issued to clarify rejections, using the same prior art.

Prior Art Cited

The references discussed herein are as follows:

USPN 5,581,664 to Allen et al. (file date 05/23/1994, issue date 12/03/1996, priority date 03/04/1991)

USPN 4,829,576 to Porter. (file date 10/21/1986, issue date 05/09/1989)

USPN 5,377,354 to Scannell et al. (file date 06/08/1993, issue date 12/27/1994, priority date 08/13/1990)

USPN 5,283,887 to Zachery (file date 12/19/1990, issue date 02/01/1994)

EP 0586954 A2 to Inglehart (file date 08/20/1993, issue date 03/16/1994)

Prior Art Rejections

Pertinent discussions found in the claim chart (Exhibit A, 05/21/2008) and the Request (05/21/2008) are hereby incorporated by reference.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4, 11-13, 15, 22-24, 26, 28-30, 34-36, 38-45, 52-55, 62-64, and 67-68 are rejected under 35 U.S.C. 102(e) as being anticipated by USPN 5,581,664 to Allen et al.

Per claim 1:

A method for automatically processing a non-interactive electronic message using a computer, comprising the steps of:

Allen discloses a processor and stored program (2: 36-48) that processes a retrieved description of facts of a particular situation (2: 60) (electronic message). When processing by automated reasoning system (Abstract) results in a high match quality of the message, the method is not interactive. The application does not require that the message content be supplemented (non-interactive). Supplemental “inter-active” information is not required. This is consistent with the term “non-interactive” as given in the ‘947 Specification, 4: 61-65.

(a) receiving the electronic message from a source;

As defined in Specification '947 4: 10-13, "It is preferred that the electronic messages 11 are E-mail messages and are so referred to herein, it being understood, however, that other types of electronic messages 11 are contemplated as being within the scope of the invention." The broadest reasonable interpretation for the term "electronic messages", in light of the Specification includes "other types of electronic messages" which reads on Allen 3: 59-65, "...user 119 may enter data relating to the problem...by means of the user interface 118." See Fig. 2, which is representative of processing a non-interactive electronic message. See Fig. 6, Application 601 receiving electronic message from "source" shown as computer used by Representative 602);

**(b) interpreting the electronic message using a rule base and case base knowledge engine;
and**

(Allen, 1: 58-62), "case based reasoning system...integrated into a rule based reasoning system, thus coordinating...in a unified automated reasoning system." See Allen 2: 61-63, "...execute a software inference engine 111 for reasoning using the case base 104 and rule base 102...(interpreting the electronic message)" See Fig. 2 and 3: 66-67, "In a case-matching step 202, the inference engine 111 attempts to match (interpreting) the problem to one or more cases 105..."

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(c) classifying the electronic message as at least one of (i) being able to be responded to automatically; and (ii) requiring assistance from a human operator.

(Allen, 3: 66 – 4: 15, 9: 20-29), "In the case-matching step 202, the application 601 may attempt to match the customer problem 605 to one or more cases in the case base 104 using just the description 606 of the customer problem 605. If the match quality 315 of the case 105 which are matched is high, the application 601 may perform the best-case step 203 and following steps.

The action 309 which the application 601 performs is to provide an advice message 607 to the customer service representative 602, who may then provide advice to the customer 604.

(classifying electronic message – able to be responded to automatically). Figure 2 shows no interactivity if "high match quality" is achieved at step 202 (classify as being able to be responded to automatically). This is followed by the best case step, note action step 205, and do action step 206.

It may occur that cases 105 which are matched all have a low match quality 315. (Allen, 9: 30-50) (i.e. classification step requires assistance from human operator in the form of retrieving additional matching attribute value pairs). (Allen, 2: 11-16), "An aspect of the invention also includes a technique in which the processor may be set to work with a limited case base, and may solicit human advice (forward to human operator) for treatment of new problems which are not already well treated by the case base (when classification step indicates that response needs assistance from a human operator)."

As per claim 2:

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(d) retrieving one or more predetermined responses from a repository for automatic delivery to the source when the classification step indicates that the electronic message can be responded to automatically.

When there is a high quality match, Allen discloses at Fig. 6, #607 (advice message / retrieving response), for delivery to computer (source) at Representative #602. The Representative's computer reads on the limitation "the source." This is consistent with Patent Owner's definition of "source" provided at Request, p. 7-8.

As per claim 3:

(d) retrieving one or more predetermined responses from a repository, the predetermined responses being proposed for delivery to the source;

Allen, 3: 66-4:12, 9: 17-29, "In the case- matching step 202, the application 601 may attempt to match the customer problem 605 to one or more cases in the case base 104 using just the description 606 (electronic message) of the customer problem 605. If the match quality 315 of the case 105 which are matched is high, the application 601 may perform the best-case step 203 (evaluate the cases) and following steps (step 4- determine the best case, determine if correct action to perform / propose for delivery to source). The action 309 which the application 601 performs is to provide an advice message 607 to the customer service representative 602 (retrieve advice message, propose for delivery to the source computer at customer service representative)..."

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(e) forwarding the electronic message and the predetermined response to the human operator when the classification step indicates that a response to the electronic message requires assistance from a human operator;

(Allen, 9: 30-50), "it may occur that cases 105 which are matched all have a low match quality 315 (classification step indicates...assistance from a human operator). The application 601 may collect a set of question-answer pairs 608 from the cases 105 which are matched... The application 601 may perform the case-matching step 202 with the question-answer pairs 608 as additional attribute-value pairs 303 to match. (i.e. classification step requires assistance from human operator in the form of retrieving additional matching attribute value pairs). See Allen, 2: 11-16, "An aspect of the invention also includes a technique in which the processor may be set to work with a limited case base, and may solicit human advice (forward to human operator) for treatment of new problems which are not already well treated by the case base (when classification step indicates that response needs assistance from a human operator)." Allen, 10: 32-35), "An action panel 616 may present...information relating to actions 309 (predetermined response). Thus the user 119 (human operator) may ...alter old actions 309 (predetermined response, forwarding the electronic message and predetermined response to the human operator) Allen, 3: 29-31, "...the user interface 118 may be used either for development of cases 105, rules 103, or procedural structures 117..."

(f) delivering the predetermined response to the source when the human operator deems the response appropriate.

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(Allen, 9: 26-29), The action 309 which the application 601 performs is to provide an advice message 607 to the customer service representative 602 (deliver to source computer at customer service representative 602, see Fig. 6)..."

As per claim 4:

(c1) further categorizing the electronic message into at least one of a plurality of sub-categories based on subject matter content of the electronic message.

Allen fairly teaches (7: 8-18) "categorizing the electronic message into...sub-categories based on subject matter content (categories & sub categories: inferential reasoning, inference engine, by means of: case based reasoning system, rule based reasoning system)..." See Fig. 3A. Problem (electronic message) is categorized into templates noting attribute-value pairs. The attribute field is analogous to a category / sub category. As an example, (Allen, 4: 40-45) "loan amount", "approved", "payment history" (based on subject matter) categories / sub categories. See Fig. 1, #107, relevant problem data, comprised of a set of data records #108. (Allen, 7: 8-18), "the inference engine 111 for the case-based reasoning system 101 may be implemented within a rule-based reasoning system 501, such as the ARM-IT rule-based reasoning system, manufactured by Inference Corporation of El Segundo, Calif. In the rule-based reasoning system 501, rules 103 may be matched against software objects 112, including a set of facts 502, cases 105 and the case template 312, and may perform procedural actions on them. Software objects 112 may comprise data elements and relations to other software objects 112, as is well known in the art." Rules sub-categorize the subject matters.

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Per claim 11:

(c) classifying the electronic message as at least one of (i) being able to be responded to automatically; (ii) requiring a first level of assistance from a human operator; and (iii) requiring a second level of assistance from a human operator.

Note that claim 11 requires only “at least one of” the given limitations. Electronic message is either classified into “high match quality” or “low match quality” (including “no” match level) (Allen, 9: 17-41). High match quality (Allen, Fig. 3A, match table) results are directed to “best case step 203 and Note-Action step 205” (Allen, Fig. 2) (classified as “being able to be responded to automatically), where response to electronic message is delivered automatically (Allen, Abstract). (Allen, 9: 21-50), “In the case-matching step 202, the application 601 may attempt to match the customer problem 605 to one or more cases in the case base 104 using just the description 606 of the customer problem 605. If the match quality 315 of the case105 which are matched is high...The action 309 which the application 601 performs is to provide an advice message 607 (responded to automatically)...However, it may occur that cases 105 which are matched all have a low match quality 315. The application 601 may collect a set of question-answer pairs 608 from the cases 105 which are matched. The application 601 may present a set of questions 609 from the question-answer pairs 608 to the customer service representative 602, who would provide a set of answers 610 to the application 601 (typically by asking the customer 604). The application 601 may perform the case-matching step 202 with the question-answer pairs 608 as additional attribute-value pairs 303 to match. In a preferred embodiment, weights may be assigned to the description'606 and to each question-answer pair 608 (first level of assistance, low match quality). If no 'best' case 204 can be matched even with the question-

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answer pairs 608, the application 601 may create a new case 105 which copies the case template 312 and ask the customer service representative 602 for the advice message 607 to include with the case 105 (no best case matched, requiring second level of assistance from human operator)..."

Per claim 12:

when the classification step indicates that the electronic message requires a first level of assistance from a human operator, the method further comprises the steps of: (d) retrieving one or more predetermined responses from a repository, the predetermined responses being proposed for delivery to the source (e) forwarding the electronic message and the predetermined response to the human operator (f) delivering the predetermined response to the source when the human operator deems the response appropriate.

Note that when the limitation "at least one of" of claim 11 involves only step (i), claim 12 would not be enabled. Alternatively, when the classification step (e.g., cases with low match quality) indicates that the electronic message requires a first level of assistance from a human operator the application retrieves a proposed response from a repository, stored as cases 105. (Allen, 9:30-41), "The application 601 may collect a set of question-answer pairs 608...present a set of questions 609 from the question-answer pairs 608 to the customer service representative 602 (human operator). The additional attribute-value pairs 303 are used in the case matching step 202 (retrieving predetermined responses from repository, proposed for delivery to source) through step 206 (delivery). (Allen, Abstract), "...processor...may solicit human advice (human operator deems response appropriate) for treatment of new problems which are not already well

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treated by the case base.” (Allen, 8: 24-28), “The inference engine 111...may ask the user 119 (i.e. customer service representative 602) what the prescribed action 309 for the case 105 should be (forwarding the electronic message and the predetermined response to the human operator, human operator deems response appropriate).” (Allen, 9: 44-46), “The inference engine 111 may create a new template 312...a new case 105 which partly or fully copies the case template 312 (forwarding electronic message and predetermined response to the human operator) and may ask...” (Allen, Fig. 3A, problem 311 / problem template 312, attribute-value pairs mapped to case action / response) (ask the customer service representative 602 for the advice message 607 to include with the case 105, human operator deems response appropriate).”

(Allen, 7:24-35), Predetermined responses are retrieved from repository; where the prescribed action 309 may be the ACTION attribute 301. Its value 302 may be a text string describing the action 309 (predetermined response). The text string is proposed for delivery to the source (Allen, Fig. 6, computer at Representative 602). (Allen, Fig. 2, Note-Action Step 205, New-Case Step 207, Do-Action Step 206 & Fig. 6, 4: 24-27), Advice message 607 is delivered to user (representative 602) via source (computer at representative 602). (Allen, 10: 32-35), “An action panel 616 may present...information relating to actions 309 (predetermined response). Thus the user 119 (human operator) may ...alter old actions 309 (predetermined response, forwarding the electronic message and predetermined response to the human operator). See rejection of limitations addressed in claim 3 above.

Per claim 13:

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when the classification step indicates that the electronic message requires a second level of assistance from a human operator, the method further comprises the steps of: (d) retrieving one or more predetermined remarks from a remarks repository to assist the human operator in processing the electronic message manually (e) forwarding the electronic message to the human operator.

Note that when the limitation "at least one of" of claim 11 involves only step (i), claim 13 would not be enabled. See retrieving and forwarding steps addressed in the rejection of claims 11 & 12 above. When relying on step (iii) of claim 11 and the classification step requires a second level of assistance from a human operator (e.g., cases where no 'best' case can be matched), an example of a second level of assistance from a human operator (Allen, 5: 24-26, 5: 33-35) is alterations to weights assigned to each attribute value pair 303 or the quality threshold 317 and the sized of the match table 314 by the user. (Allen, 9: 30-41), "Additionally, preferred embodiment, weights may be assigned to the description 606 and to each question-answer pair 608." Another alternative example of a second level of assistance from a human operator, (Allen, 8: 19-30) when no case is a good match for the case template, the interface engine may ask the user 119 what the prescribed action 309 for the case 105 should be. A "remarks repository" is analogous to the value 302 for the ACTION attribute 301 prescribes the action 309. (Allen, 7:31-32), "Its value 302 may be a text string describing the action 309..." The human operator / user may process the electronic message manually by entering responses to the questions. The electronic message is forwarded to the customer representative 602 via the source computer, as shown in Fig. 6.

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Per claim 15:

further discloses the electronic message is received over an electronic data communications channel.

See Allen, Fig. 6, Representative 602 enters electronic message at source computer which is received by application 601 via electronic data communications channel (depicted as dotted line). Receipt of the electronic message may be enabled by a user interface 118 or panel 611.

Per claim 22:

the predetermined response is altered in accordance with the interpretation of the electronic message before delivery to the source.

Claim language is amended. (Allen, 1: 62-2:2), "In addition to matching a problem template to a case base (interpretation of electronic message), an automated processor may proceed by inferential reasoning on the facts of the problem and the cases by means of rule based reasoning techniques (or based on procedural directives supplied by a human programmer). Thus, the processor may select the case which is the best match for the problem, but may act differently (response is altered) from the precise action prescribed for that case." (Allen, 8: 54-60), "In the note-action step 205, should the inference engine 111 determine that the action 309 (predetermined response) for the "best" case 204 is incorrect (e.g., by techniques noted herein) it may determine that the case 105 is no longer a good exemplar case 105 and may remove it from the case base 104." The processor may alter the predetermined response before it is delivered to the source computer.

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Regarding claim 23:**wherein the electronic message includes fixed data.**

It is noted that the '947 Specification provides a definition for fixed data electronic messages at 11: 58-64: "electronic messages 11 which contain data in a predetermined arrangement...may have the message content...in predetermined positions in the message."

As an example of fixed data in the electronic message, (Allen, 4: 31-51) case 105 may comprise a set of attributes 301, each of which has a value 302: "...attribute 301 such as "loan amount" (fixed data)...attribute 301 such as "approved"(fixed data)...attribute 301 such as "payment history (fixed data)." (data in a predetermined arrangement) (Allen, 3: 59- 4: 3), The inference engine 111 retrieves a description of the facts of a particular situation / problem and attempts to match the problem to one or more cases 105. The user may complete an on screen form (fixed data). (Allen, 5: 3-6), "To match a problem 311 to the cases 105 in the case base 104, a case template 312 may be constructed for the problem 311 with attribute-value pairs 303 which correspond to notable parameters of the problem 311 (electronic message includes fixed data / notable parameters)."

(Allen, 8: 7-9), "Facts about the problem (variable or fixed data in electronic message) 311 may be gleaned from the user 119 by means of the user interface 118 and recorded in the case template 312." (Allen, 9: 50-55), "Each display panel 611 may request information from the user 119, typically with a form to be completed (data input in a predetermined arrangement,

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message content in predetermined positions / fixed data). Each panel 611 may comprise data fields which the user 119 may write.”

Per claim 24:

the electronic message includes variable data.

It is noted that the '947 Specification provides a definition for fixed data electronic messages at 11: 67 – 12: 3: “may have message content in any arrangement.”

As an example (Allen, 4B, 6: 22-52), see string matching, word matching and character matching. Text string value 302 is broken up into separate words (a variable arrangement of words or characters in a string). (Allen, 9: 19-21), “The application 601 may retrieve a text string description (data in variable arrangement, message content in any arrangement) 606 of the customer problem 605.”

Per claim 26:

(a) receiving the electronic message from a source; (b) interpreting the electronic message using a rule base and case base knowledge engine; and (c) retrieving one or more predetermined responses corresponding to the interpretation of the electronic message from a repository for automatic delivery to the source.

(Allen, Abstract), “A case-based reasoning system which is smoothly integrated into a rule-based reasoning system...automated processor may proceed by inferential reasoning on the facts of the problem and the cases by means of rule based reasoning techniques or based on procedural

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directives...(interpreting the electronic message)” See Allen, Figs. 1, 2, & 6, application 601 receives the electronic message from computer for representative 602 (source). Predetermined responses are retrieved, corresponding to the interpretation of the electronic message, from a repository. The best matching case prescribes an action (predetermined response) to be taken. The action (or advice message 607) is retrieved from a repository for automatic delivery to the source (computer at customer representative). Limitations are similar to claims 1 & 2 which are addressed above.

Per claim 28:

See rejection of claim limitations as noted in the rejection of claims 1 & 2 above.

Per claim 29:

(b1) producing a case model of the electronic message including a set of predetermined attributes for identifying specific features of the electronic message; (b2) detecting at least one of text, combinations of text, and patterns of text of the electronic message using character matching; (b3) flagging the attributes of the case model which are detected in the electronic message; and (b4) classifying the electronic-message as at least one of (i) being able to be responded to automatically; and (ii) requiring assistance from a human operator, the classification being performed in accordance with the flagged attributes.

(Allen, 5: 3-11), “a case template 312 (case model) may be constructed for the problem 311...”

Allen evaluates a text string (detecting text, combinations of text, patterns of text), noting (Allen, 6: 24-26) “an attribute 301 with a text string value 302 may be matched by string matching, word

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matching and character matching (flagging the attributes of the case model which are detected in the electronic message, i.e., flag a separate word or separate trigram, substring of length three of character and match to case).” Regarding the claim limitation related to “classifying”, see limitations addressed in claim 1 and 11 above. Also note that "classifying" only requires "at least one of" the (i) or (ii) given options. If the classifying requires assistance from a human operator (due to low match quality 315), the flagged attributes derived from a text string would be evaluated. See limitations addressed in rejections of claims 3 & 11 above.

Per claim 30:

(b1) producing a case model of the electronic message including (i) a set of attributes for identifying specific features of the electronic message; and (ii) message text; (b2) detecting at least one of text, combinations of text, and patterns of text of the electronic message using character matching; (b3) flagging the attributes of the case model which are detected in the electronic message; (b4) comparing the flagged attributes of the case model with stored attributes of stored case models of the case base; (b5) comparing the text of the case model with stored text of the stored case models of the case base; and (b6) assigning a score to each stored case model which is compared with the case model, the score increasing when at least one of the attributes and the text match the stored case model and the score not increasing when at least one of the attributes and the text do not match the stored case model.

Limitations b1, b2, and b3 are rejected similarly in claim 29 above. Allen flags the text string, word or character trigram (the attributes) detected in the electronic message. Allen (6: 29-60)

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discloses word matching, character matching, string matching. The attributes are assigned weights (comparing the flagged attributes of the case model with stored attributes of stored case models of the case base), and the evaluation (comparing the text of the case model with stored text of the stored case models of the case base) of the text string match may be determined by a weighted sum (score increases with positive weight match) of the evaluation 316 for each type of match. Also see Allen 5: 22, “weighted sum of an evaluation 316” (assigning a score, score increases with match). See Fig. 4A. The score will not increase when at least one of the attributes and the text do not match the stored case model because clearly (Allen, 5: 22-23) the inference engine 111 may determine no match quality 315 and, inherently, a “no match weight” will not increase a weighted sum (no match – score sum will not increase).

Per claim 34:

See rejection of limitations addressed in claim 1 above. Note that limitation requires only one of the (i) or (ii) limitations. (Allen, 9: 17-41), If the match quality 315 of the case 105 which are matched is high, the application 601 may perform the best-case classification of the stored case model having a highest score step 203 and following steps. The action 309 which the application 601 performs is to provide an advice message 607... (able to be responded automatically). The (ii) limitation is disclosed by Allen (low match quality) (Allen, 9: 30-31) with assistance from a human operator who provides additional information via question answer pairs.

Per claim 35:

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See rejection of limitations addressed in the rejection of claims 1 & 2 above. Advice message is delivered to computer (source) at customer service representative 602.

Per claims 36, 38, 43:

the predetermined response is altered in accordance with the interpretation of the electronic message before delivery to the source.

See limitation addressed in rejection of claim 22 above.

Per claims 39 & 40 and 52 & 53, as related to “fixed data” and “variable data.”

See limitations addressed in rejection of claims 23 & 24 respectively above.

Per claim 41:

For a message resulting in a high match quality, the method is not interactive. The application does not require that the message content be supplemented (non-interactive). Supplemental “inter-active” information is not required. See Allen, Fig. 2, electronic messages are transmitted / received over a communication channel (between customer representative source computer to application 601). Allen discloses an “inbox storage device” at 2: 45-60 and 3: 36-39. (Allen, 1: 58-66), “The invention provides a case-based reasoning system which is smoothly integrated into a rule based reasoning system, thus coordinating case based reasoning techniques and rule based reasoning techniques in a unified automated reasoning system (knowledge engine). In addition to matching a problem templated to a case base (plurality of stored cases), an automated processor may proceed by inferential reasoning on the facts of the problem and the cases by

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means of rule based reasoning techniques (or based on procedural directives)...” Allen further discloses software (2:61-3:8 and 3: 36-48) to carry out the functions of the system. (Allen, 3:59-61), “In a description step 201, the inference engine (a pre-processor for receiving) 111 retrieves a description of the facts of a particular situation (the “problem”). The inference engine “attempts to match the problem” and “attempts to evaluate...and determine a best case 204 to match the problem (searching & classifying). See “classifying” discussion above. (Allen, 8:7-11), “Facts about the problem 311 (electronic message content) may be...recorded in the case template 312 (storing incoming electronic messages). The case template 312 (problem template 312 shown in Figs. 3A & 3B) may be matched against the case base 104...with a feature matching procedure 505 (search for best match, classify match quality).” A high quality match is responded to automatically. A “low” or “no” match may require assistance from a human operator. See rejection of claims 1-3 and 11 above.

Per claim 42:

“...a repository of predetermined responses...for automatic delivery to the source...”

Allen discloses a repository of predetermined responses (#309, an action prescribed for each case). (Allen, 9: 10-11), “advice to respond with may be stored as cases 105” (Allen, 9: 26-29), “The action 309 which the application 601 performs is to provide an advice message 607 to the customer service representative 602 (via automatic delivery to computer source)...

Regarding claim 44:

Limitations are analogous to claim 3 above. See rejection of limitations addressed in claim 3.

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Regarding claims 45 & 55:

the classifier categorizes the electronic message into at least one of a plurality of sub-categories based on subject matter content of the electronic message.

Limitations are analogous to claim 4 above. See rejection of limitations addressed in claim 4.

Regarding claim 54, limitations are addressed in the rejection of claims 1-3 above.

Regarding claims 62-63, see response to analogous claim limitations addressed at claims 29-30 respectively.

Regarding new claim 67, by Patent Owner's admission, the limitations are similar to claim 1, with support found in the '947 Specification at 4: 3-7. Claim 67 is rejected for the same reasons as claim 1 above.

Regarding new claim 68, by Patent Owner's admission, the limitations are similar to claim 26, with support found in the '947 Specification at 4: 3-7. Claim 68 is rejected for the same reasons as claim 26 above (and analogous to the limitations of claims 1 and 2).

Claim Rejections - 35 USC § 103

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

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5, 27, 31, 32, 46, 56, 64, and 65 are rejected under 35 U.S.C. 103(a) as obvious over USPN 5,581,664 to Allen et al.

Per claims 5, 46, and 56:

sub-categories include product service subject matter and product sales subject matter.

Allen discloses categories / sub-categories as attributes (Allen, 3: 15, "attribute inheritance", infers sub-attributes). Allen discloses an example of a product service subject matter, related to loans (product service subject matter). (Allen, 4: 41-44), "...attributes may be particular to the application field, and values 302 may have data types which vary from one attribute 301 to another...in a case-based reasoning system 101 for loan approval, each case 105 might have an attribute 301 such as 'loan amount' which would have a numeric value 302, an attribute 301 such as 'approved' which would have a boolean value 302, and an attribute 301 such as 'payment history' which would have a value 302 which is a list or array structure." Allen teaches (8:62 – 9: 16) an automated 'help desk' application that advises customers. "Attributes 301 of the cases 105 may include features (product service features / product sales features) of the customer problems 605." Allen discloses (9: 63-66) an example panel 611 that presents and/or requests graphical information, such as an electronic circuit diagram or an exploded view of an automobile (product sales subject matter). Allen is suggestive that electronic messages include a broad range of subject matters (product service, product sales), with the related portions of the

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electronic messages processed as attributes and assigned values. It would be obvious for an automated 'help desk' application that assists in giving advice to customers, via electronic messages, to have attribute sub-categories that include product service subject matter and product sales subject matter, considering that entities that have "customers" are generally providing services or products..

Per claim 27:

wherein the source of the electronic message is not predetermined.

(Allen, Fig. 6, source computer at Representative 602 & related text at 8: 62-9: 50), "Fig. 6 shows an example case-based reasoning system 101 for providing user help on call-in complaints." It would be obvious for more than one "customer service personnel" 602 to each be available for inputting a consumer problem 605 at "more than one" source computer. Allen suggests a "call management system", which infers efficiency for a plurality of calls processed by the automated help desk application 601. When multiple electronic messages regarding consumer problems are input into multiple source computers by multiple representatives, the "source of the electronic message is not predetermined." An expanded reasoning network is obvious.

Allen fails to explicitly disclose:

Claims 31 & 64:

when at least one of the attributes and the text match the stored case model, the score is increased by a predetermined match weight; and when at least one of the attributes and the

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text does not match the stored case model, the score is decreased by a predetermined mismatch weight.”

Allen is suggestive of the claim limitations. (Allen, 5: 15-26), “...the inference engine 111 may determine match quality 315 (score) for each case 105 in the match table 314 by a weighted sum of an evaluation 316 (sum a positive or negative value) of those attribute-value pairs 303 which are matched...”, “...the weights assigned to each attribute-value pair 303 (attributes and text match) may be predetermined and may be altered by the user 119 (user assigned or altered / predetermined mismatch weight).” Obviously the match quality (score) may increase or decrease according to whether the weight is assigned a positive or negative value.

Per claims 32 and 65:

It is noted that Allen does not explicitly disclose the match weight has an absolute value greater than zero and the mismatch weight is zero, however, since Allen teaches assigning weights to represent match quality, it would have been obvious to one of ordinary skill to assign a range of number, including zero, for the purpose of representing degree match or mismatch. As for claim 65, the claim limitation is analogous to claim 32 and is similarly rejected.

Claims 6-8, 16, 17, 25, 37, and 47-49 are rejected under 35 U.S.C. 102(3) as obvious over USPN 5,581,664 to Allen et al. in view of USPN 5,377,354 to Scannell et al.

Allen failed to explicitly disclose:

Claim 6:

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prioritizing the sub-categorized electronic message into at least one of a plurality of priorities based on the subject matter content of the electronic message wherein a higher priority indicates that the human operator should process the associated electronic message before processing lower prioritized electronic messages.

Allen does disclose case based reasoning, rule based reasoning, and inference engine techniques in the processing of classifications and categories of data to find a solution. Allen also discloses that the processor may solicit human advice. (Abstract, prioritize electronic messages into those that need human assistance) (Allen, 2: 13-15), "...may solicit human advice for treatment of new problems which are not already well-treated by the case base." It would be obvious to rely on a human operator to assist in processing features / attributes of an associated electronic message that are not well understood by the processor (a higher priority, based on subject matter content that is not well understood), before additional electronic message attributes that are well understood by the system (lower prioritized) are processed by the system, to provide an optimal response to a source.

Scannell provides further explicit support. Scannell discloses (Abstract) prioritizing a plurality of incoming electronic mail messages. "By applying the user created rules for deciding which messages constitute the priority messages for the user, a priority assigning unit (45) within an action portion (35B) of the rules-store (12) assigns a priority number..."

Allen and Scannell are analogous art, both directed towards processing electronic mail using rules to enable the automation. Allen suggests (Abstract) the use of a human operator for

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treatment of problems which are not already well treated. It was known at the time to use the logic of expert systems to (Scannell, 2: 29-31) provide “an improved automatic message sorting and processing system, driven by user created and modified rules, specifically for electronic mail.” It would have been obvious to combine Allen and Scannell. One of ordinary skill in the art would have recognized the predictable results of such a combination. The combination of Allen and Scannell predictably enables the rule-based / case matching system of Allen to classify and prioritize messages using additional rules of Scannell. In this combination, Scannell is used for its standard purpose of classifying and prioritizing messages using rules. The combination of Allen and Scannell results in prioritizing (as taught by Scannell) the sub-categorized electronic messages (Allen teaches sub-categories. See claim 4. Scannell teaches sub-categories according to keywords), based on subject matter content (Scannell bases subject matter content according to user created rules. Allen bases subject matter content according to how well it is understood by the system), where a human operator may intervene to provide expert direction (as taught by Allen), providing efficient routing and faster handling. Thus, it would have been obvious to one of ordinary skill in the art to combine what was known in the art to result to obtain predictable results.

Claim 7:

wherein the plurality of priorities of a product service sub-category include at least one of (i) fraud and lost products; (ii) sensitive information; (iii) general information; and (iv) user comments.

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Broadly Allen and Scannell disclose that messages may contain a sub category of subject matter. Scannell discloses (5: 26-58) fields of a message. (Scannell, 5: 65 – 7:7), For a message related to a product service subject matter, priorities (such as general information or user comments) are determined by testing a message against rules in the rules store 112. “If a rule is satisfied, then the actions which result can be assigning a priority level to the message...” Note that the ‘947 Specification did not provide a definition for a "product service sub-category.” It would be obvious that a message related to product service subject matter (such as providing a loan) would contain “general information” or “user comments.” As an example, (Allen, Fig. 6C), for a customer that wants a price adjustment on a product service (such as variations in loan features), general information is provided in the message template fields. A sub category of a message encompassing “sensitive information” or “general information” is very broad. Scannell discloses (2: 15-32) messages could be prioritized, according to rules, for the purpose of selectively sorting by importance.

Allen fails to explicitly disclose:

Claims 8 & 49:

wherein the listed priorities are in order from highest to lowest priority.

(Scannell, 2: 55-60), “...automatically prioritized the plurality of messages...so that messages of relatively higher priority are sooner presented (listed from highest to lowest priority)...”

Scannell discloses (6: 63 – 7: 5 & Fig. 2) the listed priorities are in order from highest to lowest priority. “The sub-units or fields of action part 35B of the rule storage unit 35 are as follows: a priority field 45. if the message matches the rule conditions, then it is given the priority level set

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by this field, which can have a value of say between 1 (highest priority) and 5 (low priority). A file-to field 46. This contains a list of folders in the user's main folder store 15. If the message matches the appropriate rule conditions, then it is filed in the appropriate folders."

Thus, it would have been obvious to one of ordinary skill in the art to incorporate the teaching of Scannell into Allen because Allen discloses a method of processing electronic message and Scannell discloses the message could be prioritized for the purpose of processing the more important message first.

Claim 16:**wherein the electronic data communications channel is the Internet.**

Allen discloses (2: 61 – 3: 48) "...the inference engine 111 may comprise a software environment having a set of manipulable software objects 112...and invoking tools 113...", "...the automated processor 110 may comprise a system having a processor, memory comprising a stored program...data...and input/output devices (electronic data communications channel is the Internet), as is well known in the art.", "It would be clear to anyone of ordinary skill in the art, after perusal of the specification, drawings, and claims herein, that modification and/or programming (using known programming techniques) of a processor of known design to achieve these functions would be a straightforward task and would not require undue experimentation." See Allen, 11: 62-64, "...in response to a request for information from an external source..." suggestive of an external network connection.

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In further support, Scannell discloses (Fig. 1, 3: 24-39) an I/O port 10. "Referring to FIG. 1, there is an I/O port 10 by means of which messages can be transmitted to and received from other work stations, via a message transmission network (which may include or consists of a host computer)." (Scannell, 1: 13-19), "Digital communication systems of the 'electronic message' or 'electronic mail' type are well established. In such systems, several, (often a very large number) of work stations are interconnected by a system which allows users at the work stations to send messages to each other. Such messages are the electronic equivalent of letters and memoranda."

Scannell's disclosure is suggestive of electronic mails transmitted though the Internet. Thus, it would have been obvious to one of ordinary skill in the art to incorporate the analogous teachings of Scannell into Allen, where the communications channel includes transmitting through the Internet for the purpose of efficiently serving a large customer base at lower transmission costs.

Claim 17:

wherein the electronic message is an electronic mail (E-mail) message.

(Allen, 9: 7-10), teaches processing an electronic message, but not specifically an E-mail message.

Scannell more explicitly discloses (Abstract) the claim limitations, "A method and apparatus for prioritizing a plurality of incoming electronic mail messages (electronic mail (E-mail) message) for a user..."

Allen and Scannell are analogous art, both directed towards processing electronic mail using rules to enable the automation. It was known at the time to use the logic of expert systems to (Scannell, 2: 29-31) provide “an improved automatic message sorting and processing system, driven by user created and modified rules, specifically for electronic mail.” The combination of Allen and Scannell results in prioritizing (as taught by Scannell) the sub-categorized electronic messages (Allen teaches sub-categories). Scannell teaches sub-categories according to keywords), based on subject matter content of electronic messages. (Scannell bases subject matter content according to user created rules). Thus, it would have been obvious to one of ordinary skill in the art to combine what was known in the art to result to obtain predictable results, electronic messages in an E-mail format.

Claim 25:

A method for automatically processing an electronic mail (E-mail) message, comprising the steps of:

- (a) receiving the E-mail from a source over an electronic data communications channel;**
- (b) interpreting the E-mail using a rule base and case base knowledge engine; and**
- (c) classifying the E-mail as at least one of (i) being able to be responded to automatically; and (ii) requiring assistance from a human operator; wherein when the classification indicates that the E-mail can be responded to automatically, the method further includes the steps of:**
- (d) retrieving one or more predetermined responses from a repository;**

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(e) formulating an E-mail response from the predetermined response; and

(f) transmitting the E-mail response to the source over the data communications channel.

Allen teaches (Allen, 3: 59-65) retrieving a description of the facts of a particular situation, Not explicitly an E-mail. Scannell explicitly discloses electronic mail (E-mail). All other limitations are disclosed by Allen. See rejection of limitations in claims 1 & 2 above as anticipated by Allen. See Allen Figs. 2 & 6 regarding the steps and communications channel. An advice message (predetermined response) may be retrieved from a best matched case 105 (repository) and may be altered (formulating). The data communications channel is shown (dotted line) in Fig. 6 between the application 601 and the representative 602 at the source computer.

The '947 Specification recites (4: 9-12), "It is preferred that the electronic messages 11 are E-mail messages and are so referred to herein, it being understood, however, that other types of electronic messages 11 are contemplated as being within the scope of the invention."

(Scannell, 1: 13-19), "Digital communication systems of the 'electronic message' or 'electronic mail' type are well established. In such systems, several, (often a very large number) of work stations are interconnected by a system which allows users at the work stations to send messages to each other. Such messages are the electronic equivalent of letters and memoranda."

It would be obvious, to combine Allen and Scannell, as both are analogous arts, teaching the use of electronic messages processed by artificial intelligence (AI) reasoning or knowledge engine (Scannell, 4: 21-47) or (Allen, Abstract) case based reasoning system, rule based reasoning

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system, inferential reasoning. To combine the disclosed processing of E-mail, as disclosed by Scannell, with the unified automated reasoning system, as disclosed by Allen, results in automatically prioritizing and processing an electronic mail (E-mail) message given in the above claim, as expected.

Claim 37:

wherein the attributes include at least one of a source's address, a do not call request, a request for service, a reference to a foreign country, a long message, a reference to a specific product, a reference to multiple questions, and a reference to a specific employee.

Allen broadly discloses attributes at 4: 31—51. (Allen, 4: 36), "...attributes 301 may be particular to the application field..." (Allen, 6: 24-41, "...an attribute 301 with a text string value 302 may be matched...text string "BRADLEY P. ALLEN" would match the words (match the attributes) "BRADLEY", "P" and "ALLEN"...") (suggestive of a specific employee) (Allen, 7: 28-29), "...parameters of some problem 311 (a request for service) may be attributes 301 of some case 105." (Allen, 9: 50-10: 38) teaches giving advice to customers who call in with problems (a request for service). Allen (Fig. 6, 8: 62), A display panel may comprise data fields (for supplying values to attributes) and may present and/or request graphical information (Allen, 9: 64-66) such as an electronic circuit diagram or an exploded view of an automobile (a reference to a specific product).

In an analogous art, Scannell discloses (5: 26-34) a "sender field 26" in the structure of a message storage unit 25 which contains the identity of the sender (source's address) and subject

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and body fields (a long message, a reference to a specific product, a reference to multiple questions, and a reference to a specific employee). Scannell discloses (7: 56-66) "If the matching so far has been successful, then the subject and body fields 30 and 31 (a request for service, a reference to a foreign country, a long message, a reference to a specific product, a reference to multiple questions, and a reference to a specific employee) are matched against the keyphrases field 40, under the control of the keyphrase zone-limit field 41. The keyphrases field may contain a number of keyphrases which are treated as character strings for matching purposes. The keywords may be combined in logical combinations in the keyphrases. The comparator 52 first matches individual keywords, and then evaluates the logical combinations to determine whether the keyphrase is satisfied."

Thus, it would have been obvious to one of ordinary skill in the art to incorporate the teaching of Scannell into Allen because Allen discloses the use of rules to classify or manipulate received and stored cases (Allen, col. 7, lines 24-45) and Scannell discloses the message classification and prioritization method for the purpose of improving accessibility and searchability of stored cases (Scannell, col. 6, line 64- col. 8, line 19). By classifying and matching attributes that are likely to be contained in an electronic message, such as a source's address, a do not call request, a request for service, a reference to a foreign country, a long message, a reference to a specific product, a reference to multiple questions, and a reference to a specific employee, data is available for the automatic sorting and prioritizing by the knowledge based engines.

Claim 47:

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prioritizing the sub-categorized electronic message into at least one of a plurality of priorities based on the subject matter content of the electronic message wherein a higher priority indicates that the human operator should process the associated electronic message before processing lower prioritized electronic messages.

Allen discloses a human operator should contribute to the processing of the associated electronic message. (Allen, Abstract), "...processor ...may solicit human advice for treatment of new problems which are not already well treated by the case base.

More explicitly Scannell discloses (6: 9-17) "the user can set up a number of rules. Each rule tests whether the messages satisfy certain conditions regarding who the sender is, who the addresses and/or copy-tos are and their numbers, and the nature of the subject and a definable initial part of the message. If a rule is satisfied, then the actions which result can be assigning a priority level (rules are used to assign higher / lower priority levels) to the message, filing it in one or more selected files, and forwarding it to further addresses." (Scannell, 7: 42-47), "...the order of the various tests can be chosen for maximum efficiency...can be dependent on the contents of the fields (subject matter content)..." Scannell detects inconsistencies (8: 24-25) and requires the user (indicates that the human operator should process the associated electronic message) to correct one or more of the rules. (Scannell, 9: 24-30), "...arithmetical weighting to calculate the priority value of a message...subject matter...and/or text...the sender...are all given suitable weightings, and the sum of the weightings is quantized to give the priority value."

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Thus, it would have been obvious to one of ordinary skill in the art to incorporate the teaching of Scannell into Allen because Allen discloses a method of processing electronic message, including human intervention, and Scannell discloses the message could be prioritized for the purpose of processing the more important message first according to user defined rules.

Claim 48:

wherein the plurality of priorities of a product service sub-category include at least one of (i) fraud and lost products; (ii) sensitive information; (iii) general information; and (iv) user comments.

Claim limitations are very broad, as any electronic message may likely contain “sensitive information”, “general information,” or “user comments.”

Allen discloses sub-categories identified as attribute-value pairs 303, and a supplemental structure 310 of software objects which may be kept by the inference engine 111 with each case 105. An example of sub-categories is given at 4: 36-45: “...attributes 301 may be particular to the application field...loan amount...approved...payment history...(loans can be considered a product service and loan amount, approved, and payment history are “sensitive information”)

Scannell discloses assigning priorities (9: 24-30) according to subject matter (product service sub categories). Scannell discloses (6: 9-17) rules for messages, “...the user can set up a number of rules. Each rule tests whether the messages satisfy certain conditions concerning who the sender

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is...and the nature of the subject and a definable initial part of the message body field. If a rule is satisfied, then the actions which result can be assigning a priority level to the message...”

It would be obvious to combine Allen and Scannell, analogous arts, to result in assigning priorities to specific sub-categories because user defined rules and priorities are a part of an automated reasoning system.

Claim 49:

the listed priorities are in order from highest to lowest priority.

See rejection of limitations addressed in claim 8 above.

Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,581,664 to Allen et al. in view of USPN 4,829,576 to Porter.

Claim 18:

(a) receiving the electronic message from the source in a first data format; and

Allen discloses (2: 61-3:11) broadly, “An automated processor 110 may execute a software inference engine...may comprises a software environment having a set of manipulable software objects 112, a set of software tools 113 for manipulating those software objects 112, for maintaining a mapping 114 between the data records 108 of the data base 106, and a set of representative objects 115 representing those data records 108, and a software language 116 for defining software objects 112 and invoking tools 113. The language 116 may also comprise

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software structures for defining and altering rules...defining and altering programming language procedural structures 117 such as software subroutines.” The “object” software language defines the first data format. Allen suggests (9: 67) a hypertext format (first data format, hypertext software object format).

Allen does not explicitly disclose:

(a2) converting the electronic message from the first data format to an electronic message having a second data format.

However, this is known in the art as taught by Porter. Porter discloses a method of processing message in which data is converted into a second format (from spoken word to text and vv).

(Porter, 6: 25-30), "Then step 310 runs the speech recognition of FIG. 3. When it does this, it passes the BESTWORD choice associated with each utterance to a word processor program for insertion in a body of text at a CURSOR, such as the CURSOR 312 shown in FIG. 12."

Thus, it would have been obvious to one of ordinary skill in the art to incorporate the teaching of Porter into Allen because Allen discloses a method of processing messages and Porter further discloses the messages could be converted into a second format for the purpose of (Porter, 1: 15-17) greatly increasing the speed and ease with which people communicate with computers and with which they record and organize their words and thoughts.” Porter discloses (22: 21-25), “A speech recognition system which improves the ease with which humans can control computer systems, and particularly computer systems which deal with text.” Converting between formats

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is known in the art and provides the expected result of simplifying computer systems and methods.

Claim 19:

wherein the first data format is one of a printed document format, a voice data format, a dual tone multi-frequency (DTMF) format, and a first digital data format.

Allen discloses a “first digital data format”. See rejection of claim 18 above (object hypertext).

Porter discloses (Abstract, recognizes spoken utterances) a “a first voice data format.” (Porter, 2: 44-49, “...this text locating system includes a visual display which displays the text which matches the search string...select a given vocabulary word as corresponding to an utterance to be recognized...”

Per claim 20:

wherein the second data format is a second digital data format.

See limitations addressed in claim 19 above. Porter discloses mapping between the matched text (second data format) and spoken utterances (first format). It is inconsequential which is assigned a first or second data format, as Porter discloses mappings between either format.

Claim 21 is rejected under 35 U.S.C. 103(a) as being obvious over USPN 5,581,664 to Allen, in view of USPN 4,829,576 to Porter, and further in view of EP 0 586 954 A2 to Inglehart.

Claim 21:

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wherein the first and second digital data formats are ASCII.

Allen / Porter disclose a method of processing and converting electronic message. It is noted that Allen and Porter do not explicitly disclose the ASCII text data format.

However, Inglehart discloses a messaging system in which "The voice-to-text processing system, converts a voice message from a digitized voice message signal into an ASCII text message signal which is stored in the file server" (Abstract, 3: 41-46).

Thus, it would have been obvious to one of ordinary skill in the art to incorporate the teaching of Inglehart into Allen / Porter because Allen / Porter discloses a method of processing messages and Inglehart further discloses the messages could be represented in ASCII format. Inglehart recognized (2: 43-52) that "when a person wants to distribute original information through both text and voice methods, that person has to generate information in two different formats. This technique is labor intensive and introduces the possibility of errors when the text is recorded in two formats." One of ordinary skill would have been motivated to try the combination of teachings to reduce labor and errors. Inglehart suggested (3: 8-11) that "it is desirable to provide a voice messaging system which can convert received voice messages into accurate reproductions in any one of multiple media formats." The combination of prior arts, using known techniques, discloses processing, and prioritizing electronic messages and converting them into multiple formats, including ASCII text.

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USPN 5,283,887 to Zachery is not used in the above rejections. Zachery discloses a "method for converting a document having a first format into a document having a second format." (Zachery, Abstract). The method disclosed in Zachery permits "conversion from one document format to another format, preferred by the recipient, [to be] performed without the recipient's intervention." (Zachery, col. 1, lines 45-47). Upon receiving an electronic message, the message is automatically reformatted, using a format table, into a preferred format. (Zachery, col. 3, lines 41-53). Zachery has not been cited in the reexamination rejection because it is cumulative to the teachings of USPN 4,829,576 to Porter. The combination of Allen and Porter fairly teaches the claim limitations of claims 18-20, and the combination of Allen / Porter / Inglehart fairly teaches the claim limitations of claim 21.

The pertinent discussions found in the Request (06/06/2008, pages 31-58) and Claim Chart Exhibit AA-1 (06/06/2008) are incorporated by reference.

Confirmed Claims

As noted in the first paragraph of this office action, claims 9, 10, 14, 33, 50, 51, 57-61, and 66 are confirmed.

As for claims **9 and 50**, which are dependent on claims 6 and 47, respectively, Allen, Scannell or any of the remaining requester cited prior art does not explicitly disclose the plurality of

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priorities of a product sales sub-category include promotional content, request for services, and general questions and lengthy messages.

Allen discloses "Each case 105 may comprise a set of attributes 301, each of which has a value 302. Attributes 301 and values 302 are typically manipulated as an attribute-value pair 303. In a preferred embodiment, attributes may be particular to the application field, and values 302 may have data types which vary from one attribute 301 to another. For example, in a case-based reasoning system 101 for loan approval, each case 105 might have an attribute 301 such as 'loan amount' which would have a numeric value 302, an attribute 301 such as 'approved' which would have a boolean value 302, and an attribute 301 such as 'payment history' which would have a value 302 which is a list or array structure." (Allen, col. 4, lines 31-44).

Scannell discloses "The sub-units or fields of action part 35B of the rule storage unit 35 are as follows: a priority field 45. If the message matches the rule conditions, then it is given the priority level set by this field, which can have a value of say between 1 (highest priority) and 5 (lower priority). A file-to field 46. This contains a list of folders in the user's main folder store 15. If the message matches the appropriate rule conditions, then it is filed in the appropriate folders. A forward-to field 47. This contains a list of addresses; if the message matches the rule conditions, then it is forwarded to these addresses." (Scannell, col. 6, line 63 to col. 7, line 7).

Scannell further discloses "The invention in its broad form resides in method and mail system of the type wherein a plurality of electronic mail messages are directed to a user at a terminal, and wherein the plurality of incoming-mail messages is held in store in a main folder till accessed by

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the user for reading and action, the invention including a message control system to non-manually and automatically prioritize the plurality of messages selectively at any predetermined time of day, based on and using user created and stored files so that messages of relatively higher priority are sooner presented to the user or dealt with appropriately as desired, as priority messages, regardless of any chronological order in which messages were received for the user..." (col. 2, lines 49-62).

Neither Allen nor Scannell discloses giving messages priority levels responsive to messages matching rule condition, messages are differently prioritized based on user-defined criteria, which include: promotional content, request for services, and general questions and lengthy messages.

Claims 10 and 51, which depend on claims 9 and 50 respectively, are therefrom confirmed.

As for **claim 14**, which is dependent on claim 13, Allen, Scannell or any of the remaining requester cited prior art does not explicitly disclose the classification step indicates that the electronic message requires a second level of assistance from a human operator when at least one of a phone number, a foreign address, a do not call request, a facsimile number, a specific employee request, sensitive information, and a specific manual procedure is interpreted in the electronic message.

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Allen discloses a human operator may provide a second level of assistance, as found in the rejection of claim 13. Allen does not suggest that the second level of assistance required is due at least one of interpreting a phone number, a foreign address, a do not call request, a facsimile number, a specific employee request, sensitive information, and a specific manual procedure. Allen broadly discloses (Abstract) soliciting human advice for treatment of new problems which are not already well-treated by the case base.

Scannell discloses "Broadly, the user can set up a number of rules. Each rule tests whether the messages satisfy certain conditions regarding who the sender is, who the addresses and/or copy-tos are and their numbers, and the nature of the subject and a definable initial part of the message. If a rule is satisfied, then the actions which result can be assigning a priority level to the message, filing it in one or more selected files, and forwarding it to further addresses." (Scannell, col. 6, lines 9-17). Scannell further discloses "If the matching so far has been successful, then the subject and body fields 30 and 31 are matched against the keyphrases field 40, under the control of the keyphrase zone-limit field 41. The keyphrases field may contain a number of keyphrases which are treated as character strings for matching purposes. The keywords may be combined in logical combinations in the keyphrases. The comparator 52 first matches individual keywords, and then evaluates the logical combinations to determine whether the keyphrase is satisfied." (Scannell, col. 7, lines 56-66).

However, neither Allen nor Scannell explicitly discloses the electronic message requires a second level of assistance from a human operator when at least one of a phone number, a foreign

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address, a do not call request, sensitive information, and a specific manual procedure is interpreted in the electronic message.

As per **claims 33 and 66**, which are dependent on claims 31 and 64, respectively, Allen or any of the remaining requester cited prior art does not explicitly disclose each score is normalized by dividing the score by a maximum possible score for the stored case model, where the maximum possible score is determined when all of the attributes and text of the case model and the stored case model match.

Allen discloses "In a preferred embodiment, the inference engine 111 may determine match quality 315 for each case 105 in the match table 314 by a weighted sum of an evaluation 316 of those attribute-value pairs 303 which are matched. In a preferred embodiment, the weights assigned to each attribute-value pair 303 may be predetermined and may be altered by the user 119." (Allen, col. 5, lines 15-26). However, Allen does not disclose each score is normalized by dividing the score by a maximum possible score for the stored case model, where the maximum possible score is determined when all of the attributes and text of the case model and stored case model match.

As for **claims 57-61**, since they are dependent on confirmed claim 56, they are also confirmed.

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Notice Regarding Certain Reexamination Issues

The patent owner is reminded of the continuing responsibility under 37 CFR 1.565(a), to apprise the Office of any litigation activity, or other prior or concurrent proceeding, involving USPN 6,411,947 B2 throughout the course of this reexamination proceeding. The third party requester is also reminded of the ability to similarly appraise the Office of any such activity or proceeding throughout the course of this reexamination proceeding. See MPEP §§ 2207, 2282 and 2286.

Conclusion

Extensions of time under 37 CFR 1.136(a) do not apply in reexamination proceedings. The provisions of 37 CFR 1.136 apply only to “an applicant” and not to parties in a reexamination proceeding. Further, in 35 U.S.C. 305 and in 37 CFR 1.550(a), it is required that reexamination proceedings “will be conducted with special dispatch within the Office.” Extensions of time in reexamination proceedings are provided for in 37 CFR 1.550(c). A request for extension of time must be filed on or before the day on which a response to this action is due, and it must be accompanied by the petition fee set forth in 37 CFR 1.17(g). The mere filing of a request will not effect any extension of time. An extension of time will be granted only for sufficient cause, and for a reasonable time specified. The filing of a timely first response to this final rejection will be construed as including a request to extend the shortened statutory period for an additional month, which will be granted even if previous extensions have been granted. In no event, however, will the statutory period for response expire later than SIX MONTHS from the mailing date of the final action. See MPEP § 2265.

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Amendment Proposed in Reexamination – 37 CFR 1.530(d) Patent owner is notified that any proposed amendment to the specification and/or claims in this reexamination proceeding must comply with 37 CFR 1.530(d)-(j), must be formally presented pursuant to 37 CFR 1.52(a) and (b), and must contain any fees required by 37 CFR 1.20(c).

Further consideration of any amendments, affidavits or declarations, or other documents as evidence of patentability, will be governed by the requirements of 37 CFR 1.116, after final rejection and 37 CFR 41.33 after appeal, which will be strictly enforced. Any paper filed with the USPTO, i.e., any submission made, by either the Patent Owner or the Third Party Requester must be served on every other party in the reexamination proceeding, including any other third party requester that is part of the proceeding due to merger of the reexamination proceedings. As proof of service, the party submitting the paper to the Office must attach a Certificate of Service to the paper, which sets forth the name and address of the party served and the method of service. Papers filed without the required Certificate of Service may be denied consideration. See 37 CFR 1.550(f)

All correspondence relating to this *ex parte* reexamination proceeding should be directed:

By Mail to: Mail Stop *Ex Parte* Reexam
Central Reexamination Unit
Commissioner for Patents

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United States Patent & Trademark Office

P.O. Box 1450

Alexandria, VA 22313-1450

By FAX to: (571) 273-9900

Central Reexamination Unit

By hand: Customer Service Window

Randolph Building

401 Dulany Street

Alexandria, VA 22314

Registered users of EFS-Web may alternatively submit such correspondence via the electronic filing system EFS-Web, at <https://sportal.uspto.gov/authenticate/authenticateuserlocalepf.html>.

EFS-Web offers the benefit of quick submission to the particular area of the Office that needs to act on the correspondence. Also, EFS-Web submissions are “soft scanned” (i.e., electronically uploaded) directly into the official file for the reexamination proceeding, which offers parties the opportunity to review the content of their submissions after the “soft scanning” process is complete.

Any inquiry concerning this communication should be directed to Mary Steelman at telephone number 571-272-3704.

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/Mary Steelman/

M. Steelman, Primary Examiner

Central Reexamination Unit 3992

Conferees:


JESSICA HARRISON
SUPERVISORY PATENT EXAMINER

