

**REMARKS**

Reconsideration and allowance in view of the following remarks and amendments are respectfully requested. Claims 1, 6-8, 11-19, 23-24, 26-29, 31 and 34-45 are pending in the application. Claims 1 and 24 are amended. Claims 2-5, 9, 10, 20-22, 25, 30, 32, 33 and 46-62 were canceled in prior submissions. *No new matter has been added.* Reconsideration of the outstanding rejections in the present application is requested based on the following remarks.

**I. Claim Rejections under 35 U.S.C. § 101**

On page 2 of the Office Action, claims 1, 6-8, 11-19, 23-24, 26-29, 31 and 34-45 stand rejected under 35 U.S.C. § 101 as being allegedly directed to non-statutory subject matter.

Applicant respectfully disagrees. Under the 2019 PEG, Step 2A now includes two prongs. Under Prong One, the inquiry is whether the claims recite a judicial exception. The judicial exceptions are mathematical concepts (*i.e.*, mathematical relationships, formulas, equations, and calculations), mental processes (*i.e.*, concepts performed in the human mind including an observation, evaluation, judgment, and opinion), and certain methods of organizing human activity (*i.e.*, fundamental economic principles or practices (including hedging, insurance, mitigating risk), commercial or legal interactions (including agreements in the form of contracts; legal obligations; advertising, marketing or sales activities or behaviors; business relations), and managing personal behavior or relationships or interactions between people (including social activities, teaching, and following rules or instructions)). If no judicial exception is recited, the claim is eligible, and the eligibility analysis is complete.

The 2019 PEG explicitly acknowledges that there was far too much inconsistency in analysis and rejections under §101. Indeed, the stated purpose of the 2019 PEG is to “improve consistency and predictability” by “extract[ing] and synthesiz[ing] key concepts identified by the

courts as abstract ideas to explain that the abstract idea exception includes the [aforementioned three] groupings of subject matter, when recited as such in a claim limitation(s) (that is, when recited on their own or per se).” 2019 PEG at 52. And the PEG continues to acknowledge that the analysis must bear in mind that “[a]t some level, all inventions embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas,” and has cautioned ‘to tread carefully in construing this exclusionary principle lest it swallow all of patent law.’” *Id.* at 51.

If the claims recite a judicial exception under Prong One, Prong Two requires an evaluation as to whether the judicial exception is integrated into a practical application. This involves identifying whether there are any additional elements recited in the claim beyond the judicial exception(s), and evaluating those additional elements to determine whether they integrate the exception into a practical application of the exception. According to the 2019 PEG, the following are indicative of integration of a judicial exception into a practical application:

- Improvements to the functioning of a computer or to any other technology or technical field;
- Applying or using a judicial exception to effect a particular treatment or prophylaxis for a disease or medical condition;
- Applying the judicial exception with, or by use of, a particular machine;
- Effecting a transformation or reduction of a particular article to a different state or thing; and
- Applying or using the judicial exception in some other meaningful way beyond generally linking the use of the judicial exception to a particular technological environment, such that the claim as a whole is more than a drafting effort designed to monopolize the exception.

Here, the Office's analysis under the first prong of step 2A, on pages 2-4, comprises a listing of Applicant's claim elements followed by an allegation that "[t]hese limitations . . . , under their broadest reasonable interpretation, describe the abstract idea of analyzing a financial service product pricing process, which may correspond to Certain Methods of Organizing Human Activity (a person following a set of instructions; certain activity between a person and a computer; October 2019 Update: Subject Matter Eligibility, page 5)." Office Action at 3, 4. Applicant respectfully submits that the Office is simply summarizing the claim and then alleging it is abstract. This is at odds with the examination standards set forth under the 2019 PEG. For example, the Office has not explained how the claim element "[a] waterfall display that electronically displays revenues cascading down from a base list price to an invoice price to a pocket price to illustrate revenue leaks" is a person following a set of instructions. Other claim elements have similar problems.

In a prior response, the Office alleged that "[the] Examiner considered each and every element of the claim (supported by listing every limitation of the claim under the 35 U.S.C. 101 rejection as presented above) when determining if the claim recites an abstract idea under Step 2A, Prong One." Applicant respectfully submits that quoting the entirety of Applicant's claim is not evidence that the Prong 1 analysis comports with the 2019 PEG, instead, Applicant respectfully submits that this is evidence that the analysis is at odds with the 2019 PEG. The guidance states:

Examiners are now to: (a) Identify the specific limitation(s) in the claim under examination (individually or in combination) that the examiner believes recites an abstract idea; and (b) determine whether the identified limitation(s) falls within the subject matter groupings of abstract ideas enumerated in Section I of the 2019 Revised Patent Subject Matter Eligibility Guidance.

2019 PEG at 54 (emphasis added). Here, the Office has purportedly determined that the overall summary of the claim describes a system that falls within the listed subject matter groupings, not any specifically identified limitation. The Office makes no attempt to explain how each identified

limitation falls into one of the groupings identified in the 2019 PEG. This distinction is critical because it is the means by which the 2019 PEG is attempting to prevent the exact type of superficial and outcome determinative review applied here. The Office offers no explanation as to how or why each claim element allegedly corresponds to Certain Methods of Organizing Human Activity.

Critically, if the Office has included all of these claim elements together as allegedly defining the abstract idea, then none of these elements are considered by the Office under Prong 2. Moreover, if the claim itself, or the gist of the claim, is labeled abstract under Prong 1, then no amount of amendments will ever evidence integration under Prong 2 since the Office will simply lump the additional claim elements under Prong 1 as any additions to the claim necessarily relate to the gist of the claim, and therefore cannot evidence integration. This is why the Office's approach to Prong 1 analysis is at odds with the guidance and MPEP.

In response, the Office alleges that "the reason the Office has included all of these claim limitations (with the exception of additional elements) together as all these limitations (with the exception of additional elements) are abstract in nature." Applicant respectfully submits that this is generalizing the entirety of the claim and represents a subjective judgment call regarding the overall claim, as opposed to specific claim elements.

The Office also alleges that some of the claim elements "recite an abstract idea as these limitations recite mathematical calculations." Office Action at 4. Applicant respectfully disagrees with the Office's conclusion. The October Update to the 2019 PEG informs that "[a] claim does not recite a mathematical concept (i.e., the claim limitations do not fall within the mathematical concept grouping), if it is only based on or involves a mathematical concept." Furthermore, MPEP §2106.04(a)(2) states, "[w]hen determining whether a claim recites a mathematical concept (i.e.,

mathematical relationships, mathematical formulas or equations, and mathematical calculations), examiners should consider whether the claim recites a mathematical concept or merely limitations that are based on or involve a mathematical concept.” At most, the claim elements flagged by the Office involve a mathematical concept. Thus, according to the October Update, the 2019 PEG, and the MPEP, Applicant’s claims do not recite a mathematical concept.

In a prior response, the Office alleged that “limitations such as determining a present value of the predetermined pricing metrics, and calculating a differential between the present value of the predetermined pricing metrics, at least a plurality of differentials being determined clearly makes use of mathematical calculations.” Applicant respectfully submits that making use of mathematical calculations in a claim is not the same as “reciting a mathematical concept.” In fact, this is the exact distinction discussed by the October Update. Claims that simply rely on or require the use of math do not recite a mathematical concept under the examination guidelines. This is the exact distinction made in MPEP §2106.04(a)(2). Regardless, the Office maintains this rejection without addressing this Applicant’s argument or the existing deficiency in the rejection.

In this Office Action, the Office fails to address the above argument. The Office’s conclusion that Applicant’s claim recites a mathematical concept simply because it “makes use of [math]” is contrary to the teachings of the 2019 PEG and the MPEP.

In a prior response, Applicant amended claim 1 to explicitly include the formatting/standardization of data, in an effort to advance prosecution. Applicant argued that “formatting the received data, wherein the formatting comprises one or more of converting actuarial data into time identifications comprising months and quarters and one or more product names” is akin to subject matter eligibility example 42. Subject Matter Eligibility Example 42 was held to be integrated under prong 2 because “[t]he claim recites a combination of additional

elements including storing information, providing remote access over a network, converting updated information that was input by a user in a non-standardized form to a standardized format, automatically generating a message whenever updated information is stored, and transmitting the message to all of the users.” Applicant’s claim converts non-standardized information into a standardized format for use with the waterfall tool which is then provided to users through the waterfall display much like that in Example 42.

In a prior response, the Office alleged that Applicant’s claim does not solve a technical problem and “[t]his is in contrast to the technical problem associated with various different patient records that existed in non-standard format as it was difficult to share updated information about the patient.” Applicant respectfully disagrees as there is no distinction. If the technical problem solved in Example 42 is formatting patient records because it was difficult to share patient information, then Applicant’s claimed embodiment solves a similar technical problem. The unformatted information subject to Applicant’s claim is also difficult to share or use for the purpose intended by Applicant’s claimed embodiment. Thus, the Applicant’s claim solves the same technical problem as Example 42. More specifically, Example 42 takes information in a non-standard format and standardizes the data for use in a downstream operation, namely, sharing the information with healthcare providers. If this is a technical improvement, then so too is formatting the received data in Applicant’s claim for use in a downstream operation, namely, generating a waterfall display (which is a specific improvement over prior art systems). Indeed, prior art systems do not allow for visualization of non-standard data in a waterfall display that identifies revenue leaks. Applicant respectfully submits that the claim is eligible because it is akin to example 42 which the USPTO has determined to be eligible.

The Office previously alleged that “the scope of the claimed invention is very different than the scope of Example 42 . . . Generating a waterfall display is an abstract concept.” Applicant’s claim converts non-standard information into a standardized format, as discussed above.

Applicant’s claim automatically generates a waterfall display, which is similar to generating and transmitting messages since both are taking the standardized information and using it to create and transmit information for downstream users. While the overall problem solved by Example 42 is different than that of Applicant’s claimed embodiment, the purpose of Example 42 was to serve as an example of patent eligible subject matter and the types of claim elements that achieve that result. Thus, pointing to the specific problem solved by the example and alleging it is different than the problem solved by Applicant’s claimed embodiment is not correct application of the example(s) provided by the U.S. Patent and Trademark Office. Moreover, alleging that a waterfall display is an abstract idea is an unsupported conclusion that is at odds with the teachings of Example 42. In fact, the Office could just as easily conclude that transmitting messages based on formatted patient information is an abstract idea, except we know this is untrue because it is used as an example of subject matter eligibility. This is clearly a case of unequal treatment between analogous cases, and the problem is worse because the analogous case is held out as a specific example of eligibility by the USPTO.

The Office further alleged that “[f]ormatting the data is recited at a high level of generality and it results in improvement to an abstract idea (i.e. generating a waterfall display) and not to technology.” Applicant respectfully submits that Example 42 was not considered abstract, so integration was unnecessary. The same is true for Applicant’s claimed embodiment, for the reasons discussed above. Moreover, the formatting recited by Applicant is no less specific than that found in Example 42. Applicant’s claim element recites, “formatting the received data, wherein the

formatting comprises one or more of converting actuarial data into time identifications comprising months and quarters and one or more product names.” Example 42 states, “converting, by a content server, the non-standardized updated information into the standardized format.” Applicant respectfully submits that Applicant’s claim element is more specific than the claim element found in Example 42 because while the claim element in Example 42 simply recites converting data into a standardized format, Applicant’s claim element recites how the received data is being formatted for standardization. Applicant respectfully submits that the Office has failed to establish that the claimed embodiment is abstract when compared to Example 42, instead, it appears that the Office disagrees with Example 42 and the therefore, unwilling to apply that example to Applicant’s claim. Applicant has previously pointed out these deficiencies with the pending rejection, but the Office fails to acknowledge Applicant’s argument or otherwise cure the deficiencies.

Regardless, in an effort to advance prosecution, Applicant has further amended claim 1 to recite additional details which further evidence integration under Prong 2 and/or significantly more. For at least these reasons, Applicant respectfully requests that this rejection be withdrawn.



**CONCLUSION**

Based on the above remarks, Applicant submits that all claims are in condition for allowance. Applicant believes that no further fees are necessary in connection with the filing of this document other than those specifically addressed. In the event any further fees are necessary, please charge or credit any such fees, including fees for any extensions of time, to the undersigned's Deposit Account No. 50-0206.

The Examiner is respectfully requested to call Applicant's undersigned representative at the telephone number below if any assistance might be provided to the Examiner in the examination of the application.

Respectfully submitted,

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