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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.

DETAILED ACTION

In view of the appeal brief filed on 22 November 2010
PROSECUTION IS HEREBY REOPENED.

A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must
exercise one of the following two options:

1) file a reply under 37 CFR 1.111 (if this Office action
is non-final) or a reply under 37 CFR 1.113.(if this Office
action is final); or,

2) initiate a new appeal by filing a notice of appeal under
37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The
previously paid notice of appeal fee and appeal brief fee can be
applied to the new appeal. If, however, the appeal fees set
forth in 37 CFR 41.20 have been increased since they were
previously paid, then appellant must pay the difference between
the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of
reopening prosecution by signing below:

/Janice A. Mooneyham/

Supervisory Patent Examiner, Art Unit 3689

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Claim Status

1. This is in response to the applicant's communication filed on 22 November 2010, wherein:

Claims 1, 7-9, 13-20, 22, and 23 are currently pending.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. **Claims 1, 7-9, 13-16, 17-20, and 22-23 are rejected under 35 U.S.C. 112, first paragraph,** as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 1, for example, describes, "for each selected message assigning a relative relevance to the current state and evolution of the scenario."

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However, the specification does not explain how the applicant assigns relevance to each message. Applicant simply states that the calculation is known to persons in the art (see page 8, line 23). There are multiple ways to calculate probabilities known in the art. Examiner does not know how applicant chose to calculate the probabilities. Applicant has merely claimed the result that is obtained without explaining how he accomplished the result for his invention. While Examiner knows what end result applicant is trying to accomplish, Examiner is unable to determine how applicant envisioned this part of the claimed steps to be completed. The other independent claims have similar language. Claim 7 states, "with a ranking engine routine, ranking the selected messages, the message with a higher relevance to the current state of the scenario being ranked higher." Although this does not explicitly state that the relevance is being assigned, it is implied in the step. Claims 9 and 20 refer to assigning a relative rank to the messages.

3. **Claims 1, 7-9, 13-19, and 22-23 are rejected** under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a

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way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Examiner has reviewed applicant's disclosure and submits that these added limitations find no support in the specification as currently written, and is, therefore, directed to new matter.

a. "at least one computer" is not described in the specification as written. Examiner reviewed the specification and did not find that the specification supported the recital of more than one computer, although it does mention **one** computer.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. **Claims 1, 13, 14, 15, and 16 are rejected under 35**

U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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The preamble of claim 1 states that it is a method of routing a dialog between an operator and a customer. However, claim 1 consists of only one step, that of receiving a customer call with telephonic equipment. Although the claim continues, stating "where at least one computer is programmed to perform the following..." it does not state that the computer actually performs any of the steps, just that it is programmed. So, the following steps don't actually occur. This means that the preamble does not agree with the body of the claim (which consists of only one step), which makes it unclear whether the operator is part of the invention or not. For the prior art rejection, Examiner will give weight to the entire claim; however, it is important to keep in mind that claim 1 only receives patentable weight as to the first step.

Claim 13 states, "calculating the next most probable step in the scenario based on information inputted by the customer in response to the current state of the scenario evolving differently with respect to the default state corresponding to a standard evolution of the default scenario" which lacks antecedent basis.

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Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1, 7-8, 13-19, and 22-23 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter.

Referring to claims 1 and 13-16:

Based upon consideration of all of the relevant factors with respect to the claims as a whole, claims 1 and 13-16 are held to claim an abstract idea, and are therefore rejected as ineligible subject matter under 35 U.S.C. 101. The rationale for this finding is explained below:

Based on Supreme Court precedent and recent Federal Circuit decisions, the Office's guidance to an examiner is that one clue to patent eligibility under 35 USC 101 is whether or not the

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process is (1) be tied to a particular machine or apparatus or (2) transforms underlying subject matter (such as an article or materials) to a different state or thing. *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876).

The claim should recite the particular machine or apparatus to which it is tied, for example by identifying the machine or apparatus that accomplishes the method steps, or positively reciting the subject matter that is being transformed, for example by identifying the material that is being changed to a different state.

There are two corollaries to the machine-or-transformation test. First, a mere field-of-use limitation is generally insufficient to render an otherwise ineligible method claim patent-eligible. This means the machine or transformation must impose meaningful limits on the method claim's scope to pass the test. Second, insignificant extra-solution activity will not transform an unpatentable principle into a patentable process. This means reciting a specific machine or a particular transformation of a

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specific article in an insignificant step, such as data gathering or outputting, is not sufficient to pass the test.

Here, applicant's method steps fail the first prong of the new test because there is no tie to any kind of machine for any of the claimed steps. Although claim 1 refers to telephone equipment, this is not a *particular* machine, and further, this step does not impose meaningful limits on the scope of the method claim, as a human being could be the one actually performing the step of receiving a call. Further, the "text generator" and "user interface," which are interpreted as software, and, if the software is performing some action, it must involve a computer, are not in a claimed step. As above, claim 1 only has one claimed step, that of receiving a call with telephonic equipment (see above for further explanation). Claim 13 refers to a calculating step, but it is not required that this step be performed by a particular machine. Claim 14 refers to a "medical monitor" which could be any sort of medical device; a medical monitor is not a particular machine. Moreover, the steps that refer to the medical monitor are insignificant extra-solution activity, as a person could press a button to call for help. Claim 15 does not include any item that is arguably a tie to a machine. Although claim 16 refers to

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software and to a database, it refers back to a "step" in claim 1 which is not a claimed step (the computer is programmed to perform the listed steps other than receiving a call, it does not actually perform the steps).

Further, applicant's method steps fail the second prong of the test because the claimed steps do not result in an article being transformed from one state to another. There is no transformation occurring in the claims for a physical object or substance or data that represents physical objects or substances.

Additionally, other factors and considerations in addition to the machine/transformation test also point to a finding that the claims are directed to a mere abstract idea. The claims also seem to be a mere statement of a general concept of providing an operator at a call center with a script. The claims if allowed would appear to effectively grant a monopoly on the concept of providing an operator at a call center with a script as claimed. The claims are directed to providing an operator at a call center with a script, which seems to be just a general business concept. When viewing these factors and the claims as

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whole, it is concluded that the claims are directed to a mere abstract idea and are not patent eligible under 35 USC 101.

Dependent claim(s) 13-16 when analyzed as a whole are held to be patent ineligible under 35 U.S.C. 101 because the additional recited limitation(s) fail(s) to establish that the claim(s) is/are not directed to an abstract idea, for the same reasoning as set forth with respect to claim 1. The dependent claims do not act to remedy the problem with claim 1 by reciting (explicitly or implied) the use of any particular machine and/or any significant transformation.

Claim Rejections - 35 USC § 103

1. 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:

(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.

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2. Claims 1 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (US 5757904), in view of Pelikan (US 7047169).

Referring to claim 1:

Anderson discloses

receiving a customer call with telephonic equipment (col. 2, lines 32-59 and col. 3, lines 40-41 and col. 4, lines 63-67; where the agent 55 is speaking with a customer on the phone 117);

where at least one computer is programmed to perform the following operations (col. 4, lines 12-20; *workstations 118 are stored program-controlled computers*):

determining a type of said scenario (col. 2, lines 32-59 and col. 4, lines 63-67 thru col. 5, lines 3; *the monitoring also includes monitoring with whom the agent at the agent position is presently engaged and When agent Eng answers the call, Mr. Allen gives his name and explains that he is a customer needing to make changes to his reservations and where the type of scenario*

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is that the customer needs his reservations changed and this information is entered into workstation 118 at step 202);

determining a current state of said scenario (col. 2, lines 32-59 and col. 5, lines 4-11 and col. 7, lines 10-12; *the monitoring also includes...what the telephone call is about* and where workstation 118 evaluating the record to determine whether the agent made the original reservation is determining the current state);

determining an evolution of the scenario (col. 2, lines 32-59 and col. 5, lines 42-65; *the monitoring also includes...what the telephone call is about* and *the analyzing also includes analyzing the monitored activities* and workstation 118 examines Mr. Allen's records to determine if other records are impacted, at step 306. This may be done automatically or in response to a request from agent Doe. Upon finding the indication that a plurality of reservations were made jointly with this reservation, it obtains records of these reservations... and where "monitoring" is a continuous activity that continues to take place as the call evolves and various activities take place, which indicate how the call is evolving and also, the finding of other reservations made jointly with Allen's

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reservation is interpreted as determining how the situation is evolving);

generating a communication script corresponding to said type, said script being arranged to select a plurality of messages from an electronic database of messages in order to yield selected messages, said selection being carried out in compliance with said type, said state, and said evolution of the scenario (col. 2, lines 32-59 and col. 5, lines 4-41; *analyzing the request within the context of the monitored activities to determine a subset of the requested information...which is most relevant to the monitored activities* and Workstation 118 then displays a message recommending that the call be transferred to agent Doe and Workstation 118 then displays a message recommending that the call be transferred to agent Doe and where the workstation displays messages to the agent which are appropriate given the previously input information); and

for each selected message assigning a relative relevance to the current state and evolution of the scenario (col. 2, lines 32-59 and col. 6, lines 11-31; *analyzing the request within the context of the monitored activities to determine a subset of the requested information... which is most relevant to the monitored*

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activities...presenting the requested information in a manner that emphasizes the subset over the rest of the requested information and workstation 118 proceeds to determine what directory entries are most relevant to (a) the customer or customers involved in the call and (b) the transaction being executed);

ranking the selected messages, a message with a higher relative relevance to the current state and evolution of the scenario being ranked higher (col. 2, lines 32-59 and col. 6, lines 45-51; analyzing the request within the context of the monitored activities to determine a subset of the requested information...which is most relevant to the monitored activities...presenting the requested information in a manner that emphasizes the subset over the rest of the requested information (e.g., highlighting the subset) and If some relevant telephone numbers are call center agents' extensions, workstation 118 obtains the status of those agents...Workstation 118 then displays the call destinations and their telephone numbers, at step 408, and highlights those agents who are available... and where highlighting the information which is most relevant is interpreted as ranking that information higher);

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with a text generator, generating a text list of the plurality of said selected messages together with their rank (col. 2, lines 32-59 and col. 6, lines 45-51; *presenting (e.g. displaying)...the requested information in a manner that emphasizes the subset over the rest of the requested information (e.g., highlighting the subset)* and *If some relevant telephone numbers are call center agents' extensions, workstation 118 obtains the status of those agents...Workstation 118 then displays the call destinations and their telephone numbers, at step 408, and highlights those agents who are available... and where displaying the other agents and their phone numbers is a text list);*

with a user interface presenting the text list to the operator (col. 2, lines 32-59 and col. 6, lines 45-51; *presenting (e.g. displaying)...the requested information and Workstation 118 then displays the call destinations and their telephone numbers);* and

wherein in order to determine the relevance of the selected message, each selected message is assigned a probability within the scenario (col. 2, lines 32-59 and col. 6, lines 45-51; *analyzing the request within the context of the monitored activities to determine a subset of the requested*

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information...which is most relevant to the monitored activities...presenting the requested information in a manner that emphasizes the subset over the rest of the requested information (e.g., highlighting the subset) and If some relevant telephone numbers are call center agents' extensions, workstation 118 obtains the status of those agents...Workstation 118 then displays the call destinations and their telephone numbers, at step 408, and highlights those agents who are available... imply that the selected subset is assigned a probability of relevance, since the most relevant information is being emphasized); and

wherein during the evolution of the scenario the selected messages are re-ranked according to their probabilities calculated by a scenario evolution algorithm (col. 2, lines 32-59 and col. 5, lines 42-65; *analyzing the request within the context of the monitored activities to determine a subset of the requested information... which is most relevant to the monitored activities and Upon finding commonality...workstation 118 displays an indication thereof... and where "monitoring" is a continuous activity and therefore, the activities would change over time, thereby changing the relevance of the provided information, causing the information to be re-ranked and where the workstation changes the messages that are displayed as the*

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most relevant depending on the information entered about the call).

Anderson discloses a system for providing agents of a call center with information relating to their conversation that is most probable to be helpful with the customer's issue. Anderson does not disclose wherein for the standard evolution of the scenario the probability is loaded by the communication script from a prestored look-up table comprising default probabilities.

However, Pelikan teaches a similar system for using probabilistic models. Pelikan teaches wherein for the standard evolution of the scenario the probability is loaded by the communication script from a prestored look-up table comprising default probabilities (col. 10, lines 53-67; *specify local probability tables*).

It would have been obvious for a person of ordinary skill in the art (PHOSITA) at the time of invention to modify the system disclosed in Anderson to incorporate prestored look-up tables comprising default probabilities as taught by Pelikan because this would provide a manner for ranking the messages in order of

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most probable, thus aiding the client by providing the most pertinent information.

Referring to claim 16:

Anderson discloses wherein the scenario evolution algorithm updates the relative relevancies of the selected messages to the scenario and loads additional messages from the database (col. 2, lines 32-59 and col. 5, lines 42-62; *analyzing the request within the context of the monitored activities to determine a subset of the requested information...which is most relevant to the monitored activities... presenting the requested information in a manner that emphasizes the subset over the rest of the requested information (e.g., highlighting the subset and the analyzing also includes analyzing the monitored activities and workstation 118 examines Mr. Allen's records to determine if other records are impacted, at step 306. This may be done automatically or in response to a request from agent Doe. Upon finding the indication that a plurality of reservations were made jointly with this reservation, it obtains records of these reservations... and where monitoring the activities implies a continuous tracking of the situation which uploads different messages depending on the monitored activities and where*

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"algorithm" is interpreted as a step by step procedure for solving a problem, as defined by www.thefreedictionary.com which software must inherently contain, as software itself is a set of step by step instructions for the computer to follow in performing some task).

3. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (US 5757904), in view of Pelikan (US 7047169), and further in view of Holzer et al. (WO 02/46872).

Referring to claim 13:

Anderson discloses a system for providing agents of a call center with information relating to their conversation that is most probable to be helpful with the customer's issue. Pelikan teaches a similar system for using probabilistic models.

Anderson and Pelikan do not disclose calculating the next most probable step in the scenario based on information inputted by the customer in response to the current state of the scenario evolving differently with respect to the default state corresponding to a standard evolution of the default scenario.

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However, Holzer teaches a similar system for an automated call center. Holzer teaches calculating the next most probable step in the scenario based on information inputted by the customer in response to the current state of the scenario evolving differently with respect to the default state corresponding to a standard evolution of the default scenario (page 13, lines 15-28; *prompts the CSR with the next statement in the script, either based on a predefined sequence or one dynamically generated in response to the customer's responses in the textual stream*).

It would have been obvious for a person of ordinary skill in the art (PHOSITA) at the time of invention to modify the system disclosed in Anderson and Pelikan to incorporate calculating the next most probable step in the scenario based on information inputted by the customer in response to the current state of the scenario evolving differently with respect to the default state corresponding to a standard evolution of the default scenario as taught by Holzer because this would provide a manner for choosing the next most probable step, thus aiding the client by providing the most pertinent information.

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4. **Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Holzer et al. (WO 02/46872), in view of Anderson (US 5757904), and further in view of Pelikan (US 7047169).**

Referring to claim 20:

Holzer teaches

a telephone device which receives incoming calls (page 7, lines 23-29; *inbound call centers*);

a scenario monitor programmed to determine a type of a scenario (page 12, lines 7-12; *For example, in a customer-service scenario, the keywords "plan", "my bill" or "billing" in the customer's textual stream could prompt the system to instantly call up relevant information about the company's new billing plan*);

a recognition engine programmed to determine and update a current state of the scenario and (page 12, lines 13-29; *...causing the system to go into a special numeric-aware state, wherein it explicitly waits and listens for textual representations of digits*) compare the current state of said

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scenario with a default state corresponding to a evolution of a default scenario to determine an evolution of the scenario (page 13, lines 15-18; *the CSR's statements can be compared against a predefined or dynamically generated script in order to determine whether or not the CSR has followed the conversation guidelines*);

a generator of a communication script programmed to select from a plurality of messages from a database of messages in compliance with said type, said current state, and said evolution of the scenario, in order to obtain a plurality of selected messages (page 3, lines 14-31; *using an established database of anticipated customer responses to specific customer service representatives questions whereby the database can then provide on screen information specific to that customer*); and

wherein for the evolution of the scenario the probability is re-ranked by a scenario evolution algorithm (page 13, lines 15-28; *prompts the CSR with the next statement in the script, either based on a predefined sequence or one dynamically generated in response to the customer's responses in the textual stream implies use of an algorithm*).

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Holzer discloses a system for an automated call center. Holzer does not disclose a ranking engine programmed to rank the selected messages, a message with a higher relative relevance to the current state and evolution of the scenario being ranked higher; a user interface which displays the selected messages together with their rank to the operator in a list; and wherein in order to determine the relevance of the selected message, each selected message is assigned a probability within the scenario.

However, Anderson teaches a similar system for providing agents of a call center with information relating to their conversation that is most probable to be helpful with the customer's issue. Anderson teaches

a ranking engine programmed to rank the selected messages, a message with a higher relative relevance to the current state and evolution of the scenario being ranked higher (col. 2, lines 32-59 and col. 6, lines 45-51; *analyzing the request within the context of the monitored activities to determine a subset of the requested information...which is most relevant to the monitored activities...presenting the requested information in a manner that emphasizes the subset over the rest of the requested information*

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(e.g., highlighting the subset) and If some relevant telephone numbers are call center agents' extensions, workstation 118 obtains the status of those agents...Workstation 118 then displays the call destinations and their telephone numbers, at step 408, and highlights those agents who are available... and where highlighting the information which is most relevant is interpreted as ranking that information higher);

a user interface which displays the selected messages together with their rank to the operator in a list (col. 2, lines 32-59 and col. 6, lines 45-51; *presenting (e.g. displaying)...the requested information in a manner that emphasizes the subset over the rest of the requested information (e.g., highlighting the subset) and If some relevant telephone numbers are call center agents' extensions, workstation 118 obtains the status of those agents...Workstation 118 then displays the call destinations and their telephone numbers, at step 408, and highlights those agents who are available... and where displaying the other agents and their phone numbers is a text list); and*

wherein in order to determine the relevance of the selected message, each selected message is assigned a probability within the scenario (col. 2, lines 32-59 and col. 6, lines 45-51;

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analyzing the request within the context of the monitored activities to determine a subset of the requested information...which is most relevant to the monitored activities...presenting the requested information in a manner that emphasizes the subset over the rest of the requested information (e.g., highlighting the subset) and If some relevant telephone numbers are call center agents' extensions, workstation 118 obtains the status of those agents...Workstation 118 then displays the call destinations and their telephone numbers, at step 408, and highlights those agents who are available... imply that the selected subset is assigned a probability of relevance, since the most relevant information is being emphasized).

It would have been obvious for a person of ordinary skill in the art (PHOSITA) at the time of invention to modify the system disclosed in Holzer to incorporate providing a relative relevance to the current state of the scenario, ranking the selected messages, a message with a higher relative relevance to the current state of the scenario being ranked higher, and presenting the plurality of said selected messages together with their rank to the operator in a list by means of a user interface as taught by Anderson because this would provide a manner for providing the customer with the most pertinent

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information, thus aiding the client by providing the most valuable information.

Holzer discloses a system for an automated call center.

Anderson teaches a system for providing agents of a call center with information relating to their conversation that is most probable to be helpful with the customer's issue. Holzer and Anderson do not disclose wherein for the standard evolution of the scenario the probability is loaded by the communication script from a prestored look-up table comprising default probabilities.

However, Pelikan teaches a similar system for using probabilistic models. Pelikan teaches wherein for the standard evolution of the scenario the probability is loaded by the communication script from a prestored look-up table comprising default probabilities (col. 10, lines 53-67; *specify local probability tables*).

It would have been obvious for a person of ordinary skill in the art (PHOSITA) at the time of invention to modify the system disclosed in Holzer and Anderson to incorporate prestored look-up tables comprising default probabilities as taught by Pelikan

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because this would provide a manner for ranking the messages in order of most probable, thus aiding the client by providing the most pertinent information.

Further, claim 20 is a system claim and as such, is defined by structure. The only structure included in the claim is "a telephone device"; all other elements of the claim receive little patentable weight as they are not structural.

5. Claims 7 and 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Menard (US 20030001743), in view of Anderson (US 5757904).

Referring to claim 7:

Menard teaches

a customer's medical monitor with a communication script arranged to follow a scenario corresponding to the medical monitor by presenting a plurality of messages to the operator ([0102]; *Either the dispatcher D or the processor P may then send an inquiry through the personal wireless device 600 to the personal device 100, instructing the personal device 100 to send various data...*);

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at least one computer programmed to perform the steps of ([0102] processor and where a processor implies the use of a computer):

with a scenario routine, determining a type of the scenario from the dialog initiated by the customer's medical monitor, the type of scenario including at least one of a request for medical assistance and support during a medical emergency ([0099]- [0102]; *...the victim V undergoes some sort of cardiac problem, such as tachycardia, that causes the personal device to attempt to establish communication with a caregiver and Using this transmitted data [from the medical monitor], the dispatcher or processor may then make a diagnosis and identify a treatment strategy*); and

with a recognition routine, determining and update a current state of the scenario based on the dialog with the customer's medical monitor ([0092] and [0105]; *In one embodiment, the cellular telephone, the base station, emergency monitoring center, or other device displays real time information from the personal device 100 and When the responding personnel R reach the victim, they may establish communications through local area wireless 330 from their medical device interface 500 to the*

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victim's personal device 100, request data from the personal device 100, and request the personal device 100 to take some action, such as dispensing medication to the victim V. Their medical device interface 500 may also establish communication with the dispatcher D or medical caregiver using network based communications 360).

Menard discloses a personal medical device communication system. Menard does not teach with a script generator routine, selecting a plurality of messages from the electronic database of messages in compliance with said type and said current state in order to obtain a plurality of selected messages; with a ranking engine routing, ranking the selected messages, the message with a higher relevance to the current state of the scenario being ranked higher; a user interface configured to display the selected messages together with their rank to the operator in a list; wherein the system further includes a probabilistic model configured to assign a probability to each selected message in order to determine the relevance of the message within the scenario; and wherein the probabilistic model is configured to assign the probability is further configured to communicate with a scenario evolution algorithm arranged to calculate respective probabilities of the selected messages.

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However, Anderson teaches a similar system for providing agents of a call center with information relating to their conversation that is most probable to be helpful with the customer's issue.

Anderson teaches

with a script generator routine, selecting a plurality of messages from the electronic database of messages in compliance with said type and said current state in order to obtain a plurality of selected messages (col. 2, lines 32-59 and col. 5, lines 4-41; *analyzing the request within the context of the monitored activities to determine a subset of the requested information...which is most relevant to the monitored activities and Workstation 118 then displays a message recommending that the call be transferred to agent Doe and Workstation 118 then displays a message recommending that the call be transferred to agent Doe and where the workstation displays messages to the agent which are appropriate given the previously input information*);

with a ranking engine routine, ranking the selected messages, the message with a higher relevance to the current state of the scenario being ranked higher (col. 2, lines 32-59 and col. 6,

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lines 45-51; analyzing the request within the context of the monitored activities to determine a subset of the requested information...which is most relevant to the monitored activities...presenting the requested information in a manner that emphasizes the subset over the rest of the requested information (e.g., highlighting the subset) and If some relevant telephone numbers are call center agents' extensions, workstation 118 obtains the status of those agents...Workstation 118 then displays the call destinations and their telephone numbers, at step 408, and highlights those agents who are available... and where highlighting the information which is most relevant is interpreted as ranking that information higher);

a user interface configured to display the selected messages together with their rank to the operator in a list (col. 2, lines 32-59 and col. 6, lines 45-51; presenting (e.g. displaying)...the requested information in a manner that emphasizes the subset over the rest of the requested information (e.g., highlighting the subset) and If some relevant telephone numbers are call center agents' extensions, workstation 118 obtains the status of those agents...Workstation 118 then displays the call destinations and their telephone numbers, at step 408, and highlights those agents who are available... and where

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displaying the other agents and their phone numbers is a text list);

wherein the system further includes a probabilistic model configured to assign a probability to each selected message in order to determine the relevance of the message within the scenario (col. 2, lines 32-59 and col. 6, lines 45-51; *analyzing the request within the context of the monitored activities to determine a subset of the requested information...which is most relevant to the monitored activities...presenting the requested information in a manner that emphasizes the subset over the rest of the requested information (e.g., highlighting the subset) and If some relevant telephone numbers are call center agents' extensions, workstation 118 obtains the status of those agents...Workstation 118 then displays the call destinations and their telephone numbers, at step 408, and highlights those agents who are available... imply that the selected subset is assigned a probability of relevance, since the most relevant information is being emphasized); and*

wherein the probabilistic model is configured to assign the probability is further configured to communicate with a scenario evolution algorithm arranged to calculate respective

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probabilities of the selected messages (col. 3, line 35 thru col. 4, line 42; where Anderson describes that his invention is performed by software running on a database, a server, and various workstation computers, which must communicate various items of information to each other in order to function properly).

It would have been obvious for a person of ordinary skill in the art (PHOSITA) at the time of invention to modify the system disclosed in Menard to incorporate the improved operator message center, which shows various messages which are relevant to the scenario as taught by Anderson because this would provide a manner for providing the operator with pertinent information which the operator can then provide to the customer, so that the operator does not have to rely solely on their memory or expertise in a particular situation, thus aiding the client by providing the best information for the situation.

Referring to claim 22:

Anderson teaches a text generator which generates text which is displayed to the operator on the user interface (col. 2, lines 32-59; *presenting (e.g. displaying)...the requested information*).

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Referring to claim 23:

Anderson teaches wherein the generator includes a text generator which generates the selected messages as text which is displayed on the user interface ((col. 2, lines 32-59; *presenting (e.g. displaying)...the requested information*).

6. Claims 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Menard (US 20030001743), in view of Anderson (US 5757904), and further in view of Holzer et al. (WO 02/46872).

Referring to claim 17:

Menard discloses a personal medical device communication system. Anderson teaches a similar system for providing agents of a call center with information relating to their conversation that is most probable to be helpful with the customer's issue. Menard and Anderson do not disclose wherein the recognition engine is a voice recognition engine is configured to detect a key word in a communication between the operator and the customer to determine the current state of the scenario.

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However, Holzer teaches a similar system for an automated call center. Holzer teaches wherein the recognition engine is a voice recognition engine is configured to detect a key word in a communication between the operator and the customer to determine the current state of the scenario (page 11, line 21 thru page 12, line 6; *voice-monitoring device and analyzed for keywords or patterns*).

It would have been obvious for a person of ordinary skill in the art (PHOSITA) at the time of invention to modify the system disclosed in Menard and Anderson to incorporate wherein the recognition engine is a voice recognition engine is configured to detect a key word in a communication between the operator and the customer to determine the current state of the scenario as taught by Holzer because this would provide a manner for automatically providing key words which are used for selecting messages, thus aiding the operator by making it easier for them to concentrate on the customer, as they do not have to type in any information.

Referring to claim 18:

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Menard discloses a personal medical device communication system. Anderson teaches a similar system for providing agents of a call center with information relating to their conversation that is most probable to be helpful with the customer's issue. Menard and Anderson do not disclose wherein the probabilistic model communicates with the scenario evolution algorithm to calculate respective probabilities of the selected messages when an unpredictable change occurs during a evolution of a default scenario of questions and instructions between the operator and the customer.

However, Holzer teaches a similar system for an automated call center. Holzer teaches wherein the probabilistic model communicates with the scenario evolution algorithm to calculate respective probabilities of the selected messages when an unpredictable change occurs during a evolution of a default scenario of questions and instructions between the operator and the customer (page 13, lines 15-28; "...prompts the CSR with the next statement in the script, either based on a predefined sequence or one dynamically generated in response to the customer's responses in the textual stream..." implies use of an algorithm).

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It would have been obvious for a person of ordinary skill in the art (PHOSITA) at the time of invention to modify the system disclosed in Menard and Anderson to incorporate wherein the probabilistic model communicates with the scenario evolution algorithm to calculate respective probabilities of the selected messages when an unpredictable change occurs during a evolution of a default scenario of questions and instructions between the operator and the customer as taught by Holzer because this would provide a manner for providing the operator with pertinent information which the operator can then provide to the customer, thus aiding the client by providing the best information for the situation.

7. Claims 8 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Menard (US 20030001743), in view of Anderson (US 5757904), and further in view of Horowitz et al. (US 6349290).

Referring to claim 8:

Menard discloses a personal medical device communication system. Anderson teaches a similar system for providing agents of a call center with information relating to their conversation that is

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most probable to be helpful with the customer's issue. Menard and Anderson do not disclose wherein the selected messages includes a configurable textual string, said system further including a text generator configured to generate text, to configure said textual string and control the user interface to present the configured textual string.

However, Horowitz teaches a similar system for generating interactive advice. Horowitz teaches wherein the selected messages includes a configurable textual string, said system further including a text generator configured to generate text, to configure said textual string and control the user interface to present the configured textual string (col. 25, lines 9-53; "The presentation engine 106 for an embodiment of the present invention has at its disposal a text parser, which parses text input provided by the customer 2 into a numerically structured format that can be used by the system in generating responses. The input parser can also reverse the parse, so that it presents numerically structured advice sequence in English prose.").

It would have been obvious for a person of ordinary skill in the art (PHOSITA) at the time of invention to modify the system disclosed in Menard and Anderson to incorporate wherein the

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selected messages includes a configurable textual string, said system further including a text generator configured to generate text, to configure said textual string and control the user interface to present the configured textual string as taught by Horowitz because this would provide a manner for providing the operator with pertinent information which the operator can then provide to the customer, thus aiding the client by providing the best information for the situation.

Referring to claim 19:

Menard discloses communicating the location of the customer (paragraph 109).

Horowitz teaches wherein the text generator updates the configurable text string with information based at least in part on data input (col. 25, lines 9-53; "The presentation engine 106 for an embodiment of the present invention has at its disposal a text parser, which parses text input provided by the customer 2 into a numerically structured format that can be used by the system in generating responses. The input parser can also reverse the parse, so that it presents numerically structured advice sequence in English prose.").

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8. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (US 5757904), and in view of Horowitz et al. (US 6349290).

Referring to claim 9:

Anderson discloses

select a plurality of messages from an electronic database of messages in compliance with said scenario in order to yield selected messages (col. 2, lines 32-59 and col. 5, lines 4-41; *analyzing the request within the context of the monitored activities to determine a subset of the requested information...which is most relevant to the monitored activities and Workstation 118 then displays a message recommending that the call be transferred to agent Doe and Workstation 118 then displays a message recommending that the call be transferred to agent Doe and where the workstation displays messages to the agent which are appropriate given the previously input information*);

communicate with a ranking engine configured to assign a relative rank to the selected messages in accordance with their

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respective relevance to a detected current state of said scenario (col. 2, lines 32-59 and col. 3, line 35 thru col. 4, line 42; *analyzing the request within the context of the monitored activities to determine a subset of the requested information...which is most relevant to the monitored activities...presenting the requested information in a manner that emphasizes the subset over the rest of the requested information (e.g., highlighting the subset)* and where highlighting the information which is most relevant is interpreted as ranking that information higher and where Anderson describes that his invention is performed by software running on a database, a server, and various workstation computers, which must communicate information to each other in order to function properly), and

control a user interface to present the selected messages together with their rank to the operator in a list (col. 2, lines 32-59 and col. 6, lines 45-51; *presenting (e.g. displaying)...the requested information in a manner that emphasizes the subset over the rest of the requested information (e.g., highlighting the subset)* and *If some relevant telephone numbers are call center agents' extensions, workstation 118 obtains the status of those agents...Workstation 118 then displays*

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the call destinations and their telephone numbers, at step 408, and highlights those agents who are available... and where displaying the other agents and their phone numbers is a text list);

wherein the relative rank is assigned to a selected message according to a probability of said selected message within the scenario (col. 2, lines 32-59 and col. 6, lines 45-51; *analyzing the request within the context of the monitored activities to determine a subset of the requested information...which is most relevant to the monitored activities...presenting the requested information in a manner that emphasizes the subset over the rest of the requested information (e.g., highlighting the subset) and If some relevant telephone numbers are call center agents' extensions, workstation 118 obtains the status of those agents...Workstation 118 then displays the call destinations and their telephone numbers, at step 408, and highlights those agents who are available... imply that the selected subset is assigned a probability of relevance, since the most relevant information is being emphasized); and*

wherein in order to update the relevance of the selected messages during an evolution of the scenario the generator is

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further arranged to communicate with a scenario evolution algorithm, said scenario evolution algorithm being arranged to calculate the probabilities based on said scenario ((col. 2, lines 32-59; *analyzing the request within the context of the monitored activities to determine a subset of the requested information...which is most relevant to the monitored activities...presenting the requested information in a manner that emphasizes the subset over the rest of the requested information (e.g., highlighting the subset)* implies that the relevance, and therefore, the likelihood of the message being of use, must be calculated in order to determine which subset is most relevant).

Anderson discloses a system for providing agents of a call center with information relating to their conversation that is most probable to be helpful with the customer's issue. Anderson does not disclose wherein the selected messages include a configurable textual string, and generate text to configure the textual string.

However, Horowitz teaches a similar system for generating interactive advice. Horowitz teaches

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wherein the selected messages include a configurable textual string (col. 25, lines 9-53; *The presentation engine 106 for an embodiment of the present invention has at its disposal a text parser, which parses text input provided by the customer 2 into a numerically structured format that can be used by the system in generating responses. The input parser can also reverse the parse, so that it presents numerically structured advice sequence in English prose*), and

generate text to configure the textual string (col. 25, lines 9-53; *The presentation engine 106 for an embodiment of the present invention has at its disposal a text parser, which parses text input provided by the customer 2 into a numerically structured format that can be used by the system in generating responses. The input parser can also reverse the parse, so that it presents numerically structured advice sequence in English prose*).

It would have been obvious for a person of ordinary skill in the art (PHOSITA) at the time of invention to modify the system disclosed in Anderson to incorporate wherein the selected messages include a configurable textual string, and generate text to configure the textual string as taught by Horowitz because this would provide a manner for providing the operator

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with pertinent information which the operator can then provide to the customer, thus aiding the client by providing the best information for the situation.

9. Claims 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (US 5757904), in view of Pelikan (US 7047169), as applied to claim 1, and further in view of Menard (US 20030001743).

Referring to claim 14:

Anderson discloses a similar system for providing agents of a call center with information relating to their conversation that is most probable to be helpful with the customer's issue.

Pelikan teaches a system for using probabilistic models.

However, Anderson and Pelikan do not disclose a customer's medical monitor initiates the dialog; the type of said scenario is determined from the dialog with the customer's medical monitor; and the messages are selected based on the dialog with the customer's medical monitor.

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However, Menard teaches a similar system for a call center which interacts with a personal medical device communication system.

Menard teaches

a customer's medical monitor initiates the dialog (paragraphs 99-102; *the victim V undergoes some sort of cardiac problem, such as tachycardia, that causes the personal device to attempt to establish communication with a caregiver*);

the type of said scenario is determined from the dialog with the customer's medical monitor (paragraphs 99-102; *Using this transmitted data [from the medical monitor], the dispatcher or processor may then make a diagnosis and identify a treatment strategy*); and

the messages are selected based on the dialog with the customer's medical monitor (paragraphs 99-102; *processor...may then make a diagnosis and identify a treatment strategy implies selecting a message*).

It would have been obvious for a person of ordinary skill in the art (PHOSITA) at the time of invention to modify the system disclosed in Anderson and Pelikan to incorporate a customer's

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medical monitor initiates the dialog; the type of said scenario is determined from the dialog with the customer's medical monitor; and the messages are selected based on the dialog with the customer's medical monitor as taught by Menard because this would provide a manner for providing the operator with pertinent information that the operator can use in helping the customer with a situation, thus aiding the client by providing the best information for the situation.

Referring to claim 15:

Anderson discloses a similar system for providing agents of a call center with information relating to their conversation that is most probable to be helpful with the customer's issue.

Pelikan teaches a system for using probabilistic models.

However, Anderson and Pelikan do not disclose a customer's medical monitor initiates the dialog; the type of said scenario is determined from the dialog with the customer's medical monitor; and the messages are selected based on the dialog with the customer's medical monitor.

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However, Menard teaches a similar system for a call center which interacts with a personal medical device communication system. Menard teaches wherein the type of scenario includes at least one of a request for medical assistance and support during a medical emergency (paragraphs 99-102; *the victim V undergoes some sort of cardiac problem, such as tachycardia, that causes the personal device to attempt to establish communication with a caregiver*).

It would have been obvious for a person of ordinary skill in the art (PHOSITA) at the time of invention to modify the system disclosed in Anderson and Pelikan to incorporate wherein the type of scenario includes at least one of a request for medical assistance and support during a medical emergency as taught by Menard because this would provide a manner for providing the operator with pertinent information that the operator can use in helping the customer with a situation, thus aiding the client by providing the best information for the situation.

Response to Amendment

1. The amendment filed 22 November 2010 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the

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disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

a. "at least one computer"

Applicant is required to cancel the new matter in the reply to this Office Action.

Response to Arguments

Applicant's arguments filed 22 November 2010 have been fully considered but they are not persuasive.

35 USC §103

Applicant states what the prior art teaches, and then states that the prior art does not teach the claim limitations, but does not state how what the prior art teaches is allegedly different from what applicant is claiming.

Examiner notes that the current rejections have been modified and some of applicant's arguments no longer apply. Examiner addresses the still applicable arguments below.

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Regarding claim 1:

Applicant argues that the prior art does not teach the claimed limitations. Examiner respectfully disagrees.

Applicant further argues that Scahill does not teach assigning a probability to each message, but merely a relevance (Anderson also uses "relevance" rather than "probability"). Examiner respectfully disagrees and points out using different words or phrases to describe the same functionality does not effectively serve to patentably distinguish the claimed invention over the prior art. By determining how relevant a message is and emphasizing the chosen messages, Anderson is determining how likely (or probable) the message is to be the appropriate message.

Applicant then argues that Pelikan does not teach "wherein for the evolution of the default scenario the probability is loaded by the communication script from a prestored look-up table comprising default probabilities." In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the

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rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Anderson discloses determining the evolution of the default scenario and it is combined with Pelikan, which applicant admits teaches using prestored look-up tables. As is explained above, it would have been obvious to a person having ordinary skill in the art to combine the prior art, which together teach the claimed element.

Claim 13 incorporates the arguments applied to claim 1.

Examiner responds as above.

Referring to claim 14:

Applicant argues that the bystander initiates the dialog.

Examiner respectfully disagrees. Paragraph 98 of Menard states that the personal device 100 may be, for example, a pacemaker.

a customer's medical monitor initiates the dialog. Paragraph 99 continues, "...the victim V undergoes some sort of cardiac problem, such as tachycardia, that causes the personal device 100 to attempt to establish communication with a caregiver."

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Applicant also argues that the prior art does not teach "the type of said scenario is determined from the dialog with the customer's medical monitor." Examiner respectfully disagrees. Menard states, in paragraph 102, "Using this transmitted data [from the medical monitor], the dispatcher or processor may then make a diagnosis and identify a treatment strategy."

Information about the scenario is being transferred from the medical device to the dispatcher or processor and this information is being used to determine the type of situation. For example, if the medical device is a pacemaker, as is suggested by the art, the pacemaker can transmit information about whether the patient's heart is beating erratically, too fast, too slow, or not at all. The call center then uses this information to determine what type of problem the patient is having and what aid should be rendered in response.

Claims 15 and 16 incorporates the arguments applied to claim 1.

Examiner responds as above.

Referring to claim 7:

Applicant argues that Menard does not teach a "medical monitor with a communication script arranged to follow a scenario

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corresponding to the medical monitor by presenting a plurality of messages to the operator." Examiner respectfully disagrees. In paragraph 102, Menard states, "...the dispatcher D or the processor P may then send an inquiry through the personal wireless device 600 to the personal device 100, instructing the personal device 100 to send various data..." By sending data when requested to do so, the medical monitor is sending a communication which is in accordance with a scenario.

Applicant also argues that the prior art does not teach "the type of said scenario is determined from the dialog with the customer's medical monitor." This is similar to an argument with respect to claim 14, and Examiner directs applicant to Examiner's response above.

Applicant then argues that the prior art does not teach determining and updated the current state of the scenario based on the dialog with the medical monitor. Examiner respectfully disagrees. Menard states, in paragraphs [0092] and [0105], *In one embodiment, the cellular telephone, the base station, emergency monitoring center, or other device displays real time information from the personal device 100 and When the responding personnel R reach the victim, they may establish communications*

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through local area wireless 330 from their medical device interface 500 to the victim's personal device 100, request data from the personal device 100, and request the personal device 100 to take some action, such as dispensing medication to the victim V. Their medical device interface 500 may also establish communication with the dispatcher D or medical caregiver using network based communications 360. When the responders are receiving information and passing information to the medical device, the current state of the scenario is being updated. Additionally, the medical monitor can communicate current information to the emergency center, thereby constantly updating the scenario.

The remainder of applicant's arguments as to claim 7 are similar to claim 1, and Examiner directs applicant to Examiner's response above.

Referring to claim 18:

Applicant argues that the prior art does not teach questions and instructions between the operator and the customer, stating that the customer is the medical monitor. Examiner respectfully disagrees. There is no basis for "customer" as it is used in

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claim 18, to be interpreted as the medical monitor. Claim 18 is dependent upon claim 7, which states it is directed to "A system arranged to route a dialog between an operator of a call center and a customer, said system comprising: a customer's medical monitor..." The medical monitor is not the customer; it is a device belonging to the customer.

Referring to claim 9:

Applicant's first several arguments are similar to arguments which have already been responded to by Examiner - see above.

Claim 20 incorporates arguments similar to those applied to the previous claims. Examiner responds as above.

Rejections under 35 USC §101

Applicant first argues that Examiner failed to use the proper test under *Bilski*. Examiner points out that the final rejection was mailed on June 22, 2010, prior to the release of the Supreme Court's decision on June 28, 2010. Examiner has adjusted the rejection under 35 USC §101 to comport with the new guidelines.

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Applicant then argues that claim 1 meets the machine or transformation test. Examiner respectfully disagrees.

Applicant states that the "telephonic equipment" meets the requirement of a particular machine. However, telephonic equipment is not a *particular* machine (it could be any of a variety of types of cell phones, telephones, or computers, just to name a few examples) and further, this step does not impose meaningful limits on the scope of the method claim.

Applicant continues the argument stating that the claim meets the transformation test since the customer call is an electrical signal which is transformed into an operator-readable text list displayed on a monitor. This is not the sort of transformation which is contemplated by the machine or transformation test.

Bilski states, "Purported transformations or manipulations simply of public or private legal obligations or relationships, business risks, or other such abstractions cannot meet the test because they are not physical objects or substances and they are not representative of physical objects or substances."

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Rejections under 35 USC §112

These rejections are new and as such, applicant's arguments are moot.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CARRIE A. STRODER whose telephone number is (571)270-7119. The examiner can normally be reached on Monday - Thursday 8:00 a.m. - 5:00 p.m. ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jan Mooneyham can be reached on (571)272-6805. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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