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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.

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Office Action Summary

Application No. 14/790,957	Applicant(s) Wong et al.	
Examiner GERARDO ARAQUE JR	Art Unit 3689	AIA Status Yes

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

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 11/5/2018.
 - A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.
- 2a) This action is **FINAL**.
- 2b) This action is non-final.
- 3) An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.
- 4) Since this application is in condition for allowance 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.

Disposition of Claims*

- 5) Claim(s) 1-8, 10-18 and 20-22 is/are pending in the application.
 - 5a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 6) Claim(s) _____ is/are allowed.
- 7) Claim(s) 1-8, 10-18 and 20-22 is/are rejected.
- 8) Claim(s) _____ is/are objected to.
- 9) Claim(s) _____ are subject to restriction and/or election requirement

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

- 10) The specification is objected to by the Examiner.
- 11) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

- a) All b) Some** c) None of the:
- 1. Certified copies of the priority documents have been received.
- 2. Certified copies of the priority documents have been received in Application No. _____.
- 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b)
 Paper No(s)/Mail Date 10/16/2018.
- 3) Interview Summary (PTO-413)
 Paper No(s)/Mail Date _____.
- 4) Other: _____.

Notice of Pre-AIA or AIA Status

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

DETAILED CORRESPONDENCE

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on **November 5, 2018** has been entered.

Status of Claims

3. **Claims 1, 11, and 21** have been **amended**.
4. **Claims 9 and 19** have been **cancelled**.
5. **No claims** have been **added**.

Claim Rejections - 35 USC § 101

6. 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.

7. **Claims 1 – 8, 10 – 18, and 20 – 22** are rejected under 35 U.S.C. 101 because the claimed invention is directed to a non-statutory subject matter.

When considering subject matter eligibility under 35 U.S.C. § 101, it must be determined whether the claim is directed to one of the four statutory categories of invention, i.e., process, machine, manufacture, or composition of matter. If the claim

does fall within one of the statutory categories, it must then be determined whether the claim is directed to a judicial exception (i.e., law of nature, natural phenomenon, and abstract idea), and if so, it must additionally be determined whether the claim is a patent-eligible application of the exception. If an abstract idea is present in the claim, any element or combination of elements in the claim must be sufficient to ensure that the claim amounts to significantly more than the abstract idea itself. Examples of abstract ideas include fundamental economic practices, certain methods of organizing human activities, an idea itself, and mathematical relationships/formulas. *Alice Corporation Pty. Ltd. v. CLS Bank International, et al.*, 573 U.S. __ (2014).

In the instant case, **claims 1 – 10** are directed to a system (i.e., machine), **claims 11 – 20** are directed to a method (i.e. process), and **claims 21 and 22** are directed to a computer readable storage device (i.e., an article of manufacture). Thus, each of the claims falls within one of the four statutory categories. Nevertheless, the claims fall within the judicial exception of an abstract idea.

Claims 1 – 8, 10 – 18, and 20 – 22 are directed to an abstract idea of customer service at a call center, specifically, identifying a caller, connecting the customer to a live agent, providing a communication session with the caller and agent, and placing additional callers in a queue if an agent is not available. For instance, in *Alice Corp.* the Supreme Court found that “intermediated settlement” was a fundamental economic practice, which is an abstract idea.

In this case, the claimed invention is directed to a method of organizing human activities and an idea of itself because the claimed invention is directed towards:

concepts relating to interpersonal and intrapersonal activities, such as managing transactions between people, satisfying legal obligations, and managing human mental activity (*providing customer service*); collecting information, analyzing it, and displaying certain results of the collection and analysis (*collecting and analyzing caller requests, agent availability, and queue information in order to determine if an agent is available to assist the next caller in the queue*; see **Electric Power Group**); creating an index, and using that index to search and retrieve data (*creating a queue of callers and agent availability in order to search and retrieve the next caller and next available agent*; see **Int. Ventures v. Erie Indemnity '434 patent**);

an idea standing alone such as an uninstanitated concept, plan or scheme, as well as a mental process (thinking) that "can be performed in the human mind, or by a human using pen and paper; collecting and comparing known information (*collecting and comparing queue information and agent availability, as well as identification information*; see **Classen**); collecting information, analyzing it, and displaying certain results of the collection and analysis (*collecting and analyzing caller requests, agent availability, and queue information in order to determine if an agent is available to assist the next caller in the queue*; see **Electric Power Group**); comparing new and stored information and using rules to identify options (*comparing agent availability and caller request information (new) and queue information (stored) and using rules (is an agent available and who is next in line) to identify options (connecting an available agent to the next person in line)*; see **Smartgene**); data recognition and storage (*recognizing and storing queue information, user identification information, and availability information*; see **Content Extraction**),

which results in it being a method of organizing human activities and an idea of itself.

Step 2A: Is the claim **directed** to a law of nature, a natural phenomenon, or an abstract idea? As was discussed above, the claimed invention is, indeed, directed to towards performing the well-understood, routine, and conventional activities in the technical field of customer service at a call center, i.e. receiving caller requests and routing the requests to the next available agent. Independent **claims 1, 11, and 21** are directed towards the well-understood, routine, and conventional activities of customer service at a call center. As a result, the Examiner asserts that the claimed invention is, indeed, directed towards a judicial exception of an abstract idea and is, therefore, not eligible for the “streamlined analysis”.

The Examiner further reminds the applicant that the provision of evidence or court decisions that are specifically directed towards the claimed invention or the identified abstract idea is insufficient to eliminate any doubt that the claimed invention is directed to a judicial exception. The Examiner asserts that an argument that documentary evidence has not been provided in identifying the abstract idea would be unpersuasive. In order to establish that a claim is directed to an abstract idea, the Examiner must provide a reasoned rationale that identifies the concept recited in the claim and explain why it is considered an abstract idea. This can be done by comparing the recited concepts courts have found to be abstract ideas, as was discussed above. Therefore, the Examiner’s burden has been met and a proper *prima face* case has been made.

Further, as a reminder, the July 2015 Update: Subject Matter Eligibility explains that courts consider the determination of whether a claim is eligible, which involves identifying whether an exception such as an abstract idea is being claimed, to be a question of law. Accordingly, courts do not rely on evidence, such as publications, to find that a claimed concept is a judicial exception. For example, in *Planet Bingo v VKGS LLC*, it was stated:

“Moreover, the claims here are ***similar to the claims at issue in Bilski v. Kappos***, 130 S. Ct. 3218 (2010), ***and Alice***, 134 S. Ct. 2347, which the Supreme Court held were directed to “abstract ideas.” ***For example, the claims here recite methods and systems for “managing a game of Bingo.”*** ’646 patent col. 8 l. 46; *see also id.* col. 9 l. 33; ’045 patent col. 8 l. 64. This is ***similar to the kind of “organizing human activity” at issue in Alice***, 134 S. Ct. at 2356. And, although the ’646 and ’045 patents are ***not drawn to the same subject matter*** at issue in *Bilski* and *Alice*, ***these claims are directed to the abstract idea of “solv[ing a] tampering problem and also minimiz[ing] other security risks” during bingo ticket purchases.*** Appellant’s Br. 10, 20. ***This is similar to the abstract ideas of “risk hedging” during “consumer transactions,” Bilski***, 130 S. Ct. at 3231, ***and “mitigating settlement risk” in “financial transactions,” Alice***, 134 S. Ct. at 2356–57, that the Supreme Court found ineligible. Thus, we hold that the subject matter claimed in the ’646 and ’045 patents is directed to an abstract idea.”

Finally, the Interim Eligibility Guidelines at 74625 state that **“if there is doubt as to whether the applicant is effectively seeking coverage for a judicial exception itself, the full analysis should be conducted to determine whether the claim recites significantly more than the judicial exception.”** Further yet still, the July 2015 Guidelines are state:

“In particular, the initial burden is on the examiner to explain why a claim or claims are unpatentable clearly and specifically, so that applicant has sufficient notice and is able to effectively respond. For subject matter eligibility, the examiner’s burden is met by clearly articulating the reason(s) why the claimed invention is not eligible, for example by providing a reasoned rationale that identifies the judicial exception recited in the claim

and why it is considered an exception, and that identifies the additional elements in the claim (if any) and explains why they do not amount to significantly more than the exception. This rationale may rely, where appropriate, on the knowledge generally available to those in the art, on the case law precedent, on applicant's own disclosure, or on evidence.

...

Accordingly, courts do not rely on evidence that a claimed concept is a judicial exception, and in most cases resolve the ultimate legal conclusion on eligibility without making any factual findings.

...

Alice Corp., Myriad, Mayo, Bilski, Diehr, Flook and Benson relied solely on comparisons to concepts found to be exceptions in past decisions when identifying judicial exceptions.

...

Alice Corp., Bilski, Diehr, Flook and Benson did not cite any evidence in support of the significantly more inquiry, even where additional elements were identified as well-understood, routine and conventional in the art. *Mayo* did not cite any evidence in support of identifying additional elements as mere field-of-use or data gathering steps, but did cite the patent's specification when identifying other limitations as well-understood, routine and conventional."

(Pages 6 - 7)

Therefore, the full analysis under *Alice* is still appropriate because applicant's remarks have not eliminated all doubt that the invention is directed to a judicial exception.

Although, one may argue that the claimed invention does not seek to "tie up" the exception because of the claimed invention's narrow scope, the Examiner asserts that clever draftsmanship of further narrowing the abstract idea does not change the fact that the invention is still directed towards an abstract idea. Here, the claimed invention

is directed towards a similar scenario because the claimed invention is narrowing the abstract idea of customer service at a call center, specifically, using video conferencing to communicate and prioritizing a queue based on the user's identity, i.e. the claimed invention is merely implementing well-known business practices and implementing them in a computer environment that is comprised of generic computing devices to perform generic functions, or, more specifically, applies them in the aforementioned well-understood, routine, and conventional activities that are known in the technical field of customer service at a call center.

The CAFC stated the following in *Electric Power Group, LLC v Alstom S.A.*:

“Information as such is an intangible. See *Microsoft Corp. v. AT & T Corp.*, 550 U.S. 437, 451 n.12 (2007); *Bayer AG v. Housey Pharm., Inc.*, 340 F.3d 1367, 1372 (Fed. Cir. 2003). Accordingly, we have treated collecting information, including when limited to particular content (which does not change its character as information), as within the realm of abstract ideas. See, e.g., *Internet Patents*, 790 F.3d at 1349; *OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1363 (Fed. Cir. 2015); *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat’l Ass’n*, 776 F.3d 1343, 1347 (Fed. Cir. 2014); *Digitech Image Techs., LLC v. Elecs. for Imaging, Inc.*, 758 F.3d 1344, 1351 (Fed. Cir. 2014); *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1370 (Fed. Cir. 2011). In a similar vein, we have treated analyzing information by steps people go through in their minds, or by mathematical algorithms, without more, as essentially mental processes within the abstract-idea category. See, e.g., *TLI Commc’ns*, 823 F.3d at 613; *Digitech*, 758 F.3d at 1351; *SmartGene, Inc. v. Advanced Biological Labs., SA*, 555 F. App’x 950, 955 (Fed. Cir. 2014); *Bancorp Servs., L.L.C. v. Sun Life Assurance Co. of Canada (U.S.)*, 687 F.3d 1266, 1278 (Fed. Cir. 2012); *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1372 (Fed. Cir. 2011); *SiRF Tech., Inc. v. Int’l Trade Comm’n*, 601 F.3d 1319, 1333 (Fed. Cir. 2010); see also *Mayo*, 132 S. Ct. at 1301; *Parker v. Flook*, 437 U.S. 584, 589–90 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972). And we have recognized that merely presenting the results of abstract processes of collecting and analyzing information, without more (such as identifying a particular tool for presentation), is abstract as an ancillary part of such collection and analysis. See, e.g., *Content Extraction*, 776 F.3d at 1347; *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 715 (Fed. Cir. 2014).”

Also, in *BuySafe, Inc. v. Google, Inc.* (Fed. Cir. 2014), the court stated that "abstract ideas, no matter how groundbreaking, innovative, or even brilliant, are outside what the statute means by "new and useful process, machine, manufacture, or composition of matter", and reference is made to *Mryiad* by the court for this position. Also stated in *BuySafe* is

"In defining the excluded categories, the Court has ruled that the exclusion applies if a claim involves a natural law or phenomenon or abstract idea, even if the particular natural law or phenomenon or abstract idea at issue is narrow. Mayo, 132 S. Ct. at 1303. The Court in Mayo rejected the contention that the very narrow scope of the natural law at issue was a reason to find patent eligibility, explaining the point with reference to both natural laws and one kind of abstract idea, namely, mathematical concepts."

See also *OIP Techs.*, 788 F3.d at 1362-63, stating:

"Lastly, although the claims limit the abstract idea to a particular environment that does not make the claims any less abstract for the step 1 analysis."

Again, the Examiner would like to reiterate that this is a rejection under 35 USC 101 and not a rejection under 35 USC 102/103.

Therefore, because independent **claims 1, 11, and 21** include an abstract idea, the claims must be reviewed under Part II of the Alice Corp. analysis to determine whether the abstract idea has been applied in an eligible manner.

Step 2B: The claim(s) does not include additional element that are sufficient to amount to significantly more than the judicial exception because the claim recited generically computer elements (e.g. a computing device) which do not add a meaningful limitation to the abstract idea because they would be routine in any computer implementation.

The Examiner asserts that the claimed invention does not further or improve upon the technology or the technical field as merely having a general purpose device to perform the steps of the abstract idea is nothing more than having the general purpose device perform the well-understood, routine, and conventional activities already known in customer service at a call center, which results in the claimed invention not amounting to being “significantly more” than the judicial exception. The Examiner further notes that the decision of *DDR Holdings* does not apply as, unlike *DDR Holdings*, the claimed invention is not “deeply rooted in the technology” since: 1.) humans have, for some time, longed been known to perform the well-understood, routine, and conventional activities in the field of customer service at a call center, e.g., **gathering the necessary information pertaining to the caller and call center in order to route the next caller to an available agent**; and 2.) the well-understood, routine, and conventional activities of the abstract idea does not change, alter, or improve upon how the technology, i.e. the computing device, fundamentally functions. The invention further fails to improve upon the technical field (customer service at a call center) because merely using the general purpose device to perform the well-understood, routine, and conventional activities of the customer service at a call center and that such use of the technology has been held to not be an “inventive concept” as the general purpose device is being used for the very purpose that such device are known to be used for, e.g. more efficient, faster, more cost-efficient, and etc. **(See applicant’s specification ¶ 17, 20, 38, 61 – 73 wherein the invention is utilizing generic computing devices, network infrastructure, and communication techniques/technology as tools in order to perform the well-understood, routine,**

and conventional activities of the abstract idea) Looking at the limitations as an ordered combination adds nothing that is not already present when looking at the elements taken individually. There is no indication that the combination of elements improves the functioning of a computer or improves any other technology. Their collective functions merely provide conventional computer implementation.

Further still, unlike *Enfish* where the claims were directed to a specific improvement to the computer's functionality at the time of the invention and where *Enfish* explicitly defined the specific improvements along with the technical aspects of the improvements to demonstrate the improvements to existing technology, the Examiner asserts that the instant invention does not. In order to determine whether the claimed invention is directed towards an abstract idea and/or that it is "significantly more" than the abstract idea, *Alice* stated that the following considerations must be taken into account before making this determination. Specifically, in *Enfish, LLC v Microsoft Corporation, Fiserv, Inc., Intuit, Inc., Sage Software, Inc., Jack Henry & Associates, Inc.* the courts stated the following:

"We do not read *Alice* to broadly hold that all improvements in computer-related technology are inherently abstract and, therefore, must be considered at step two. Indeed, some improvements in computer-related technology when appropriately claimed are undoubtedly not abstract, such as a chip architecture, an LED display, and the like. Nor do we think that claims directed to software, as opposed to hardware, are inherently abstract and therefore only properly analyzed at the second step of the *Alice* analysis. Software can make non-abstract improvements to computer technology just as hardware improvements can, and sometimes the improvements can be accomplished through either route. We thus see no reason to conclude that all claims directed to improvements in computer-related technology, including those directed to software, are abstract and necessarily analyzed at the second step of *Alice*, nor do we believe that *Alice* so directs. Therefore, we find it relevant to ask whether the claims are directed to an improvement to computer functionality versus

being directed to an abstract idea, even at the first step of the *Alice* analysis.”

“For that reason, the first step in the *Alice* inquiry in this case asks whether the focus of the claims is on the specific asserted improvement in computer capabilities (i.e., the self-referential table for a computer database) or, instead, on a process that qualifies as an “abstract idea” for which computers are invoked merely as a tool. ... In this case, however, the plain focus of the claims is on an improvement to computer functionality itself, not on economic or other tasks for which a computer is used in its ordinary capacity.”

(Page 11)

Enfish provided a background on the state of the art, at the time of the invention, in the technology, namely, with regards to the management of information in a computer database. This served as reference material in order to identify the improvement or, more specifically, establish that the claimed invention of *Enfish* was deeply rooted in the technology and was seeking to remedy a problem that arose from the technology. That is to say, *Enfish* provided a background explanation with regards to the state of the art to establish the flaws that arose from data management and demonstrated that the inventive concept of *Enfish* laid with the improvement of this technology. It was established in *Enfish* that the claimed invention did not contain an abstract idea because it was not directed towards a fundamental economic practice, a method of organizing human activities, an idea of itself, or mathematical relationships/formulas because the inventive concept was directed towards the improvement of the technology, specifically, i.e. although the invention was directed towards the organization of information the invention of *Enfish* was not simply relying on or applying well-understood, routine, and conventional concepts known in the technical field or describing the use of generic devices and technologies to perform an abstract idea, but

was, in fact, directed and seeking to improve upon the technology by addressing issues known in the technology. This was further made evident by the disclosure presented in the specification of *Enfish*, which the courts stated the following:

“The patents teach that multiple benefits flow from this design. First, the patents disclose an indexing technique that allows for faster searching of data than would be possible with the relational model. *See, e.g.*, ’604 patent, col. 1 ll. 55–59; *id.* at col. 2 l. 66–col. 3 l. 6. Second, the patents teach that the self-referential model allows for more effective storage of data other than structured text, such as images and unstructured text. *See, e.g.*, ’604 patent, col. 2 ll. 16–22; col. 2 ll. 46–52.”

(Page 7)

“Finally, the patents teach that the self-referential model allows more flexibility in configuring the database. *See, e.g.*, ’604 patent, col. 2 ll. 27–29. In particular, whereas deployment of a relational database often involves extensive modeling and configuration of the various tables and relationships in advance of launching the database, *Enfish* argues that the self-referential database can be launched without such tasks and instead configured on-the-fly. *See* Oral Argument at 1:00–2:15 <http://oralarguments.ca/cfc.uccourts.gov/default.aspx?fl=2015-1244.mp3>; *see also* ’604 patent, col. 7 ll. 10–22. For instance, the database could be launched with no or only minimal column definitions.”

(Page 7)

Here, the claims are not simply directed to *any* form of storing tabular data, but instead are specifically directed to a *self-referential* table for a computer database. ... (“The present invention improves upon prior art information search and retrieval systems by employing a flexible, selfreferential table to store data.”)

(Pages 14 – 15)

The specification also teaches that the self-referential table functions differently than conventional database structures. According to the specification, traditional databases, such as “those that follow the relational model and those that follow the object oriented model,” ’604 patent, col. 1 ll. 37–40, are inferior to the claimed invention. While “[t]he structural requirements of current databases require a programmer to predefine a structure and subsequent [data] entry must conform to that

structure,” *id.* at col. 2 ll. 10–13, the “database of the present invention does not require a programmer to preconfigure a structure to which a user must adapt data entry.” *id.* at col 2 ll. 27–29. Moreover, our conclusion that the claims are directed to an improvement of an existing technology is bolstered by the specification’s teachings that the claimed invention achieves other benefits over conventional databases, such as increased flexibility, faster search times, and smaller memory requirements. *See id.* at col 2 ll. 23–27; *see also Openwave Sys., Inc. v. Apple Inc.*, 808 F.3d 509, 513–14 (Fed. Cir. 2015) (finding that a specification’s disparagement of the prior art is relevant to determine the scope of the invention).

(Page 15)

In the case of the instant invention, the Examiner asserts that the specification lacks any disclosure of evidence to demonstrate that the invention is seeking to improve upon the technology or, more specifically, that the claimed invention is directed towards addressing and improving upon an issue that arose from the technology, but merely demonstrating that the claimed invention is directed towards the abstract idea and merely applying or utilizing generic computing devices performing their generic functions to carry out the well-understood, routine, and conventional activities in the technical field of customer service at a call center due to the benefits that computing devices provided, i.e. faster, more efficient, and etc.. The courts further stated:

“The Supreme Court has not established a definitive rule to determine what constitutes an “abstract idea” sufficient to satisfy the first step of the *Mayo/Alice* inquiry. *See id.* at 2357. Rather, both this court and the Supreme Court have found it sufficient to compare claims at issue to those claims already found to be directed to an abstract idea in previous cases. “[The Court] need not labor to delimit the precise contours of the ‘abstract ideas’ category in this case. It is enough to recognize that there is no meaningful distinction between the concept of risk hedging in *Bilski* and the concept of intermediated settlement at issue here.” *Alice*, 134 S. Ct. at 2357; *see also OIP Techs.*, 788 F.3d at 1362. **For instance, fundamental economic and conventional business practices are often found to be abstract ideas, even if performed on a computer.** *See, e.g., OIP Techs.*, 788 F.3d at 1362–63.”

(Page 10)

“Moreover, we are not persuaded that the invention’s ability to run on a general-purpose computer dooms the claims. Unlike the claims at issue in *Alice* or, more recently in *Versata Development Group v. SAP America, Inc.*, 793 F.3d 1306 (Fed. Cir. 2015), which Microsoft alleges to be especially similar to the present case, Appellee’s Br. 18, *see also* Oral Argument at 15:40–18:15, the claims here are directed to an improvement in the functioning of a computer. ***In contrast, the claims at issue in Alice and Versata can readily be understood as simply adding conventional computer components to well-known business practices.*** *See Alice*, 134 S. Ct. at 2358–60; *Versata Dev. Grp.*, 793 F.3d at 1333–34 (***computer performed “purely conventional” steps to carry out claims directed to the “abstract idea of determining a price using organization and product group hierarchies”***); *see also Mortgage Grader, Inc. v. First Choice Loan Servs. Inc.*, 811 F.3d 1314, 1324–25 (Fed. Cir. 2016) (***claims attaching generic computer components to perform “anonymous loan shopping” not patent eligible***); *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1367–69 (Fed. Cir. 2015) (***claims adding generic computer components to financial budgeting***); *OIP Techs.*, 788 F.3d at 1362–64 (***claims implementing offer-based price optimization using conventional computer activities***); *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 714–17 (Fed. Cir. 2014) (***claims applying an exchange of advertising for copyrighted content to the Internet***); *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1354–55 (Fed. Cir. 2014) (***claims adding generic computer functionality to the formation of guaranteed contractual relationships***). ***And unlike the claims here that are directed to a specific improvement to computer functionality, the patent ineligible claims at issue in other cases recited use of an abstract mathematical formula on any general purpose computer, see Gottschalk v. Benson***, 409 U.S. 63, 93 (1972), *see also Alice*, 134 S. Ct. at 2357–58, ***or recited a purely conventional computer implementation of a mathematical formula, see Parker v. Flook***, 437 U.S. 584, 594 (1978); *see also Alice*, 134 S. Ct. at 2358, ***or recited generalized steps to be performed on a computer using conventional computer activity, see Internet Patents***, 790 F.3d 1348–49 (***claims directed to abstract idea of maintaining computer state without recitation of specific activity used to generate that result***), *Digitech Image Techs., LLC v. Electrs. For Imaging, Inc.*, 758 F.3d 1344, 1351 (Fed. Cir. 2014) (***claims directed to abstract idea of “organizing information through***

mathematical correlations” with recitation of only generic gathering and processing activities).

(Pages 16 – 17)

“In sum, the self-referential table recited in the claims on appeal is a specific type of data structure ***designed to improve the way a computer stores and retrieves data in memory. The specification’s disparagement of conventional data structures, combined with language describing the “present invention” as including the features that make up a self-referential table, confirm that our characterization of the “invention” for purposes of the § 101 analysis has not been deceived by the “draftsman’s art.” Cf. Alice, 134 S. Ct. at 2360.*** In other words, we are not faced with a situation where general-purpose computer components are added post-hoc to a fundamental economic practice or mathematical equation. ***Rather, the claims are directed to a specific implementation of a solution to a problem in the software arts.*** Accordingly, we find the claims at issue are not directed to an abstract idea.”

(Page 18)

As a result, the Examiner asserts that, in light of the applicant’s specification (see *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015); see *Genetic Techs. Ltd. v. Merial L.L.C.*, 2016 WL 1393573, at *5 (Fed. Cir. 2016) (inquiring into “the focus of the claimed advance over the prior art”)), the claimed invention does not lie with the improvement of a technology, identifying and resolving an issue that arose from the technology, or that the claimed invention is “deeply rooted in the technology”, but that the claimed invention is directed towards the abstract idea of customer service at a call center and merely utilizing generic computing devices (**see applicant specification citations provided above**) in order to perform the well-understood, routine, and conventional activities known in the field of customer service at a call center. As was found in *Alice Corp v CLS Bank*, the claims in *Alice Corp v CLS Bank* also required a computer that processed streams of data, but nonetheless were

found to be abstract. There is no “inventive concept” in the claimed invention's use of a general purpose computing devices to perform well-understood, routine, and conventional activities commonly used in the technical field, in this case, customer service at a call center.

Consequently, the Examiner asserts that the claimed invention is, in fact, more closely directed related to the decision of, *inter alia*, *TLI Communications, LLC v AV Automotive, LLC*, in that the claimed invention is merely relying on the use of a generic computing device to perform the abstract idea of customer service at a call center. As was done in *TLI Communications*, the Examiner refers to the specification to determine whether the claimed invention amounts to “significantly more” or whether the claimed invention is directed towards the improvement of the technological arts.

Turning to the specification, the Examiner finds that the invention relies on the use of a general purpose computer that is being utilized to store, retrieve, and organize information that can be performed using pen and paper (**see applicant specification citations provided above**). The Examiner asserts that, unlike *Enfish*, which was directed towards improving how a computer can more efficiently store and manage data, the claimed invention is not directed towards improving how the computer manages the information, but merely directed towards using generic communication techniques in order to allow two humans to communicate with one another. Although the applicant has stated that the invention is supposed to be directed to an improved method of digital communication, the Examiner asserts that the claimed invention is not directed towards improving the technology in order to result in an improved method and is, therefore, directed towards simply using the technology as a tool in order to establish

the communication necessary in order to perform the well-understood, routine, and conventional activities of the abstract idea. Although the applicant is using a variety of computing devices, the Examiner asserts that the claimed invention amounts to simply using generic devices that have long existed in order to perform the well-established technique of video conferencing. The Examiner asserts that video conferencing has existed long before the applicant's effective filing date and the inclusion of facial recognition is insufficient to transform the claimed invention from an abstract idea to a non-abstract idea as the applicant is simply relying on generic facial recognition technology and techniques, i.e. not improving upon facial recognition, in order to perform its original generic function, i.e. user identification. As will be discussed below, simply providing a computer to perform well-understood, routine, and conventional activities of an abstract idea is insufficient to transform and invention into a non-abstract idea or a demonstration of an improvement to the abstract idea or the technology.

As a result, the Examiner asserts that the claimed invention is similar to the analysis and decision of *Electric Power Group, LLC v. Alstom S.A.*, where the CAFC stated that, "the claims do not go beyond requiring the collection, analysis, and display of available information in a particular field, stating those functions in general terms, without limiting them to technical means for performing the functions that are arguably an advance over conventional computer and network technology. The claims, defining a desirable information-based result and not limited to inventive means of achieving the result." Further still, as was further discussed in *Electric Power Group, LLC v. Alstom S.A.*, "there is a critical difference between patenting a particular concrete solution to a

problem and attempting to patent the abstract idea of a solution to the problem in general.”

Further, as has been discussed throughout the Office Action, the type of information that is being managed is insufficient to transform an abstract idea into a non-abstract idea or to demonstrate that the invention is “significantly more” than the abstract idea. Similar to *Electric Power Group, LLC v. Alstom S.A.*, the claimed invention is simply limiting the claims to a particular environment and is, without more, insufficient to transform them into a patent-eligible applications of the abstract idea at their core. The Examiner asserts that the claims are directed towards the type of information and selecting information for collection, analysis, and display, which do nothing significant to differentiate a process from ordinary mental processes. The claims to not require a new source or type of information, or new techniques for analyzing it and, accordingly, “do not invoke any assertedly inventive programming”, but “merely require the selection and manipulation of information—to provide a “humanly comprehensible” amount of information useful for users.” The claims “do not require any nonconventional computer, network, or display, or even a ‘non-conventional and non-generic arrangement of known, conventional pieces,’ but merely call for performance of the claimed information collection, analysis, and display functions using a generic computing device, display, and network. ... Nothing in the claims, understood in light of the specification, requires anything other than off-the-shelf, conventional computer, network, and display technology for gathering, sending, and presenting the desired information. ... ***We have repeatedly held that invocations of computers and***

networks that are not even arguably invention are ‘insufficient to pass the test of an inventive concept in the application’ of an abstract idea.”

The specification continues on with disclosing how the disclosed generic computing environment and devices are utilized, for their intended purpose, in order to carry out the claimed invention or, more specifically, the abstract idea of customer service at a call center. It is clear from the applicant’s specification that the “claims here are not directed to a specific improvement to computer functionality. Rather, they are directed to the use of conventional or generic technology in a nascent but well-known environment, without any claim that the invention reflects an inventive solution to any problem by combining the two.” (Page 8 *TLI Communications, LLC v AV Automotive, LLC*) Similar to *TLI Communications*, the Examiner asserts that the instant invention does not describe any new computing device or communication network/infrastructure and “fails to provide any technical details for the tangible components, but instead predominately describes the system and methods in purely functional terms.” (Page 9 *TLI Communications, LLC v AV Automotive, LLC*) The specification simply describes the components in terms of performing generic computing functions and, accordingly, “are not directed to a solution to a “technological problem” as was the case in *Diamond v Diehr*, 450 U.S. 175 (1981). Nor do the claims attempt to solve a ‘challenge particular to the Internet.’ *DDR Holdings, LLC v Hotels.com, L.P.*, 773 F.3d 1245, 1256 – 57 (Fed. Cir. 2014); cf. *Intellectual Ventures I*, 792 f.3d at 1371 (because the patent claims at issue did not “address problems unique to the Internet, ... *DDR* has no applicability.”) (Page 10 *TLI Communications, LLC v AV Automotive, LLC*) Such vague, functional descriptions of computing components/environment are insufficient to transform the

abstract idea into a patent-eligible invention. (Page 14 *TLI Communications, LLC v AV Automotive, LLC*)

Instead, the claims, as noted, are simply directed to the abstract idea of customer service at a call center. As a result, returning to the second step of the analysis, the Examiner asserts that the claims fail to recite any element that individually or as an ordered combination transform the abstract idea of customer service at a call center into a patent eligible application of that idea. “It is well-settled that mere recitation of concrete, tangible components is insufficient to confer patent eligibility to an otherwise abstract idea. Rather, the components must involve more than performance of “well-understood, routine, conventional activit[ies]’ previously known in the industry.” *Alice*, 134 S. Ct. at 2359 (quoting *Mayo*, 132 S. Ct. at 1294).” Accordingly, the Examiner asserts that the claims’ recitation of generic computing components/environment fail to add an inventive concept sufficient to bring the abstract idea into the realm of patentability.

Even if the applicant were to argue that, even if known in the prior art, the components recited in the claims cannot be “conventional” within the meaning of the *Alice* absent fact-finding by the court, the Examiner asserts that simply looking towards the specification it is clear that the invention describes the computing components/environment as either performing basic computing functions such as sending and receiving data, or performing functions “known” in the art. In other words, the claimed functions are “well-understood, routine, activit[ies]’ previously known in the industry.” *Id.* at 2359 (quoting *Mayo*, 132 S. Ct. at 1294). That is to say, the computing components/environment simply provide the environment in which the abstract idea of

customer service at a call center is carried out. Further, as was stated in *Alice* 134 S. Ct. at 2360 “Nearly every computer will include a ‘communications controller’ and a ‘data storage unit’ capable of performing basic calculation, storage, and transmission functions required by the method claims.”); *Content Extraction*, 776 F.3d at 1345, 1348 (“storing information” into memory, and using a computer to “translate shapes on a physical page into typeface characters,” insufficient confer patent eligibility); *Mortg. Grader*, 811 F.3d at 1324-25 (generic computer components such as an “interface,” “network,” and “database,” fail to satisfy the inventive concept requirement); *Intellectual Ventures I*, 792 F.3d at 1368 (a “database” and a “communication medium” “are all generic computer elements”); *BuySAFE v Google, Inc.*, 765 F.3d 1350, 1355 (Fed. Cir. 2014) (“That a computer receives and sends the information over a network—with no further specification—is not even arguably inventive.”)

Furthermore, the Examiner further refers to *Affinity Labs of Texas, LLC v DirectTV, LLC* as the instant invention is also “...not tied to any particular technology and can be implemented in myriad ways...,” as well as not being directed to a particular way of performing any of the claimed functions, i.e. the claimed invention is simply directed towards generally claiming the use of generic technology and devices to perform generic functions. Again, the “Supreme Court and this court have repeatedly made clear that merely limiting the field of use of the abstract idea to a particular existing technological environment does not render the claims any less abstract.” “Even if all the details contained in the specification were imported into the ’379 claims, the result would still not be a concrete implementation of the abstract idea. In fact, the specification underscores the breadth and abstract nature of the idea embodied in the

claims. The specification describes the wireless communication.” “While the claim required the use of concrete, tangible components such as a telephone unit and a server, the court noted that the specification made clear that the recited physical components “merely provide a generic environment in which to carry out the abstract idea of classifying and storing digital images in an organized manner.” *Id.* at 611. That is to say, “While the inventions in those cases involved tangible components, the components were conventional and were used in conventional ways.” Simply put, the specification and claimed invention does not describe a new type of technology or device, a new method of using the technology, or an improvement to the technology, but, again, directed towards the utilization of generic devices as tools to perform the well-understood, routine, and conventional activities of the abstract idea. “As the Supreme Court stated in *Alice*, “generic computer implementation” is insufficient to transform a patent-ineligible abstract idea into a patent eligible invention. *Alice*, 134 S. Ct. at 2352, 2357. More generally, “simply appending conventional steps specified at a high level of generality” to an abstract idea does not make that idea patentable. *Mayo*, 132 S. Ct. at 1300.”

Additionally, the claimed invention is also directed towards the abstract idea of collecting data, recognizing data, and storing the recognized data in order two humans to communicate with each other. The Examiner asserts that the concept of data collection, recognition, and storage is undisputedly well-known and, indeed, humans have always performed these functions. As was already discussed above, the claimed invention is merely utilizing general purpose devices (computing device) to perform the steps of data retrieval. Although one may argue that the human mind is unable to

process and recognize the electronic stream of data that is being received, transmitted, stored, and etc. by the computing device, the Examiner asserts that this is insufficient to overcoming the rejection under 35 USC 101 (see *Content Extraction and Transmission LLC v Wells Fargo Bank, National Association* where the system uses categories to organize, store, and transmit information, which was considered by the courts to be an abstract idea). The claims in *Alice Corp v CLS Bank* also required a computer that processed streams of data, but nonetheless were found to be abstract. There is no “inventive concept” in the claimed invention's use of a general purpose computing device to perform well-understood, routine, and conventional activities commonly used in the technical field. (*Content Extraction and Transmission LLC v Wells Fargo Bank, National Association*) At most, the claims attempt to limit the abstract idea of recognizing and storing information using the devices to a particular environment. Such a limitation has been held insufficient to save a claim in this context.

Further still, the steps of receiving and transmitting information between the computing device and the storage of the information are merely directed towards the concept of data gathering and transmitting are considered insignificant extra solution activities. Viewed as a whole, these additional claim elements do not provide meaningful limitations to transform the abstract idea into a patent eligible application of the abstract idea such that the claims amount to significantly more than the abstract idea itself.

In regards to the amendments are arguments received on **5/14/2018**, the Examiner asserts that simply reciting in the preamble that the invention is an improvement over the technology is insufficient to overcome the rejection as this is

simply nothing more than a conclusory statement. Further still, with regards to the body of the claim, the Examiner asserts that the **Shafiee** reference, which was publically available since **August 3, 2004**, long before the applicant's effective filing date, which establishes that the utilization of a plurality of servers in order to manage and establish a conference between two computers was well-known in the art. Further still, when taking a step back and looking at the technology of the invention as a whole, the Examiner asserts that the invention is nothing more than relying on generic computing devices communicating over a generic communication network, wherein servers are being used to manage the communication in order to balance traffic load and ensure that connectivity is maintained. The Examiner also asserts that when looking at the invention more narrowly the invention is doing nothing more than holding a video conference between two users on their respective computers and that the communication is managed by a plurality of servers, which, the Examiner also asserts, is technology that has existed long before the applicant's effective filing date, i.e. the concept of having a communication session that is not directly between only two computers has existed long before the applicant's effective filing date. Simply put, the invention is relying on well-understood, routine, and conventional technology and, thereby fails to demonstrate an improvement in the technology as the invention (**see supporting references cited in PTO-892 Notice of References Cited which support the architecture used by the applicant was well-understood, routine, and conventional before the effective filing date of the applicant's invention and using the architecture based on the well-understood, routine, and conventional advantages it is known to provide**).

The claims do not include additional elements that are sufficient to amount to significantly more than the judicial exception because the additional elements or combination of elements in the claims other than the abstract idea per se amounts to no more than: (i) customer service at a call center, and/or (ii) recitation of computer readable storage medium having instructions encoded to perform functions of customer service at a call center are well understood, routine, and conventional activities previously known to the industry. Considering all claim elements both individually and in combination, do not amount to significantly more than an abstract idea.

Dependent **claims 2 – 8, 10, 12 – 18, 20, and 22** merely add further details of the abstract steps/elements recited in **claims 1, 11, and 21** without including an improvement to another technology or technical field, an improvement to the functioning of the computer itself, or meaningful limitations beyond generally linking the use of an abstract idea to a particular technological environment, as has been discussed above. The Examiner asserts that the requirements as set forth by the office and the *Mayo/Alice* framework have been followed. The Examiner has formulated a detailed analysis based on various court decisions as to why the claimed invention is, indeed, an abstract idea. The Examiner has considered the additional features presented in the dependent claims and, as explained in the rejection, the presented features do not add any additional features that have not already been addressed in the rejection above. The Examiner asserts that the burden is now shifted to the applicant to point out where and what features of the claimed invention, i.e. independent and dependent claims, they believe are sufficient to transform the abstract idea into a non-abstract idea or present

additional features that raises doubt as to whether those features are considered to be an abstract idea.

Furthermore, the Examiner asserts that the decisions rendered by the courts have followed the *Mayo/Alice* framework and, at no point, has every decision addressed each specific limitation in each dependent claim and provide a separate analysis. On the contrary, similar to the courts, the Examiner has considered the features presented in the dependent claims and has concluded that they do not provide any additional features that would transform the abstract idea into a non-abstract idea nor do they present features that have not already been addressed in the rejection and the cited court decisions. As was discussed in the rejection, the Interim Eligibility Guidelines at 74625 state that **“if there is doubt as to whether the applicant is effectively seeking coverage for a judicial exception itself, the full analysis should be conducted to determine whether the claim recites significantly more than the judicial exception.”** The Examiner further refers to the guidelines that were provided above and found on **Pages 6 – 7** of the July 2015 Guidelines.

Therefore, dependent **claims 2 – 8, 10, 12 – 18, 20, and 22** are also non-statutory subject matter.

In light of the detailed explanation and evidence provided above, the Examiner asserts that the claimed invention is directed towards the abstract idea of customer service at a call center, which a method of organizing human activities and an idea of itself. As disclosed, the claimed invention is directed towards customer service at a call center (a method of organizing human activities). It is also directed towards being an idea of itself as the claimed invention is directed towards the collection and comparison

of information to determine the next caller that needs assistance with the next available agent. Lacking significantly more for the remainder of the claim, the invention is nothing more than an abstract idea.

Claim Rejections - 35 USC § 102

8. In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

9. 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 –

(a)(1) the claimed invention was patented, described in a printed publication, or in public use, on sale or otherwise available to the public before the effective filing date of the claimed invention.

(a)(2) the claimed invention was described in a patent issued under section 151, or in an application for patent published or deemed published under section 122(b), in which the patent or application, as the case may be, names another inventor and was effectively filed before the effective filing date of the claimed invention.

10. **Claims 1 – 3, 5 – 8, 10 – 13, and 15 – 18, and 20 – 22** are rejected under 35 U.S.C. 102(a)(1)/(a)(2) as being anticipated by **Shafiee et al. (US Patent 6,771,766 B1)**.

11. In regards to **claims 1, 11, and 21**, **Shafiee** discloses **(Claim 1)** a method providing an improvement in customer service sessions implemented over computer networks, the method comprising; **(Claim 11)** an apparatus providing an improvement in customer service sessions implemented over computer networks the apparatus comprising; **(Claim 21)** one or more non-transitory computer-readable media providing

an improvement in customer service sessions implemented over computer networks, the one or more non-transitory computer-readable media storing instructions which, when processed by one or more processors, cause :

a distribution server, receiving via one or more computer networks from a cabinet application executing on a computing device, a request to initiate a customer service interaction, the request including a computer identifier (CID) of the cabinet application executing on the computing device (**Col. 5 – 6 Lines 5 – 36; Col. 9 – 10 Lines 55 – 20; Col. 11 Lines 6 – 17 wherein the central system, which is comprised of a site server and call center server, receives a request from a kiosk/customer terminal in order to initiate a conference with an agent and where the request includes the kiosk's/customer terminal's identification. Shafiee discloses that the site server will identify trigger events in order to inform the call center server to search for an available agent and create a call session between the customer and agent.**);

the distribution server, selecting an available virtual receptionist application from a plurality of virtual receptionist applications executing on one or more computing devices (**Col. 5 – 6 Lines 5 – 36; Col. 10 Lines 7 – 24 wherein the central system identifies an available agent**);

the distribution server, assigning the available virtual receptionist application to a customer service session with the cabinet application executing on a computing device and providing the CID of the cabinet application executing on the computing device to the assigned virtual receptionist application (**Col. 5 – 6 Lines 5 – 36; Col. 9 – 10 Lines 55 – 24; Col. 11 Lines 6 – 17 wherein the available agent is assigned to a session with the kiosk/customer terminal and the identification of the kiosk/customer**

terminal so as to facilitate a conference between a particular agent and a particular customer using the particular kiosk/customer terminal);

the distribution server providing, to the cabinet application executing on the computing device, a CID for the assigned virtual receptionist application and instructing the cabinet application executing on the computing device to instruct a video conferencing server, that is separate from the distribution server and the computing device, to initiate a video conferencing session between the cabinet application executing on the computing device and the assigned virtual receptionist application **(Col. 4 Lines 37 – 44; Col. 4 – 5 Lines 57 – 4; Col. 5 Lines 5 – 56 wherein a video conference is facilitated over a communication network between the agent's terminal and the kiosk/customer terminal. Specifically, Shafiee discloses that the site server will identify trigger events in order to inform the call center server to search for an available agent and create a call session between the customer and agent; Col. 4 Lines 36 – 44; Col. 6 – 7 Lines 63 – 16; Col. 7 Lines 34 – 65 wherein a video conference is being held, i.e. the agent is able to be viewed by the customer on the kiosk/customer terminal; Fig. 1; Col. 4 – 6 Lines 57 – 36; Col. 10 Lines 30 – 49; Col. 11 – 12 Lines 66 – 15 wherein the system architecture is disclosed to allow for the establishment of video conference between an agent and a customer by providing a customer terminal and agent terminal communicate over a communication network through a central system comprised of a server with a communication management platform with corresponding protocols, rules, instructions, and the like that facilitates the communication process. The central system is comprised of a server program that manages access to the centralized**

resource/service in the network, in this case, facilitating video conferencing between the agent and customer);

the distribution server initiating a customer service session between the assigned virtual receptionist application and the cabinet application, wherein the video conferencing session and the customer service session run concurrently (**Col. 4 Lines 37 – 44; Col. 4 – 5 Lines 57 – 4; Col. 5 – 6 Lines 5 – 36 wherein a video conferencing session is initiated and conducted between the customer and agent**),

wherein the method is performed using one or more processors (**Col. 4 Lines 37 – 44; Col. 4 – 5 Lines 57 – 4; Col. 5 Lines 5 – 56; Col. 9 – 10 Lines 55 – 20; Col. 11 Lines 6 – 17 wherein the method is performed using a kiosk/customer terminal, server, communication network, and agent terminal**).

12. In regards to **claims 2, 12, and 22**, **Shafiee** discloses the method of claim 1 (11, 21), further comprising:

the distribution server receiving, from a second cabinet application executing on a second computing device, a second request to initiate a second customer service interaction, the second request including a CID of the second cabinet application executing on a second computing device;

the distribution server determining that the assigned virtual receptionist application is assigned to the customer service session with the cabinet application executing on the computing device that is unavailable for assignment to the second cabinet application;

in response to determining that the assigned virtual receptionist application is assigned to the customer service session with the cabinet application executing on the computer device and is unavailable for assignment to the second cabinet application, the distribution server adding the second request to a request queue

(Col. 5 – 6 Lines 5 – 36; Col. 9 Lines 26 – 49; Col. 10 Lines 7 – 24; Col. 17 Lines 10 – 54 wherein the system is able to manage a plurality of customer requests to have a video conference with agent(s) and if there are no available agents the system will place a customer in a queue until the next available agent using the methodology discussed above.)

13. In regards to **claims 3 and 13**, **Shafiee** discloses the method of claim 2 (12), the distribution server, determining that the customer service session between the assigned virtual receptionist application and the cabinet application is terminated **(Col. 7 Lines 21 – 24 wherein the central system determines that a video conference between a customer and agent has ended)**;

the distribution server, determining that the assigned virtual receptionist application is available **(Col. 10 Lines 21 – 24 wherein the system determines that an agent is available after the previous session has ended)**;

the distribution server, assigning the available virtual receptionist application to a second customer service session with the second cabinet application executing on the second computing device and providing the CID of the second cabinet application to the assigned virtual receptionist application **(Col. 7 Lines 21 – 24 wherein the agent is assigned to the next customer in the queue)**;

the distribution server, instructing the assigned virtual receptionist application to transmit the CID of the second cabinet application and a CID of the assigned virtual receptionist application to the video conferencing server, thereby instructing the video conferencing server to initiate a video conferencing session between the second cabinet application and the assigned virtual receptionist application **(Col. 4 Lines 37 – 44; Col. 4 – 5 Lines 57 – 4; Col. 5 Lines 5 – 56 wherein a video conference is facilitated over a communication network between the agent’s terminal and the kiosk/customer terminal);**

using the distribution server, initiating the second customer service session between the assigned virtual receptionist application and the second cabinet application **(Col. 4 Lines 37 – 44; Col. 4 – 5 Lines 57 – 4; Col. 5 Lines 5 – 56 wherein a video conference is initiated).**

14. In regards to **claims 5 and 15**, **Shafiee** discloses the method of claim 2 (12), wherein the request queue comprises a plurality of queue elements, each queue element, from the plurality of queue elements, includes a first slot containing cabinet application data of cabinet applications having submitted a request and a second slot containing available receptionist application data that indicates virtual receptionist application that are not currently assigned to a cabinet application **(Col. 9 Lines 26 – 49; Col. 10 Lines 7 – 24; Col. 17 Lines 10 – 54 wherein customers are placed in a queue when there are no available agents and when an agent becomes available they will be assigned to the next customer in the queue).**

15. In regards to **claims 6 and 16**, **Shafiee** discloses the method of claim 1 (11), further comprising:

determining that the cabinet application is located at a first entity of a plurality of entities; and

causing the cabinet application to request a data file from a storage server and to generate a page view associated with the first entity at the cabinet application from the data file

(Col. 9 Lines 26 – 49; Col. 10 Lines 7 – 24; Col. 17 Lines 10 – 54 wherein the system is able to manage a plurality of customer requests to have a video conference with agent(s) and if there are no available agents the system will place a customer in a queue until the next available agent using the methodology discussed above; Col. 7 Lines 46 – 65; Col. 8 Lines 33 – 41; Col. 9 Lines 17 – 49; Col. 14 Lines 64 – 21; Col. 16 Lines 33 – 64 wherein the kiosk is located at a location that is associated with the customer service provider of the central system (entity), determines identification information of the kiosk, and where the central system causes the kiosk to request data that has been stored, e.g., information inputted into a form, user behavior at the kiosk, and so forth, in order to generate a page view at the kiosk, e.g., a form, shopping cart, and etc.).

16. In regards to **claims 7 and 17**, Shafiee discloses the method of claim 6 (16), wherein the assigned virtual receptionist application is *associated* with the first entity of the plurality of entities **(Col. 7 Lines 46 – 65; Col. 8 Lines 33 – 41; Col. 9 Lines 17 – 49; Col. 14 Lines 64 – 21; Col. 16 Lines 33 – 64 wherein the agent is *associated* with the entity in order to provide the requested or triggered customer service for the customer).**

17. In regards to **claims 8 and 18**, **Shafiee** discloses the method of claim 1 (11), wherein a user of the cabinet application is geographically remote from a user of the assigned virtual receptionist application (**Fig. 1 wherein the customer and agent are remote from one another**).

18. In regards to **claims 10 and 20**, **Shafiee** discloses the method of claim 1 (20), further comprising, during the customer service session, using the video conferencing server, displaying at least a portion of a screen of the assigned virtual receptionist application at the cabinet application executing on the computing device (**Col. 4 Lines 36 – 44; Col. 6 – 7 Lines 63 – 16; Col. 7 Lines 34 – 65 wherein a video conference is being held, i.e. the agent is able to be viewed by the customer on the kiosk/customer terminal**).

Claim Rejections - 35 USC § 103

19. In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

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

A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have

been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

21. **Claims 4 and 14** are rejected under 35 U.S.C. 103 as being unpatentable over **Shafiee et al. (US Patent 6,771,766 B1)** in view of **Mottur (US PGPub 2003/0093430 A1)**.

22. In regards to **claims 4 and 14**, **Shafiee** discloses the method of claim 2 (12), further comprising:

the distribution server, receiving from the cabinet application executing on the computing device, a third request for an identifier of a user of a third cabinet application, **[...]**;

[...];

adding the third request to the request queue in front of the second request **(Col. 9 Lines 26 – 49; Col. 10 Lines 7 – 24; Col. 17 Lines 10 – 54 wherein the system is able to manage a plurality of customer requests to have a video conference with agent(s) and if there are no available agents the system will place a customer in a queue until the next available agent using the methodology discussed above)**

Shafiee discloses a system and method that utilizes queues in order to provide a service to a user. Although **Shafiee** discloses one well-known type of queue management, i.e. first come first serve, **Shafiee** does not disclose all known types of queue management techniques, as well as using other well-known identification techniques in order to identify a user, such as facial recognition.

To be more specific, **Shafiee** fails to explicitly disclose:

the method of claim 2, further comprising:

the distribution server, receiving, from the cabinet application executing on the computing device, a third request for an identifier of a user of a third cabinet application, ***the identifier obtained using facial recognition;***

using the distribution server, determining that the user of the third cabinet application has a higher priority than a user of the second cabinet application.

However, **Mottur**, which is directed towards queue management, teaches that it is well-known in the art to utilize facial recognition in order to determine the identity of a user and, based on this identification, determine a priority level for the user in order to determine where they should be placed in a queue, i.e. higher priority users will be placed before lower priority users (**¶ 36, 79, 105**).

Therefore, it would have been obvious to one of ordinary skill in the art before the effective filing date of the invention that since each individual element and its function are shown in the prior art, albeit shown in separate references, the difference between the claimed subject matter and the prior art rests not on any individual element or function but in the very combination itself-that is in the substitution of a priority based queue management system that identifies its users using facial recognition, as taught by **Mottur**, for the first come first serve queue management system that still requires user identification based on information provided by a user at login, as disclosed by **Shafiee**.

Thus, the simply substitution of one known element for another producing a predictable result renders the claim obvious.

Response to Arguments

23. Applicant's arguments filed **11/5/2018** have been fully considered but they are not persuasive.

Double Patenting

24. The double patenting rejection has been **withdrawn**. The terminal disclaimer that was filed on **11/8/2018** has been **approved**.

Rejection under 35 USC 101

25. The rejection under 35 USC 101 has been **maintained**. The Examiner asserts that simply reciting in the preamble that the invention is an improvement over the technology is insufficient to overcome the rejection as this is simply nothing more than a conclusory statement. Further still, with regards to the body of the claim, the Examiner asserts that the **Shafiee** reference, which was publically available since **August 3, 2004**, long before the applicant's effective filing date, which establishes that the utilization of a plurality of servers in order to manage and establish a conference between two computers was well-known in the art. Further still, when taking a step back and looking at the technology of the invention as a whole, the Examiner asserts that the invention is nothing more than relying on generic computing devices communicating over a generic communication network, wherein servers are being used to manage the communication in order to balance traffic load and ensure that connectivity is maintained. The Examiner also asserts that when looking at the invention more narrowly the invention is doing nothing more than holding a video conference between two users on their respective computers and that the communication is managed by a plurality of servers, which, the Examiner also asserts,

is technology that has existed long before the applicant's effective filing date, i.e. the concept of having a communication session that is not directly between only two computers has existed long before the applicant's effective filing date. Simply put, the invention is relying on well-understood, routine, and conventional technology and, thereby fails to demonstrate an improvement in the technology as the invention (**see supporting references cited in PTO-892 Notice of References Cited which support the architecture used by the applicant was well-understood, routine, and conventional before the effective filing date of the applicant's invention and using the architecture based on the well-understood, routine, and conventional advantages it is known to provide**).

Rejection under 35 USC 102

26. The Examiner is uncertain as to the applicant's arguments because the applicant argues that **Shafiee** does not disclose that the session is initiated client-side, but then also argues that **Shafiee** discloses that the session is initiated either server-side or by instructing the agent station to initiate the session. Then the applicant continues to argue that **Shafiee** discloses that the central system, which is comprised of a site server and multimedia call center server, instructs the agent station to establish a connection with a customer terminal. ***The Examiner asserts that "client" is a broad term and, consequently, the Examiner asserts that the devices at each of the customer and agent locations are client devices.*** Further still, since the applicant argues that the invention is directed towards a "client-side approach to initiate video conferencing session" and because the applicant argues that **Shafiee** discloses that the agent station is receiving instructions to initiate the video conferencing session, the Examiner must

assert that **Shafiee** does, indeed, disclose the specifics of **claim 1** since an agent station is a client device.

However, as discussed in the rejection, **Shafiee** discloses that the central system, again, comprised of a site server and multimedia call center server that facilitates the session between the agent station and the customer station (computing device), is monitoring the system to check the status of agents, kiosks, and services in order to determine if a session is being requested from the client devices, i.e. trigger, and upon this detection the central system will identify available devices and connect the devices in order to carry out the video conferencing session between an agent and customer.

Moreover, the applicant appears to argue that **Shafiee** discloses that the session is only being facilitated because the agent is requesting to have the session with the customer. However, as cited in the rejection, **Shafiee** discloses that the customer terminal, i.e. computing device, is requesting to have the session and requesting the central system to identify an available agent with whom the customer can have a video conferencing session with and upon the central system receiving this request, i.e. trigger, the central system will identify and establish a connection with an available agent with the customer. The Examiner asserts that the central system of **Shafiee** is configured to, *essentially*, wait on standby and monitor the status of the entire system and await for a trigger event or request from a customer to communicate with an agent and, upon receiving the request or identifying the trigger, the central system will facilitate the communication session between the customer and agent. This is explicitly stated in, *at least*, **Col. 7 Line 39 – 41**, which states, “***These status messages are***

particularly advantageous if the customer affirmatively or explicitly requests a live agent.”; Col. 7 Lines 46 – 58, which states, “At decision branch 450, it is determined whether or not a trigger event for invoking the establishment of a call with a live agent has occurred. The trigger event may be, for example, the customer requesting a live agent... .”

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GERARDO ARAQUE JR whose telephone number is (571)272-3747. The examiner can normally be reached on Monday - Friday 8-4:30.

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

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Minnah L Seoh can be reached on 571-270-7778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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

Application/Control Number: 14/790,957
Art Unit: 3689

Page 42

USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Primary Examiner
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Primary Examiner, Art Unit 3689
11/14/2018