Patent Eligibility Jurisprudence Study

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Revised: 10/11/2021

Introduction

This document is being submitted under the general guidelines of the "Patent Eligibility Jurisprudence Study."

Original Patent Application: No. 13/792,110 (03/10/2013)
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Examiner: Chein, Allen C

Continuation Application: No. 16/937,462 (7/23/2020)

My patent application is a computer invention and involves two general technologies – 1) financial accounting business methods, and 2) computer software design, including security, databases, data structures, and user interfaces. I have extensive experience in both of these technologies dating back to around 1980. I have been a CPA for about 40 years. Very recently I discontinued my CPA permit to practice as a CPA. When I took the CPA exam (20-hour exam) I had the highest score in the State of Kansas, and I was given a special award by the American Institute of Certified Public Accountants (AICPA) for scoring with high distinction on the exam. I have participated in several Governmental Accounting Standards Board (GASB) projects, and was personally recognized by GASB for my assistance on the GASB Guide to Implementation of GASB Statement 14 on the Financial Reporting Entity.

Legal Representation

I am not currently represented by a patent attorney. My prior attorney suggested that we apply for the Continuation. Also, he suggested I find new representation, saying he was just "out of ideas." I sensed that my attorney was frustrated with the one, and only, examiner we worked with for more than seven years. I was more than just frustrated because the examiner gave me the impression that he had little or no technical knowledge related to my application regarding accounting, data warehousing, and software engineering.

This Document Is Assembled in Two Parts

Two separate parts of this document follow. The two parts are identified as 1) **Document Part 1 – "Comments on Concerns,"** and 2) **Document Part 2 – Problems with Examiner**.

The **first part** contains requested comments on a few of the "13 Concerns" published in the Federal Register Notice. I only made comments on those "concerns" that apply to my case.

The **second part** contains comments about the examiner and is organized in five "chapters" – Parts 1 – 5. Particularly regarding Document Part 2 (Problems with Examiner), I quote the "Examiner." These quotes are taken from the USPTO response rejecting claimed subject matter (Notification date May 28, 2020). The above-mentioned Continuation Application followed this notification.

DOCUMENT PART 1 – Comments on "Concerns" Published in Federal Register Notice.

- **Concern No. 1.** Explain how the current state of patent eligibility jurisprudence affects the conduct of business in your technology areas, and identify your technology areas.

  My technology areas are – 1) financial accounting business methods, and 2) computer software design, including security, databases, data structures, and user interfaces.

  The impact of financial accounting technology has continuously, and negatively, affected users of financial accounting systems because the current state of the art (i.e., prior art) has not changed in basic framework for 500 years. Can you name any other technological field that is still using 500-year-old technology?

  What are the problems in financial accounting prior art technology, you ask? Try 1) complexity, 2) cost, 3) accuracy, 4) reliability, 5) auditability, 6) reporting capability, etc. Of course, fraud and embezzlement are among the huge issues that accompany these accounting problems. To give you an example, per a 2012 report, the Association of Certified Fraud Examiners, "the typical U.S. business loses 7% of its annual revenues to employee fraud, and small businesses have the most cases and the highest losses." My work is designed specifically to prevent, detect, and audit such fraud! And it has been tested and proven to be effective.

  It is clear that academia and professional organizations have been aware of the problems in the areas of financial accounting, auditing, and reporting for many years. And there have been attempts to make improvements in financial accounting over the years, but few, if any, have made any significant improvements impacting the above-mentioned problems **overall**.

  These types of improvements have instead been aimed at specific types of accounting entities, and specific types beneficial improvements. More to the point, these types of improvements typically provide a benefit on the one hand, but take away a benefit on the other hand.

  To cite an example, consider a relatively new accounting option referred to as the FRF for SMEs accounting framework released by the AICPA in June 2013. Per the AICPA, this new framework draws upon a blend of traditional methods of accounting with some accrual income tax methods. My understanding is that this new framework would reduce the cost of preparing accrual basis financial statements, and hence addresses the "cost" problem. However, such financial statements might not meet the financial statement requirements needed for certain other purposes.

  To cite another example, consider another accounting option I would describe as a **cash basis** balance sheet and income statement. I learned of such statements at a CPA conference several years ago. I assumed its purpose was to provide a simplistic replacement for the traditional **accrual basis** balance sheet and income statement prepared in accordance with generally accepted accounting principles (i.e., **GAAP**). This appears to be an improvement in the area of cost. However, I am at a loss to understand the purpose, or value, of such financial statements. Further, I am inclined to think such statements would not be an acceptable replacement in most quarters for the traditional GAAP accrual basis financial statements.

  Extraordinarily speaking, there is one person on the planet that has introduced new technology in financial accounting to make improvements to abolish or significantly address ALL of the above-mentioned problems. Guess who that one person is!

Extraordinarily speaking, this new financial accounting technology is the first time in history that makes it possible for even the United States to use the new framework to produce accurate and reliable financial statements. More to the point, the simplicity of maintaining this new financial accounting technology can make it possible for use not just in the U.S., but in virtually all foreign countries receiving aid from the U.S. It has long been a problem with some, maybe many, small countries not having the capability of maintaining "state-of-the-art" accounting systems, not to mention their systems not being auditable.

The same situational problems can be found with public and private entities across the entire U.S., not to mention the entire world. There are states across the country, colleges and universities, cities and counties, who do not even appreciate the problems they have to deal with. And yes, these same problems exist with every business in the world, large and small. Examples include Bernie Madoff scandal (2008) and Rita Crundwell scandal (Dixon, IL 2012).

And everyone, including auditors, simply accept that the current state of the art (i.e., prior art) is as good as it gets. What is their excuse? They believe the prior art has stood the test of time, and thereby don't seem to think financial accounting technology can be improved. There is also the possibility that I am the first person in history to have such high levels of expertise in the two major areas of importance – 1) financial accounting technology, and 2) related computer technology.

Concern No. 2. Explain what impacts you have experienced as a result of the current state of patent eligibility jurisprudence in the United States. Include impacts on as many of the following areas as you can, identifying concrete examples and supporting facts when possible:

- **Concern No. 2-4. Research and Development.** Research and development have been negatively impacted in my business in two areas – cost and time. The cost and time the patent examiner caused me to waste has been very distressing.

  Over the past eight years, the cost has accumulated to approximately $80,000. That is a lot of money to me. The bigger issue with me is the excessive time I needed to help my attorney with arguments against the examiner's arguments.

  For the first four years I had to suffer through some of the examiner's stupidest prior art arguments. I will let you research the "Baig" reference he used in one of his arguments. As I recall, the "Baig" reference was anything but written by a skilled artisan. Another example, the examiner could not distinguish between the centuries-old financial accounting "trial balance" to my reference in the specifications to a "cash basis trial balance." The description of the two terms, as you can see, make it extremely difficult to NOT see or understand that there is a difference. To make it worse, I paid about $1,500 to speak to the examiner for 30 minutes over the phone. I tried and tried to explain the difference. About all he could say is "a trial balance is a trial balance." This amounts to absolute ignorance, given that I considered myself the skilled artisan, and he was apparently anything but.

  Eventually, "prior art" arguments were discontinued by the PTAB after four years, but what followed was another four years of questionable arguments that my work was nothing more than an "abstract idea." Of course, this four-year problem I experienced was similar to the first four years, but the big problem was that the examiner did not define what an "abstract idea" is. I finally decided to do what the courts do – I used the ordinary definition of "abstract idea" where there otherwise is no definition. My argument using this "ordinary" definition is presented in Document Part 2 – Problems with Examiner.

- **Concern No. 2-8. Ability to obtain financing from investors or financial institutions.** My most serious attempt to get outside financing was three or four years ago. For the first time, I published a monograph documenting my work (available on my business website – cmwsoftware.com, about 75 pages). Included in that document was an offer by me to "partner up" with another company. I had waited for many years believing very strongly that my work was indeed patentable. And with the patent I would be in a better bargaining position.

  Within a couple of months of the publication of my monograph, I only received about 10 or 12 offers. This was not surprising because I did no advertising. Most of them were small businesses who did not have a clue what the value of my work was. One of the responses to my "partnership" offer was one of the largest corporations in the world. I received an email signed by the President/CEO. He wanted to set up a new corporation for our partnership. While that is very close to what I was hoping for, I did not respond to the offer because it was a Chinese corporation and I felt like I would be selling out my own country. A colleague of mine told me it was probably a scam. I don't think it was, because nothing was being requested of me, other than a negotiated partnership.

  It has been my understanding for a long time that the first to fully develop and market my new accounting system has a huge marketing advantage over late comers.

- **Concern No. 2-11. Product Development.** Product development never stops for most businesses, and my business is no exception. For example, in my business there are computer-related technology changes, financial accounting and reporting compliance changes, software technology changes, new features to gain a competitive advantage, and new ideas. I have experienced all these things. And virtually all of these experiences bring with them the age-old problems of time and money.

  Since my first product in 1988, I have never experienced any bigger problem than with my latest product. The single biggest problem I was confronted with was the EXAMINER. Hence, I have documented in some detail this eight-year-long problem in Document Part 2 – Problems with Examiner.

- **Concern No. 10. Identify how the current state of patent eligibility jurisprudence in the United States impacts the global strength of U.S. intellectual property.**

  If extraordinarily new technology is a replacement for 500-year-old technology, and the new technology is critical to every country in the world, every business in the world, large and small, every governmental unit in the world, large and small, and every oversight body of the afore-mentioned entities, the country in which it is developed and marketed cannot help but be strengthened in many different ways. In my case, the USPTO, specifically the Examiner, has further destroyed my trust in the honesty of the U.S. government. To quote a common phrase from investigative journalism everywhere these days, "Too many elite government officials suffer from either incompetence or corruption. It is hard to tell which."

- **Concern No. 11. Identify how the current state of subject matter eligibility jurisprudence in the United States impacts the U.S. economy as a whole.**

  My work is one of the greatest inventions of all time. I am the only person on the planet who can prove this beyond all doubt. It will spread around the world eventually. It has the unbelievable potential to literally "clean up" the many problems in current state-of-the-art financial accounting

and auditing. This alone will positively impact the U.S. economy as a whole. More on this in Document Part 2 – Problems with Examiner."

- **Concern No. 12-6. Identify how the current state of patent eligibility jurisprudence in the United States impacts the global strength of U.S. intellectual property and the U.S. economy in any of the following areas, providing concrete examples and supporting facts when possible: other computer-related inventions (e.g., software, business methods, computer security, databases and data structures, computer networking, and graphical user interfaces).**

  I have addressed this concern already. There is more in Document Part 2 – Problems with Examiner.

- **Concern No. 13. Identify how the current state of patent eligibility jurisprudence in the United States affects the public. For example, does the jurisprudence affect, either positively or negatively, the availability, effectiveness, or cost of … software, or computer-implemented inventions.**

  The effect on the public caused by the Examiner's continued incompetence is most certainly devastating. You only have to look at what my work does to protect against all users of current state of the art (i.e., prior art) financial accounting systems. This includes about everyone: business owners, taxpayers, regulatory bodies, oversight bodies, etc.

  The financial auditing community does not have the capability to effectively detect errors in the audited financial statements because the underlying transactional data that are the source of the statements are not stored in an "auditable" format for the auditor. You only have to look at the many cases of fraud and embezzlement in this country. They are everywhere. My work as described in the patent specifications, have made unimaginable, and unbelievable, improvements in the area. More on this in Document Part 2 – Problems with Examiner.

DOCUMENT PART 2 – Problems with Examiner (Parts 1 – 5)

Problems with Examiner Part 1 – Preamble

This paper is largely about patent eligibility and ineligibility, which includes subject matter eligibility. Per the Bahr (USPTO) memo dated 4/19/2018, "… **an examiner should conclude that an element (or combination of elements) represents well-understood, routine, conventional activity only when the examiner can readily conclude that the element(s) is widely prevalent or in common use in the relevant industry**." PLEASE REMEMBER THIS!

The **Federal Circuit** has held that some claims contain limitations directed to purported improvements described in the specification, thereby **raising a genuine issue of material fact** as to whether the purported improvements were more than well-understood, routine, conventional activity previously known in the industry. **Specifically**, the Federal Circuit held that **"whether something is well-understood, routine, and conventional to a skilled artisan at the time of the patent is a factual determination."** PLEASE REMEMBER THIS!

Dictionary Definitions and Installation Instructions Not Hearsay in IPR Proceedings. (Source: Lexology 9/14/2020) The Board held that dictionary definitions and installation instructions offered as evidence of the meaning of terms as understood by a person of ordinary skill should not be excluded as hearsay. These definitions and instructions were not offered for truth of any statement or assertion and were similar to prior art, which is not considered hearsay when offered to provide what it describes as the state of the art. *Trend Micro Inc., v. Cupp Computing AS,* IPR2019-00764, Paper 34 (Aug. 25, 2020) (Giannetti, joined by Baer and Fenick). Source: Lexology 9/14/2020

To set the stage that follows, I believe that nobody has the right to assign their own personal meaning to anything, including words or phrases that, to coin a phrase, represent a well-understood, routine, conventional meaning. This is particularly true if the "personal" meaning has an obvious questionable motive, not to mention, if the so-called "artisan" is not considered to be a skilled artisan at the time of the patent. For this very precise reason, much of the discussion that follows addresses questionable conclusions based on questionable suppositions that are not supported by depositions signed by a skilled artisan at the time of the patent, whose skills are properly documented. To put it mildly, Appellant has very strong evidence that this is not, and has not been, the case in the past. That is, Examiner's arguments sometimes go unquestioned, and do not stand up to scrutiny.

Possible Problems with Examiner

Claim 1 is not prior art, and never should have been considered prior art. The Examiner for years argued that Appellant's invention was prior art. It never was prior art. The problem is that the Examiner steadfastly, either intentionally or unintentionally, failed or refused to understand Claim 1. What makes me think this way? I have read articles written by experts, many of which appear in the WSJ, that identify high-ranking federal officials as NOT being truthful and/or factual. The conclusion that is common to these publications is that the officials are either incompetent or corrupt. Such might be the case with this Examiner who has thwarted my application for over eight years.

A couple of examples might be telling. First, I go through years of wasting money and time challenging prior art arguments by the Examiner. Then one day, someone reviews the Examiner's prior art arguments, and just like that, all prior art arguments by USPTO disappear. At the very same time, a new argument pops up that the Examiner apparently was not even aware of. That one new argument was basically a conclusion that Claim 1, all of a sudden, is declared to be an "abstract idea." How do these things happen? Incompetence? Corruption? That question lingers in my mind.

35 U.S. Code § 101 (Patent Eligibility)

35 U.S. Code § 101 – Inventions patentable. Before discussing USPTO Section 101 guidance, specifically 2019 Revised Guidance and the October 2019 Update, as referenced by the Examiner, it might be helpful to understand the following from 35 U.S. Code Section 101:

> 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. (July 19, 1952, ch. 950, 66 Stat. 797.)
>
> The term "process" means process, art or method, and includes a new use of a known process, machine, manufacture, composition of matter, or material. (source: 35 U.S. Code Section 101)

The importance of these excerpts is that they appear to say that "a new and useful process, including a new and useful method" is patent eligible. Also, they appear to say that such patent eligibility includes "a new use of a known process."

Attention will focus on how Claim 1, **first** meets these patent eligibility requirements, and **second** is not an abstract idea.

To avoid confusion, it might be helpful to understand that:

1) Mayo/Alice Step 1 = Step 2A in the USPTO's guidance
2) Mayo/Alice Step 2 = Step 2B in the USPTO's guidance

SLS Note: Under 35 U.S.C. Section 112(a), or pre-AIA Section 112: a valid patent must describe the manner and process of making and using the claimed invention. A claim is adequately enabled when the specification teaches "those skilled in the art how to make and use the full scope of the claimed invention without undue experimentation."

A simplified summary of many such improvements are presented in a spreadsheet format at the end of Part 5 of the "Problems with Examiner."

USPTO Section 101 Guidance

The Examiner states in part (middle page 6): "Under the 2019 Revised Guidance and the October 2019 Update, we first look to whether the claim recites: (1) any judicial exceptions, including certain groupings of abstract ideas (i.e., mathematical concepts, certain methods of organizing human activity such as a fundamental economic practice, or mental processes) **("Step 2A, Prong One")**; and (2) additional elements that integrate the judicial exception into a practical application (see MPEP 2106.05(a)—(c), (e)—(h) (9th ed.Rev. 08.2017, Jan. 2018)) **("Step 2A, Prong Two")**.

> **Footnote 3 (Step 2A, Prong two)** (bottom page 6). This evaluation is performed by (a) identifying whether there are any additional elements recited in the claim beyond the judicial exception, and (b) evaluating those additional elements individually and in combination to determine whether the claim as a whole integrates the exception into a practical application. See 2019 Revised Guidance - Section Ill(A)(2), 84 Fed. Reg. 54-55.

The Examiner states in part (top page 7): Only if a claim (1) recites a judicial exception and (2) does not integrate that exception into a practical application, do we then look, under Step 2B, to whether the claim: 3) adds a specific limitation beyond the judicial exception that is not "well-understood, routine, conventional" in the field (see MPEP 2106.05(d)); or 4) simply appends well-

understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception. (see Berkheimer memo)

Note: The Examiner does not fully examine this step, but otherwise quotes “other guidance” that renders Step 2B not applicable. The “other guidance”, per Examiner, states something to the effect that the so-called “practical application” cannot itself be “an abstract idea.” I believe the Examiner is inappropriately using the term “abstract idea” certainly in the sense that it has not been defined in the guidance anywhere. This renders the Examiner’s conclusion totally subjective, and difficult, if not impossible, to successfully argue my case against his conclusion.

Does the Examiner actually understand that, at Step 2B, he has no argument beyond the “abstract idea?” Probably. The Examiner’s concern might be that Step 2B has ONLY two options:

1) Does Claim 1 add a specific limitation beyond the judicial exception that is not "well-understood, routine, conventional" in the field? **OR**

2) Does Claim 1 simply append well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception? That very question will be addressed.

   Note: Specifically, the Federal Circuit has held that “whether something is well-understood, routine, and conventional to a skilled artisan at the time of the patent is a factual determination.” To make such determination, you must prove there is an artisan that will provide a deposition to that effect. Good Luck! Is the Examiner calling that shot? This could easily explain the Examiner’s excessive reliance on the “abstract idea” argument. Is this reliance supposition, conjecture, or what? Given what is at stake, you would think there would be a little more logic, truth, fact, etc. in the Examiner’s argument.

USPTO STEP 2A, PRONG 1

Per the Examiner (p. 7) – “The Examiner concludes that Claim 1 is directed to accounting, which is a fundamental economic practice and a method of organizing human activity.” This “preliminary conclusion” is based on USPTO Section 101 guidance of January 2019, updated October 2019. But this conclusion inevitably becomes the basis of the next (“follow-up”) conclusion: that Claim 1 is, therefore, an abstract idea. That is, the PTAB states in part: “Accordingly, we conclude the claims recite a fundamental economic practice, which is one of certain methods of organizing human activity identified in the Revised Guidance, and thus an abstract idea.”

Note: Per examination guidance (October 2019 Update: Subject Matter Eligibility, top page 3), “Under the 2019 PEG, if an examiner has an application with a claim limitation that does not fall clearly within the enumerated groupings of abstract ideas, but the examiner nonetheless determines, based on a Supreme Court or Federal Circuit decision, that the claim limitation should be treated as reciting an abstract idea, the examiner should bring the application to the attention of their Technology Center (TC) Director…”

Given this guidance, the Examiner states in part (bottom page 7) – “The emphasized limitations in the recitation of Claim 1 above, under their broadest reasonable interpretation, **recite an accounting system because the various limitations recite the steps that would ordinarily be used in an accounting system**.” Oh, really?

Possible Arguments against Examiner's conclusions:

1) "Accounting" is a fundamental economic practice.
2) "Accounting" is a method of organizing human activity (human activity has not been defined)
3) "We (PTAB) conclude the claims recite a fundamental economic practice, which is one of certain methods of organizing human activity identified in the Revised Guidance, and thus an abstract idea.
4) "Claim 1 recites an accounting system because the various limitations recite the steps that would ordinarily be used in an accounting system."
5) "Claim 1 is directed to accounting, and therefore is a fundamental economic practice long prevalent in our system of commerce, which is one of certain methods of organizing human activity identified in the Revised Guidance, and thus an abstract idea." Whew!!!

How is it possible to say that Claim 1 recites "the steps that would ordinarily be used in an accounting system"? How much does it take to understand the comparison of Claim 1 to Double Entry Accounting (DEA)? A spreadsheet comparison is presented on final page.

The Examiner appears to be saying that the process is "an accounting system." The Examiner does not provide any evidence whatsoever that describes what he means when he uses the term "an accounting system."

We will show that the Examiner is short on evidentiary subject matter which clearly reveals a significant lack of support for his arguments. For more than seven years the Examiner has consistently and clearly shown, based on his conclusions, that he is NOT a skilled artisan in the basic technological skills that are helpful, if not required, to understand the claims and the specifications. Such skills include 1) accounting, auditing, budgeting, reporting, and 2) computer skills such as software engineering, database design, and data warehouse management.

We will start by showing 1) an accounting system is not a fundamental economic practice, or a fundamental anything, and 2) an accounting system is not an abstract idea, at least by definition.

In Part 2 – Definitions for Response to Examiner, the focus will be on terminology that seems to be inconsistent with the Examiner's "personal" use.

Problems with Examiner Part 2 – Background Prior Art and Definitions (8/31/2021)

As discussed in much detail, the specifications describe a computerized financial accounting and reporting system. Understanding the state of the art and prior art on a particular subject matter is important to anyone making conclusions concerning patent eligibility. This obviously includes the Examiner. Consulting the guidance of skilled artisans is a good start toward understanding prior art and the related lexicon. But to gain an understanding of the "subject matter," you need to recognize the subjects.

The technical field comprises data management, accounting data management, and accounting systems and methods. (Par. 0001) Put another way, Claim 1 patent eligibility is based on at least two major subject areas: accounting and computers.

For 6 or 7 years, the Examiner did not recognize this. He focused his attention on accounting, and on prior art. I attempted, on my own time and at my own cost, to help him to understand a major element of Claim 1 that was computer related – a "cash basis trial balance." The Examiner obviously was not interested, and did not want to understand. His memorable conclusion was "a trial balance is a trial balance." That is, he was equating the standard double entry accounting "trial balance" to the newly

discovered “cash basis trial balance” described in the specifications. The Examiner’s ignorance might have been in violation of USPTO guidance. How can anyone not see the difference in the wording, and therefore inquire about the difference in their meaning? How can you not recognize the difference between the traditional “trial balance” and Claim 1’s “cash basis trial balance?”

The Examiner, was not listening. He was telling me, in effect, that he was the skilled artisan. This was a major problem with the Examiner because no proof has been provided that the Examiner is a skilled artisan in accounting or computer technology. Yet, the Examiner was supplanting the Claim 1 meaning of a “cash basis trial balance” with the traditional meaning of the well-understood, routine, conventional “trial balance.”

What is a skilled artisan? A skilled artisan is one who understands in a skillful way the subject matter of the Claim. In the case of Claim 1, you necessarily must be skilled in financial accounting. Perhaps more importantly, you must be skilled in computer technology, such as database design, database management, and software engineering. Without these skills, how can you be considered competent to make conclusions about the difference or similarity of Claim 1 and “ordinary” computerized financial accounting systems? The fact is, you cannot competently make conclusions about subject matter in which you are not a skilled artisan.

Along those same lines, nobody has the right to assign their own personal meaning to anything, including words or phrases that represent a well-understood, routine, conventional meaning. This is particularly true if the “personal” meaning has an obvious questionable motive, not to mention, if the so-called “artisan” is not considered to be a skilled artisan at the time of the patent. For this very precise reason, much of the discussion that follows addresses questionable conclusions based on questionable suppositions that are not supported by depositions signed by a skilled artisan at the time of the patent, whose skills are properly documented. To put it more directly, this is a problem with the Examiner and has been a problem for many years.

- **What is the meaning of “Abstract Idea?”**

  Per yourdictionary.com

  > Abstract is defined as something that is not physical or concrete.
  > Considered apart from concrete existence: *an abstract concept*
  > Not applied or practical; theoretical
  > Difficult to understand; abstruse
  > Denoting something that is immaterial, conceptual, or nonspecific, as an idea

- **What is the meaning of “steps that would ordinarily be used in an accounting system?”**

  The Examiner uses the phrase “steps that would ordinarily be used in an accounting system” as a pretense to conclude that Claim 1 is therefore not patent eligible. Yet, the Examiner does not describe the specific steps. This is a classic example of how the Examiner fails to provide sufficient evidence to support his conclusions. Indirectly, the Examiner uses his personal judgement for whatever conclusions he personally favors.

  For this reason, following is objective evidence to prove this very point.

- **What is the meaning of an Accounting System (accountingtools.com)?** Accounting is the systematic recordation of the financial transactions of a business. Such recordation can be split into three activities: 1) setting up a system of record keeping, 2) tracking transactions within that

system of record keeping, and 3) aggregating the resulting information into a set of financial reports.

- **What is the meaning of Financial Accounting (accountingtools.com)?**

  Financial accounting is the practice of recording and aggregating financial transactions into financial statements. The intent of financial accounting is to distribute a standard set of financial information to outside users of the information, such as creditors, lenders, and investors. It is usually compared to management accounting, which focuses on an operational analysis of a business to explore how it can be made more efficient or profitable.

  Several accounting frameworks are available that provide the rules under which financial statements are to be constructed, so that the financials issued by the entities in an industry will be comparable. For a for-profit or nonprofit business, these rules are provided (in the United States) by the **Generally Accepted Accounting Principles (GAAP) framework** and (elsewhere) by **International Financial Reporting Standards (IFRS) framework**. If a company is publicly-held, additional rules are mandated by the **Securities and Exchange Commission (SEC)** if the business lists its shares on a stock exchange in the United States.

  Financial accounting involves the creation of a chart of accounts, so that financial transactions can be stored in a consistently-used set of accounts. There are also a number of policies and procedures that provide structure for how transactions are to be recorded into these accounts. Once recorded, the financial statements and their associated set of disclosures are compiled and then released to users.

  The focus of financial accounting is outward – its work product is read by persons outside of a business, such as investors, creditors, and lenders. Since lawsuits can arise from the issuance of incorrect financial statements, a strong focus in financial accounting is on ensuring that the information presented fairly represents the financial position, cash flows, and results of a business.

- **What are the most common types of Financial Accounting Systems?**

  Accountingtools.com describes in some detail a Double Entry Accounting system:

  Double Entry Accounting Overview

  Double entry accounting is a record keeping system under which every transaction is recorded in at least two accounts. There is no limit on the number of accounts that may be used in a transaction, but the minimum is two accounts. There are two columns in each account, with debit entries on the left and credit entries on the right. In double entry accounting, the total of all debit entries must match the total of all credit entries. When this happens, the transaction is said to be “in balance.” If the totals do not agree, the transaction is said to be “out of balance,” and you will not be able to use the resulting information to create financial statements until the transaction has been corrected.

  Double Entry Accounting Definitions

  The definitions of a debit and credit are:

A *debit* is that portion of an accounting entry that either increases an asset or expense account, or decreases a liability or equity account. It is positioned to the left in an accounting entry.

A *credit* is that portion of an accounting entry that either increases a liability or equity account, or decreases an asset or expense account. It is positioned to the right in an accounting entry.

An *account* is a separate, detailed record associated with a specific asset, liability, equity, revenue, expense, gain, or loss. Examples of accounts are:

Cash (asset account: normally a debit balance)
Accounts receivable (asset account: normally a debit balance)
Inventory (asset account: normally a debit balance)
Fixed assets (asset account: normally a debit balance)
Accounts payable (liability account: normally a credit balance)
Accrued liabilities (liability account: normally a credit balance)
Notes payable (liability account: normally a credit balance)
Common stock (equity account: normally a credit balance)
Retained earnings (equity account: normally a credit balance)
Revenue – products (revenue account: normally a credit balance)
Revenue – services (revenue account: normally a credit balance)
Cost of goods sold (expense account: normally a debit balance)
Wage expense (expense account: normally a debit balance)
Utilities expense (expense account: normally a debit balance)
Travel and entertainment (expense account: normally a debit balance)
Gain on sale of asset (gain account: normally a credit balance)
Loss on sale of asset (loss account: normally a debit balance)

Double Entry Accounting Examples

Here are the double entry accounting entries associated with a variety of business transactions:

Buy merchandise. You buy $1,000 of goods with the intention of later selling them to a third party. The entry is a debit to the inventory (asset) account and a credit to the cash (asset) account. In this case, you are swapping one asset (cash) for another asset (inventory).
Sell goods. You sell the goods to a buyer for $1,500. There are two entries in this situation. One is a debit to the accounts receivable account for $1,500 and a credit to the revenue account for $1,500. This means that you are recording revenue while also recording an asset (accounts receivable) which represents the amount that the customer now owes you. The second entry is a $1,000 debit to the cost of goods sold (expense) account and a credit in the same amount to the inventory (asset) account. This records the elimination of the inventory asset as we charge it to expense. When netted together, the cost of goods sold of $1,000 and the revenue of $1,500 result in a profit of $500.
Pay employees. You pay employees $5,000. This is a debit to the wage (expense) account and a credit to the cash (asset) account. This means that you are consuming the cash asset by paying employees.
Buy a fixed asset. You pay a supplier $4,000 for a machine. The entry is a debit of $4,000 to the fixed assets (asset) account and a credit of $4,000 to the cash (asset) account. In this case, you are swapping one asset (cash) for another asset (inventory).

Incur debt. You borrow $10,000 from the bank. The entry is a debit of $10,000 to the cash (asset) account and a credit of $10,000 to the notes payable (liability) account. Thus, you are incurring a liability in order to obtain cash.
Sell shares. You sell $8,000 of shares to investors. The entry is a debit of $8,000 to the cash (asset) account and a credit of $8,000 to the common stock (equity) account.
Pay a credit card statement. You pay a credit card statement in the amount of $6,000, and all of the purchases are for expenses. The entry is a total of $6,000 debited to several expense accounts and $6,000 credited to the cash (asset) account. Thus, you are consuming an asset by paying for various expenses.

Thus, the key point with double entry accounting is that a single transaction always triggers a recordation in at least two accounts, as assets and liabilities gradually flow through a business and are converted into revenues, expenses, gains, and losses.

Alternatives to Double Entry Accounting

A simpler version of accounting is **single entry accounting**, which is essentially a cash basis system that is run from a check book. Under this approach, assets and liabilities are not formally tracked, which means that no balance sheet can be constructed.

What are the most common types of Financial Accounting Systems? At least based on the above discussion per accountingtools.com, it appears that that there are only two "common" types of financial accounting systems – 1) Double Entry Accounting, and 2) Single Entry Accounting.

- **Corroborating Source (IRS) – Common Types of Financial Accounting Systems?**

Accountingtools.com describes in detail "double entry accounting" and follows with "Alternatives to Double Entry Accounting." Accountingtools.com offers one "alternative" in stating "A simpler version of accounting is single entry accounting, which is essentially a cash basis system that is run from a check book."

The US federal government appears to agree with this description of common accounting systems. Indeed, IRS Publication 583 states that "You must decide whether to use a single-entry or a double-entry bookkeeping system."

The IRS is simply and clearly stating that, based on their expertise, there are only two types of accounting systems, meaning single entry accounting and double entry accounting. And the same publication states that when you own more than one business, you can use a different accounting **method** for each business if the method you use for each clearly shows your income. The IRS is merely stating that within these two types of accounting systems there are different "bases of accounting."

Per accountingtools.com (Steven Bragg), the **basis of accounting** refers to the methodology under which revenues and expenses are recognized in the financial statements of a business. When an organization refers to the basis of accounting that it uses, two primary methodologies are most likely to be mentioned:

Cash basis of accounting. Under this basis of accounting, a business recognizes revenue when cash is received, and expenses when bills are paid. This is the easiest approach to recording transactions, and is widely used by smaller businesses.

Accrual basis of accounting. Under this basis of accounting, a business recognizes revenue when earned and expenses when expenditures are consumed. This approach requires a greater knowledge of accounting, since accruals must be recorded at regular intervals.

Per accountingtools.com: “Accounting is more than recording, storing, and retrieving transactions to create financial statements and reports. Accounting encompasses additional activities such as a chart of accounts, setting up the general ledger, creating internal (management) financial reports, creating external financial statements and reports, such as for bank loans and shareholders, budgets, tax returns, and internal controls that provide assurance regarding the auditability, accuracy, and reliability of the underlying financial transactional source data used to create the financial statements and reports.”

Tentative Conclusion. A conclusion that can be drawn based on the above discussion is that there are, in prior art, two types of accounting systems – 1) single entry accounting systems, and 2) double entry accounting systems. Translated, that means there are only two types of “accounting systems” that could be characterized as “steps that would ordinarily be used in an accounting system” – 1) single entry accounting systems, and 2) double entry accounting systems. To summarize:

Single-entry accounting has these general characteristics: 1) single-entry method of bookkeeping, 2) designed to record cash transactions, 3) designed to generate a cash basis income statement, and 4) generally recommended only for very small businesses.

Per accountingtools.com “A single entry system records each accounting transaction with a single entry to the accounting records, rather than the more common double entry system. The single entry system is centered on the results of a business that are reported in the income statement. … Asset and liability records are usually not tracked in a single entry system; these items must be tracked separately. … **Single entry systems are strictly used for manual accounting systems**, since all computerized systems utilize the double entry system instead. … It is generally possible for a trained accountant to manually reconstruct a double entry-based set of accounts from single entry accounting records, though the time required may be substantial.

Double-entry accounting has these general characteristics: 1) double-entry method of bookkeeping, 2) designed to record all financial transactions, 3) designed to generate an accrual basis balance sheet and income statement, and 4) widely recommended for businesses.

Problems with Examiner Part 3 – Overview of Differences Between Claim 1 and Prior Art (8/31/2021)

- **Comparison of Claim 1 to Single Entry Accounting Systems and Double Entry Accounting Systems – an OVERVIEW:**

As discussed previously, the Examiner uses the phrase “steps that would ordinarily be used in an accounting system” as a pretense to conclude that Claim 1 is therefore not patent eligible. Yet, the Examiner does not describe the specific steps he is referring to.

Following is a comparative overview of the primary differences between Claim 1 and related specifications, on the one hand, and “steps that would ordinarily be used in an accounting system.” This will include two separate comparisons, one each for the two most common types of accounting systems in existence: 1) single entry accounting, and 2) double entry accounting.

Comparison No. 1: Claim 1 and related specifications TO Single Entry Accounting (SEA).

SEA is designed 1) to record cash transactions, and 2) to generate a cash basis income statement for a business.

Claim 1 is designed to record ALL transactions. Moreover, Claim 1 is designed to generate virtually any type of financial statement, including cash basis, tax cash basis, accrual basis, and tax accrual basis.

This is largely made possible with a new accounting concept referred to in Claim 1 and the specifications as a **cash basis trial balance**.

Claim 1 is also designed to record transactions and create the same financial statements for individual business segments, any selected group of business segments, and all business segments combined (i.e., the business as a whole), all using the same accounting system simultaneously.

This capability largely makes is possible to share 1) employee payroll expenses, and 2) expenses for capital assets (depreciation expense) among all business segments within the same accounting system simultaneously.

Comparison No. 2: Claim 1 and related specifications TO Double Entry Accounting (DEA).

DEA is designed to record all transactions and primarily to generate **an** accrual basis balance sheet and income statement for **a** business.

Claim 1 is designed to record all transactions. Moreover, Claim 1 is designed to generate virtually any type of financial statement, including cash basis, tax cash basis, accrual basis, and tax accrual basis. This is largely made possible with a new accounting concept referred to as a cash basis trial balance.

Claim 1 is also designed to record transactions and create the same financial statements for individual business segments, any selected group of business segments, and all business segments combined (i.e., the business as a whole), all using the same accounting system simultaneously. This capability largely makes is possible to share 1) employee payroll expenses, and 2) expenses for capital assets (depreciation expense) among all business segments within the same accounting system simultaneously.

To summarize, DEA is designed to record all transactions and 1) primarily to generate an accrual basis balance sheet and income statement, and 2) primarily to generate financial statements for one accounting entity. Claim 1 distinguishes itself over DEA with its special design features that give it the flexibility and capability to not only record all transactions in a simple and efficient process, but also to 1) create any type of financial statement, using any basis of accounting, and 2) create such statements for any individual business segment, any selected group of business segments, or 3) the entity as a whole (i.e., all business segments combined). However, the Claim 1 distinguishing features do not stop there:

Additional Feature – Highest Level of Auditability Ever Achieved. Claim 1 tracks transactions forever because such transactions are recorded and stored in a single entry format that identifies the original source information. No accounting system in history has demonstrated the capability to store all such data, not to mention the capability to thereby

retrieve the same data for audit purposes, a month later, a year later, or a decade later. This capability, in turn, makes it possible to re-create any financial statement or report using the same original source data that was used to create the original financial statements and reports. The auditability of such transactional data becomes simple, efficient, and unlimited, and as a consequence, provides the highest level of confidence in the underlying data used to prepare financial statements and reports ever achieved. The same can be said for the confidence in the accuracy and reliability of the related financial statements and reports.

Additional Feature – Financial Statement Decisions AFTER End of Period. The business owner can decide AFTER year-end what financial statements are needed. For example, the business owner might have started the year under the assumption that the same financial statements would be prepared as in the past. That is, for three business segments, the owner had prepared a separate Schedule C tax cash basis financial statement for each business segment. These schedules were then submitted for business income tax purposes along with the owner's personal income tax return.

Something happened shortly after the end of the year. The business owner was very successful and decided to expand, but needed a huge bank loan, and consequently needed an accrual basis balance sheet and income statement.

IF the business owner was relying on prior art for accounting purposes – big-time problems.

IF the business owner was relying on Claim 1 for accounting purposes – minimal problems.

What is the difference? You are locked in at the beginning of the year with your "prior art" accounting system. If you rely on Claim 1 you are NEVER locked in to any financial statement, even after the end of the year. Extraordinary as this is to believe, BELIEVE IT!

Point 1. IF the business owner was relying on prior art for accounting purposes – the nightmare begins. IF the business owner was relying on Claim 1 for accounting purposes – a vacation in the Bahamas is in order.

Point 2. IF the Examiner still does not comprehend the enormity and the difference between the "prior art" trial balance and the "cash basis trial balance" God help him.

Additional Feature. There are variations of both the cash basis of accounting and the accrual basis of accounting. Also, there are other types of accounting systems, but most have very limited reporting purposes. Perhaps the most common such system would be "checkbook accounting" in which cash transactions (cash receipts and cash disbursements) are recorded, and maintain a running available cash balance in the related bank checking account.

Virtually all businesses need, at a minimum, a cash basis accounting system to record cash receipts and cash disbursements. However, some businesses are very small, and do not require a sophisticated, full-featured accounting system. For example, some businesses do not need a payroll accounting function. Some businesses do not need an accounts receivable accounting function.

Other such systems might include payroll accounting, accounts receivable accounting, accounts payable accounting, etc. The piece-meal approach to accounting is not needed.

Generally speaking, single-entry accounting is synonymous with single-entry accounting systems, and the singe-entry method of bookkeeping. Double-entry accounting is synonymous with double-entry accounting systems, and the double entry method of bookkeeping.

Claim 1 compared to “steps that would ordinarily be used in an accounting system” as quoted by the Examiner.

Claim 1 is NOT comparable to any of the above-discussed types of accounting, so as to be characterized as “steps that would ordinarily be used in **an accounting system**.” It is not even close. For example:

> **Single Entry Accounting Systems.** Single entry accounting systems are typically, and perhaps exclusively, recommended only for recording cash transactions, that is, cash receipts and cash disbursements. Single entry accounting systems are reasonably simple to maintain, but at the same time are limited to cash-related reporting.
>
> **Double Entry Accounting Systems.** Double entry accounting systems, unlike single entry accounting systems, have at least two very distinct differences: 1) all transactions, not just cash transactions, are typically recorded, and 2) all transactions are recorded in a double entry (debit/credit) format in a ledger system comprising a general ledger and multiple subsidiary ledgers.
>
> The **steps that would ordinarily be used in a double entry accounting system** would start with recording a transaction as a journal entry, which in turn would be posted to (i.e., recorded in) the ledger system. That is, transactions are recorded first as a journal entry, and second as a double entry posting to one or more ledgers in the ledger system.
>
> Point 1. The ledger system itself creates significant complexity in day-to-day maintenance of the double entry system as a result of multiple ledgers that include a general ledger and multiple subsidiary ledgers. Moreover, each ledger has many accounts. The complexity in recording each transaction is four-fold – 1) which ledger(s) to use, 2) which ledger account(s) to use, 3) what amount to use, and 4) whether to use a debit or credit. This explains why, to enter transactions, and maintain a double entry accounting system day-to-day requires an accountant who has a reasonably high level of related education, training, and experience.
>
> Point 2. Say a new single-line-of-business company establishes a suitable accounting system. Later, this company “branches out” into other lines of business. The IRS requires that each line of business must file income tax returns separately. In turn, that means each “separate line of business” would be required to establish a separate accounting system. The Claim 1 system is seamlessly capable of handling all such lines of business into one accounting system.
>
> Point 3. Claim 1 describes a “data warehouse” comprising accounting and reporting sub-systems which have different functions (see Figs. 1-5), employed to record and store data in single entry format, transactions for a business entity as well as a subsidiary of the business entity (i.e., business segments), and is designed with the capability to retrieve such transactional data for virtually any type of financial statement known, or unknown, to mankind.
>
> Point 4. It should be obvious that Claim 1 has 100 percent eliminated, perhaps the most well recognized step in the entire history of accounting systems – the double entry posting of journal entries to the ledger system. Ironically this one step represents the culprit of the existing shortcomings of prior art. That is, the double entry posting of journal entries to the

ledger system is 1) complex to maintain on a continuing basis, 2) time consuming to maintain on a continuing basis, 3) vulnerable to fraudulent financial statement reporting, 4) limited in financial statement reporting capability, and 5) lacking in day-to-day, month-to-month, and year-to-year auditability of the underlying accuracy of the transactions recorded in double entry format.

To summarize, Claim 1 uses a simple and efficient initial entry method for all transactions (single entry format). Comparatively speaking, the ordinary accounting system (DEA) uses a complex and inefficient method.

The only reason double entry systems have survived historically is that a better system has not been invented. Until now, of course, the shortcomings of double entry accounting have never been considered to be a problem. Quite the opposite, double entry accounting has been accepted universally as a gift from heaven. Only with this invention (that is, Claim 1) are the problems with double entry accounting being exposed for the world to see. Sadly, for most small business entities, double entry accounting is not affordable given the complexity and cost of maintaining it.

- **What is a Chart of Accounts?** The chart of accounts is a listing of all accounts used in the general ledger of an organization. The chart is used by the accounting software to aggregate information into an entity's financial statements. The chart is usually sorted in order by account number, to ease the task of locating specific accounts. The accounts are usually numeric, but can also be alphabetic or alphanumeric. (accountingtools.com)

  Regarding the chart of accounts, accountingtools.com suggests the following: “Do not allow subsidiaries to change the standard chart of accounts without a very good reason, since having many versions in use makes it more difficult to consolidate the results of the business.” This suggestion points to the problem with double entry accounting systems that they do not conveniently accommodate more than one business segment in the accounting system. That is to say, if a business owner has, for example, five separate business segments, a separate accounting system would be required for each one. Hence, the consolidation requirement.

  (Important: Claim 1 technology can accommodate any number of business segments, all in the same accounting system. Put another way, expenses shared between business segments, such as for shared employees and shared assets can be accounted for in the accounting system with simplicity and flexibility. Furthermore, any and all financial statements and reports can be created 1) at the business segment level, for any selected group of business segments, as well as the business as a whole.)

  The chart of accounts methodology used in reference to Claim 1 is significantly different than that described above for double entry accounting systems. The chart of accounts referenced in Claim 1 is better characterized a chart of accounts system, or integrated groups of such accounts. It is illustrated in Fig. 18. As shown in the figure, there is a “Basic Account Code Structure” that includes Receipt Code accounts and Expenditure Code accounts, which are used for cash transactions recorded and stored in Central Sub-System 100 (see Fig. 2)

- **Starting Point for Financial Statements – Cash Basis Trial Balance.** All cash transactions are recorded and stored in the database with either a “basic” receipt code, for cash receipts, or a “basic” expenditure code, for cash disbursements. At the end of the financial statement reporting period, and after all cash transactions have been recorded for the entire period, the creation of the “starting point” can begin. The **starting point** for a financial statement is a **cash basis trial**

balance for the selected financial statement using a specialized group of account codes included in the chart of accounts specifically for this purpose (see Fig. 16 and paragraph 70 et seq.).

The following steps can be selected and automatically create the **starting point** for any one of a selected type of financial statement. As shown in Fig. 19, these financial statements include 1) Accrual Basis financial statements, 2) Tax Accrual Basis financial statements, 3) Tax Cash Basis financial statements, or any other type of financial statement, current or future.

The creation of the **starting point** to prepare a financial statement requires a **two-step process** to convert all cash transactions for the reporting period for the selected type of financial statement. This is only the **starting point**, and typically a relatively small number of adjustments are required before the related financial statements can be created.

Step 1 – Summarization By Basic Account Code. The first step is to summarize all cash transactions by basic account code (see Fig. 18). This step summarizes 1) all cash receipts by the basic receipt codes in the chart of accounts, and 2) all cash disbursements by the basic expenditure codes in the chart of accounts. That is, after the summarization takes place, each basic receipt code that had at least one cash receipt transaction will have a record in the **Detailed Summary Table** with the total (summarized) amount for that code. Similarly, each basic expenditure code that had at least one cash disbursement transaction will have a record in the **Detailed Summary Table** with the total (summarized) amount for that code.

This **Detailed Summary Table** contains a **summarized total amount** 1) for all cash transactions for the reporting period (e.g., annual period), 2) **for each basic cash receipt account code and each basic cash disbursement account code**. This **Detailed Summary Table** is created automatically in a matter of seconds, and becomes the precursor of any one of an **unlimited** variety of annual financial statements. Two very common such types of financial statements are 1) Accrual Basis financial statements (standard business financial reporting model, balance sheet and income statement), and 2) Tax Cash Basis financial statements (statements of taxable income and related deductible expenses) (see Fig. 19).

Step 2 – Conversion/Translation. The second step is to convert/translate the summarized totals in the **Detailed Summary Table** for each basic receipt code and each basic expenditure code to another “group” of codes designed for creating a specific type of financial statements (see Fig. 18). The chart of accounts contains a “group” of translation codes designed to convert the summarized basic account codes to targeted financial statement account codes.

To illustrate how the conversion/translation step works, consider the conversion from the **Detailed Summary Table** to the **Tax Cash Basis Summary Table** that serves as the **starting point** for Cash Tax Basis financial statements to be used for income tax reporting purposes.

Conversion/Translation to Create Tax Cash Basis Summary Table:

1) The computer accesses each item in the Detailed Summary Table, for both receipt and expenditure codes, one at a time, to retrieve the receipt or expenditure account code and the amount for that code.

2) The computer next accesses the chart of accounts to locate that specific basic code in the “conversion/translation” table to retrieve the related Tax Cash Basis account code that the “detailed” code is mapped to (see Fig. 18).

3) The computer then creates an entry into the Tax Cash Basis Summary Table using the Tax Cash Basis account code and the related summarized amount.

4) This procedure is repeated for all items contained in the Detailed Summary Table.

5) The end result of the conversion/translation process is a Tax Cash Basis Summary Table. Recognizing that this process is a "**starting point,**" the summary table is more appropriately characterized as an unadjusted **Cash Basis Trial Balance**. It is a trial balance in the sense that it contains a summary of all cash receipts and cash disbursements. Some cash receipts are not taxable, and some cash disbursements are not deductible. Hence, adjustments are required for tax financial statement reporting purposes.

This same two-step procedure can be used to create a "cash basis trial balance" for accrual basis financial statements, that is, a balance sheet and income statement. This specific "cash basis trial balance," records the entries in the related Detailed Summary Table in double entry format, unlike that for Tax Cash Basis financial statements in which the entries in the Detailed Summary Table are recorded in single entry format. This facilitates conversion from outdated double entry accounting systems.

Claim 1 describes a chart of accounts to map detailed transaction codes employed to record and store detailed cash transactions (cash receipts and cash disbursements) to specific general ledger revenues and expenses (Fig. 18). This mapping methodology translates the original detailed cash transactions recorded in single entry format to a summarized amount for a different type of financial statement (Fig.18), such as Tax Cash Basis financial statements, Accrual Basis financial statements (balance sheet and income statement), and Tax Accrual Basis financial statements (Fig. 17).

Problems with Examiner Part 4 – Differences Between Claim 1 and Prior Art (8/31/2021)

The previous guidance was intended to compare Claim 1 and what the Examiner states in part (bottom page 7) – "The emphasized limitations in the recitation of Claim 1 above, under their broadest reasonable interpretation, **recite an accounting system because the various limitations recite the steps that would ordinarily be used in an accounting system**."

Summary of Differences. To summarize the difference between Claim 1 and what the Examiner calls "the steps that would be ordinarily be used in an accounting system." The Examiner makes an extraordinary jump from Claim 1 to "the steps that would ordinarily be used in an accounting system."

Is it accurate, or even fair, for the Examiner to conclude that Claim 1 recites the steps that would ordinarily be used in an accounting system? The IRS is telling businesses that, for tax reporting purposes, "You must decide whether to use a single-entry or a double-entry bookkeeping system." This basically is saying that there are only two types of accounting systems – 1) single entry accounting systems, and 2) double entry accounting systems.

The Examiner is considerably stretching his characterization of Claim 1 as "steps that would ordinarily be used in **an accounting system**." It is not even close. In fact, the Examiner would be hard-pressed to identify one step, not to mention the entirety of Claim 1, that can be characterized as being "steps **ordinarily** used in an accounting system." To put it bluntly, the **differences** between Claim 1 and "steps that would ordinarily be used in an accounting system" are simple to identify, as are the obvious improvements of Claim 1 over prior art.

Comparing the Difference Between Claim 1 and "Ordinary" Accounting Systems – 1) Single Entry Accounting, and 2) Double Entry Accounting

- **Claim 1 Comparison to Accounting System 1. Single Entry Accounting (SEA)**

  Difference in Transactions Recorded and Stored. SEA is designed primarily to record only cash transactions. It is recommended only for small businesses with a small number of transactions. It is not designed to record all transactions of a business.

  Claim 1 is designed to record all transactions of a business.

  Difference in Financial Statement Reporting. SEA is designed primarily to create cash basis financial statements. It is not designed to create accrual basis financial statements.

  Claim 1 is designed to create any type of financial statement using any basis of accounting. That includes both cash basis financial statements and accrual basis financial statements.

  Difference in Business Segment Reporting. SEA is designed primarily to create financial statements for a one accounting entity. It is not designed to create financial statements for multiple business segments in the same accounting system.

  Claim 1 is designed to create financial statements for multiple accounting entities, using any basis of accounting, in the same accounting system. That includes any single business segment, any selected group of business segments, and the entity as a whole (all business segments combined).

  Difference in Chart of Accounts. SEA is designed with a single set (i.e., group) of accounts for use in creating a single type of cash basis financial statements.

  The chart of accounts methodology used in reference to Claim 1 is significantly different than that described above for single entry accounting systems. The chart of accounts referenced in claim 1 is better characterized a chart of accounts system, or integrated groups of such accounts. It is illustrated in Fig. 18. As shown in the figure, there is a "Basic Account Code Structure" that includes Receipt Code accounts and Expenditure Code accounts, which are used for cash transactions recorded and stored in Central Sub-System 100 (see Fig. 2)

- **Claim 1 Comparison to Accounting System 2. Double Entry Accounting (DEA)**

  Difference in Recording and Storing Transactional Data. DEA is designed to record all transactions as journal entries. These journal entries are then posted to the ledger system, including the general ledger, in double entry format. The posting process is complex, time-consuming, expensive, and requires an educated, trained, and experienced accountant to maintain the accounting system on a day-to-day, month-to-month, and year-to-year basis.

  Claim 1 is designed to record and store all transactions in single entry format, in various accounting sub-systems (see Figs. 2, 3, 4, and 5). The posting of journal transactions to the ledger system has been eliminated. Consequently, this unique system of recording and storing transactional data (Claim 1) is so simple to learn it can be maintained by a non-accountant with ease.

  Difference in Financial Statement Reporting Capability Part 1. DEA is designed primarily to create only financial statements for only a single accounting entity. It is not designed to

accommodate multiple business segments in the same accounting system. Instead, separate accounting systems typically must be used for each business segment. Consequently, some type of financial statement consolidation likely would be required after the individual financial statements have been created.

Claim 1 describes the financial statement reporting capability. It is also illustrated in Fig. 17.

Difference in Financial Statement Reporting Capability Part 2. DEA is designed primarily to create only one type of financial statements. To use DEA to create more than one type of financial statements, such as 1) accrual basis statements, **and** 2) modified accrual basis statements, in the same accounting system, significantly increases the complexity and cost of maintaining the system. Why is it more complex? Because DEA was not designed for multiple reporting of this type.

Claim 1 describes the financial statement reporting capability. It is also illustrated in Fig. 19.

Claim 1 creates a cash basis financial statement including, for a period, beginning cash balance, cash receipts, cash disbursements, and ending cash balance. DEA is not designed to create such a financial statement and does not have the capability to do so.

Claim 1 creates the same cash basis financial statement described previously for individual business segments, any selected group of business segments, and all business segments combined (i.e., the business as a whole), all using the same accounting system simultaneously.

Claim 1 creates a budgetary basis financial statement including, for a period, beginning uncommitted cash balance, receipts, expenditures, and ending uncommitted cash balance. DEA is not designed to create such a financial statement and does not have the capability to do so.

Claim 1 creates the same budgetary basis financial statement described previously for individual business segments, any selected group of business segments, and all business segments combined (i.e., the business as a whole), all using the same accounting system simultaneously.

Claim 1 creates a tax cash basis financial statement (taxable income and related deductible expenses). DEA is not designed to create such a financial statement.

Claim 1 creates the same tax cash basis financial statement described previously for individual business segments, any selected group of business segments, and all business segments combined (i.e., the business as a whole), all using the same accounting system simultaneously.

Difference in Chart of Accounts. DEA employs the “traditional”, 500 year-old technology, referred to as a ledger system. This ledger system includes a general ledger and multiple subsidiary ledgers. Each ledger has multiple accounts, and all journal entries are posted to the various ledger accounts in a double entry (debit/credit) format. The general ledger accounts are employed to create the financial statements.

Claim 1 describes a chart of accounts to map detailed transaction codes employed to record and store detailed cash transactions (cash receipts and cash disbursements) to specific general ledger revenues and expenses. This mapping methodology translates the original detailed cash transactions recorded in single entry format to a summarized amount for a different type of financial statement, including accrual basis financial statements.

For example, assume the senior bookkeeper has completed the recording of all cash transactions for the year, and the corporate controller is now ready to create financial statement(s). Claim 1 identifies not just the financial statement **capability**, but also the **flexibility** to decide what financial statements you wish to prepare. How is this possible? Because after the end of the year, all financial statements have the same starting point – a **cash basis trial balance** specifically designed for whatever statement you select to create. Moreover, you can create such statements for a business segment, any group of business segments, and the entity as a whole. This is not possible for any other type of accounting system.

Difference in Starting Point for Financial Statement Creation. DEA is designed most typically to create accrual basis financial statements, a balance sheet and income statement. The **starting point** for such statements is a summary of all general ledger accounts after the end of the reporting period. This "starting point" is referred to as the **Unadjusted Trial Balance** because additionally, adjusting entries beyond the entries posted to the general ledger, are required.

Claim 1 is designed to create any type of financial statement using any basis of accounting. For some such financial statements, Claim 1 describes the process of creating a "**cash basis trial balance**" as a starting point for creating the selected type of financial statement to be created, including the one type DEA is designed traditionally to create – accrual basis balance sheet and income statement.

Problems with Examiner Part 5 – Concluding Comments

What follows are concluding comments by Appellant, in contrast to the Examiner. **Ultimately** the PTAB (Patent Trial and Appeal Board), dated 5/28/2020, concludes that the Claims (including Claim 1) are patent ineligible stating 1) "A 'claimed invention's use of the ineligible concept,' e.g, an abstract idea, 'cannot supply the inventive concept that renders the invention 'significantly more' than the ineligible concept." (BSG Tech, Fed. Cir. 2018) The PTAB continues "Under the Mayo/Alice framework, a claim directed to a newly discovered" abstract idea "cannot rely on the novelty of that discovery for the inventive concept necessary for patent eligibility." (Genetic Techs, Fed. Cir. 2016) (see PTAB 5/28/2020, middle page 13) It goes without saying that the PTAB is merely agreeing with the Examiner.

SLS Note: I will discuss this issue later in the context of the Examiner arguing that the invention is an "accounting system" which are indefinitely numerous. My argument is that the invention is a "**financial** accounting system," only two of which exist in world history. **This alone takes my invention out of the realm of an abstract idea.**

In two instances above, the Examiner states that 1) a claimed invention's use of the ineligible concept (e.g., an abstract idea) cannot supply the inventive concept needed for eligibility, and 2) a claim directed to a newly discovered abstract idea cannot rely on the novelty of that discovery for the inventive concept necessary for patent eligibility.

This appears to contradict the Federal Register that is dated after the above Federal Circuit cases. The Federal Register (Vol. 84, B. Step 2B) states in part "… the Federal Circuit has held claims eligible at the second step of the Alice/Mayo test (USPTO Step 2B) **because** the additional elements recited in the claims provided "significantly more" than the recited judicial exception (e.g., **because** the additional elements were unconventional in combination)."

Important (9/26/2020): If you look closely at Figure 1 and Figure 2 of the October 2019 Guidelines on Subject Matter Eligibility, Fig. 1 has a clear path from Step 2B to Eligibility. Suspiciously, Fig. 2 shows Step 2B but has NO path to Eligibility. I caught on to this AFTER I read the Examiner's

rejection arguments. After reading many articles I found it suspicious that 1) the Examiner appeared to ignore Step 2B, 2) Step 2B was still a requirement for the Examiner, and 3) Step 2B made it difficult, if not impossible, to reject the Eligibility of Claim 1. After more reading, I found the following somewhat hidden in the footnotes: Specifically footnote 82 of the Guidance is as follows:

> **Footnote 82 (Guidance):** Explanation of Step 2B in a rejection written after the 2019 PEG will likely be shorter than in the past because many of the considerations evaluated in revised Step 2A overlap with Step 2B and thus, are not reevaluated in Step 2B. The exception is when an examiner had concluded, in Step 2A Prong Two, that an additional element was insignificant extra solution activity, in which case the examiner should re-evaluate, in Step 2B, whether the element is unconventional (i.e., more than what is well-understood, routine, conventional activity) in the field.

- Suspicious Nature of Examiner's Conclusion. Given the Examiner's "back door" approach to characterize Claim 1 as an "abstract idea," and therefore patent ineligible, is indeed suspicious.

  To get to this conclusion, the Examiner follows USPTO guidance (Subject Matter Eligibility October 2019 Update):

  Step 2A, Prong One. Does the claim recite an abstract idea, law of nature, or natural phenomenon? If yes, go to Step 2A, Prong Two. If no, claim is eligible.

  Claim 1 recites "an accounting system." An accounting system is, in the words of the Examiner (and PTAB) "a fundamental economic practice, which is one of certain methods of organizing human activity … , and thus an abstract idea." KEEP READING!

  Note 1: Appellant makes a good case that Claim 1 is better characterized as "a financial accounting and reporting system." The importance of this observation is that "an accounting system" covers the entire universe of accounting. In contrast, "a financial accounting and reporting system" is limited to two types of accounting systems – 1) single entry accounting systems, and 2) double entry accounting systems. Hence, what is "fundamental" about these two accounting systems that make them "fundamental" by definition? Also, how can anyone conclude that single entry accounting or double entry accounting even come close to the definition of an abstract idea? Both types of systems comprise methods that are clearly described in authoritative literature and clearly understood by users of the systems. This takes them out of the realm of being an abstract idea!

  Note 2: The Examiner somewhat arbitrarily states "Claim 1 simply includes instructions to implement an abstract idea on a computer, or merely uses a computer to perform an abstract idea." BUT he changes his tune when we compare Claim 1 to record, store, and retrieve data in a computer much like Enfish. That case was declared to be patent eligible, not by the USPTO, but by the Federal Circuit.

  Step 2A, Prong Two. Does the claim recite additional elements that integrate the judicial exceptions into a practical application? If yes, claim is eligible. If no, go to Step 2B.

  The problem here is that the answer to the question is a resounding YES. That is, Claim 1 is indeed a practical application. How can Claim 1 NOT be a practical application? A prototype has proven this beyond absolutely ALL doubt.

Consider the **Problems with Double Entry Bookkeeping Systems** per an article from smallbusiness.chron.com (Author John Lewis, Houston Chronicle). Following are excerpts taken from the article:

The double entry bookkeeping system is commonly used in the accounting and business world… DEA is simply using two entries for every transaction that takes place … These types of entries are used in accrual accounting … DEA … has some problems:

Complexity. One of the main problems with the double-entry bookkeeping method is the complex nature of the process. For the small-business owner who has no background in accounting, the double-entry system can seem like learning a whole new language. Terminology such as "debits" and "credits" replace simple words like "subtract" and "add," causing confusion. Knowing when to debit an account and what corresponding account to credit can be difficult, and can throw the novice bookkeeper for a loop.

Cost. The cost of maintaining the books while using a double-entry system is directly related to the system's complexity. Because records are kept in more than one place, companies have books all over the place that they must keep track of. In some cases it even becomes necessary to hire additional employees to keep track of books for each department. If you're using an outside (contract) accountant, your cost will go up as your books become more complex, requiring your accountant to bill you for additional hours of work. Overall, the cost of the double-entry system can be high.

Time. The amount of time spent doing and verifying your books is another problem directly related to the complexity of the double-entry method. Because entries have to be done twice and, therefore, verified twice, the double-entry system will eat up precious minutes that you could spend being productive in another endeavor. This is why you may find it advantageous to hire an accountant. In reality, despite the fact that the double-entry system can lead to more accurate books, it can be somewhat impractical.

Accuracy. Overall, the double-entry accounting system is important for small-business owners because it will typically provide them with more accurate records than other methods. This is certainly advantageous in most cases, but if you don't have much of a background in bookkeeping, and you try to go it all your own using the double-entry method, you may find yourself somewhat dazed and confused. A primary problem with the system is that if you make one mistake along the way, the accuracy of the rest of your books will be thrown off.

Appellant's response to this article: Claim 1 describes an accounting system that overcomes ALL of these very real problems. Claim 1, IN FACT, does a lot more than just solve these problems. This is what I mean when I say my work EXPOSES these, and many more, problems that most accounting employees are not even aware of.

Important: At this point, it is helpful to review October 2019 Update: Subject Matter Eligibility. Specifically review Fig. 1 (page 10) and Fig. 2 (page 11).

BUT the Examiner has another trick up his sleeve. After the obligatory double speak for a page or two starting on page 12, the Examiner states – A "claimed invention's use of the ineligible concept," e.g., an abstract idea, "cannot supply the inventive concept that renders the invention 'significantly more' than that ineligible concept." The Examiner (and PTAB) continues "Under the Mayo/Alice framework, a claim directed to a newly discovered abstract idea cannot rely on the novelty of that discovery for the inventive concept necessary for patent eligibility."

- **Step 2B.** Does the claim recite additional elements that amount to **significantly more** than the judicial exception?

The **Examiner states** in part (page 11) "Turning to step 2B of the Revised Guidance, we look to whether Claim 1 (a) adds a specific limitation or combination of limitations that are not well-

understood, routine, conventional activity in the field, or (b) simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception. 2019 Revised Guidance, 84 Fed. Reg. at 56.

Continuing (page 11) "The **Examiner determines** that "Appellant's additional elements appear to largely comprise generic computing or data storage elements, which is used to implement an abstract accounting process. This does not lend itself to patent eligibility." Ans. 5 (citing MPEP 2016.05(f)).

Continuing (page 12) **Appellant does not direct our attention** to anything in the Specification that indicates the claimed computer components – whether considered individually or as an order combination – perform anything other than well-understood, routine, and conventional functions, such as collecting data, transmitting data, and manipulating data … Those types of generic computer components performing generic computer functions – both individually and in combination – have been found to be well understood, routine, and conventional. … Courts have held computer implemented processes not to be significantly more than an abstract idea (and thus ineligible) where the claim as a whole, amounts to nothing more than computer functions merely used to implement an abstract idea, such an idea that could be done by a human analog (i.e., by hand or by merely thinking.") WOW!

I, the Appellant, am confused. I know what a human is and what an analog is, but I never heard of a "human analog." This distended English usage is inappropriate, unnecessary and confusing.

The Examiner is obviously cherry-picking the "well-understood, routine, and conventional" functions, and totally ignoring those that are NOT "well-understood, routine, and conventional."

To take a step back, consider the Examiner's use of "accounting system" rather than the more appropriate "financial accounting and reporting system," as was pointed out earlier. There exist only two commonly recognized "financial accounting and reporting systems" in the history of the world. This has been documented previously using accounting tools.com and IRS Pub. 583.

Moreover, in the Step 2B analysis, the Examiner is required to determine if Claim 1 performs **anything** that is NOT well understood, routine, and conventional. If yes, Claim 1 is patent eligible. This is precisely why Step 2B is so critical; it is referred to as "the Inventive Concept" (see Fig. 1). How do you explain the comparison of the Invention and Prior Art (see page 13)?

To quote the Fed. Reg. Vol.84, No. 4, 1/7/2019 p.56:

> **B. Step 2B: If the Claim Is Directed to a Judicial Exception, Evaluate Whether the Claim Provides an Inventive Concept**
>
> It is possible that a claim that does not "integrate" a recited judicial exception is nonetheless patent eligible. For example the claim may recite additional elements that render the claim patent eligible even though a judicial exception is recited in a separate claim element.[34] Along these lines, the **Federal Circuit has held claims eligible at the second step of the *Alice/Mayo* test (USPTO Step 2B) because the additional elements recited in the claims provided "significantly more" than the recited judicial exception (*e.g.,* because the additional elements were unconventional in combination)**.[35] Therefore, if a claim has been determined to be directed to a judicial exception under revised Step 2A, examiners should then evaluate the additional elements individually and in combination under Step 2B to determine whether they provide an inventive concept (*i.e.,* whether the additional elements

amount to significantly more than the exception itself). **If the examiner determines that the element (or combination of elements) amounts to significantly more than the exception itself (Step 2B: YES), the claim is eligible, thereby concluding the eligibility analysis.** If the examiner determines that the element and combination of elements does not amount to significantly more than the exception itself, the claim is ineligible (Step 2B: NO) and the examiner should reject the claim for lack of subject matter eligibility.

While many considerations in Step 2A need not be reevaluated in Step 2B, **examiners should continue to consider in Step 2B whether an additional element or combination of elements:**

- **Adds a specific limitation or combination of limitations that are not well-understood, routine, conventional activity in the field, which is indicative that an inventive concept may be present; OR**
- **simply appends well-understood, routine, conventional activities** previously known to the industry, specified at a high level of generality, to the judicial exception, which is indicative that an inventive concept may not be present.[36]

For this reason, if an examiner had previously concluded under revised Step 2A that, *e.g.,* an additional element was insignificant extra-solution activity, they should reevaluate that conclusion in Step 2B. If such reevaluation indicates that the element is unconventional or otherwise more than what is well-understood, routine, conventional activity in the field, this finding may indicate that an inventive concept is present and that the claim is thus eligible.[37] For example, when evaluating a claim reciting an abstract idea such as a mathematical equation and a series of data gathering steps that collect a necessary input for the equation, an examiner might consider the data gathering steps to be insignificant extra-solution activity in revised Step 2A, and therefore find that the judicial exception is not integrated into a practical application.[38] However, when the examiner reconsiders the data gathering steps in Step 2B, the examiner could determine that the combination of steps gather data in an unconventional way and therefore include an "inventive concept," rendering the claim eligible at Step 2B.[39] Likewise, a claim that does not meaningfully integrate a judicial exception into a practical application of the exception sufficient to pass muster at Step 2A, may nonetheless include additional subject matter that is unconventional and thus an "inventive concept" at Step 2B.[40]

- **Context of Arguments – Is Examiner Out of Bounds?**

The Examiner appears to establish some arguments by using specific words or terms out of context, or otherwise attaching different meanings to them than might be appropriate. Following are the definitions of various words and terms based on several different sources – 1) accountingtools.com (accounting information for skilled artisans), 2) businessdictionary.com (business dictionary), and 3) yourdictionary.com (ordinary dictionary).

Definition of Accounting.

Accountingtools.com. Accounting is the systematic recordation of the **financial** transactions of **a business**. The recordation process includes setting up a system of record keeping, tracking transactions within that system, and aggregating the resulting information into a set of **financial** reports.

Businessdictionary.com. Accounting is a systematic process of identifying, recording, measuring, classifying, verifying, summarizing, interpreting and communicating **financial** information.

Yourdictionary.com. 1) The definition of accounting is the process of systematically recording and managing **financial** accounts. 2) The practice or profession of maintaining the **financial** records of **a business**, including bookkeeping as well as the preparation of statements concerning the assets, liabilities, and operating results. 3) A system that measures, organizes, and communicates **financial** information about **a specific business, government, or other entity**.

Definition of Fundamental Economic Principles or Practices.

Principle

Accountingtools.com.
Businessdictionary.com.
Yourdictionary.com.

A basic truth, law, or assumption
A fixed or predetermined policy or mode of action
A rule or law concerning the functioning of natural phenomena or mechanical processes
A rule used to choose among solutions to a problem

Practice

Accountingtools.com.
Businessdictionary.com.
Yourdictionary.com.

The act or process of doing something; performance or action

Hedging

Accountingtools.com.
Businessdictionary.com.
Yourdictionary.com.

To minimize or protect against the loss of by counterbalancing one transaction, such as a bet, against another
To try to avoid or lessen loss by making counterbalancing bets, investments, etc.

Insurance

Accountingtools.com.
Businessdictionary.com.
Yourdictionary.com.

The definition of insurance is protection against something going wrong
The business of insuring against loss

The Take Away. It is not by chance that the definitions of "accounting" from each of the three sources incorporate the words 1) financial, 2) information, 3) system or systematic, and 4) process. This is an indication that the word "accounting" alone denotes financial accounting or financial accounting and reporting. The patent specifications use terms like 1) "systems and methods for financial accounting," 2) "financial accounting and reporting," and 3) "financial accounting entities" throughout.

More to the point, there exist only two such accounting systems in the prior art – 1) single entry accounting systems, and 2) double entry accounting systems.

Plain and simple, appellant's invention is most appropriately characterized as a financial accounting system, or a financial accounting and reporting system. In contrast, the Examiner has chosen to focus on the term "accounting system" to describe the patent. Why is this observation important? Consider the following:

1) As discussed previously, the Examiner uses a backdoor approach to argue that Appellant's invention is an abstract idea. That is, the Examiner characterizes the invention as an accounting system, and thereby argues under Step 2B (page 9) that "Appellant's additional elements appear to largely comprise generic computing or data storage elements, which is used to implement an abstract accounting process. This does not lend itself to patent eligibility." Ans. 5 (citing MPEP 2106.05(0)

2) As discussed previously, there exist only two types of "financial accounting and reporting systems" in the prior art – 1) single entry accounting systems, and 2), double entry accounting systems. Each of these two prior art types of financial accounting and reporting systems have been compared to Claim 1 in some detail, and the differences were identified. The differences are substantial, and obvious to skilled artisans in the two relevant industries – 1) financial accounting and reporting, and 2) computer-related skills in such areas as software engineering and data warehousing.

   Illustrated here is just one of the new and unique financial accounting and reporting concepts included in Claim 1 – the "cash basis trial balance." This term had to be created for the first time in history because the concept is new and unique. This term was logically chosen based on how the new concept is integrated into the invention as a whole.

   Moreover, this new concept of a "cash basis trial balance" is a substantially important part of the invention which, combined with other new concepts incorporated into the invention, clearly passes the USPTO Step 2B requirement for patent eligibility. That is "because the additional elements recited in the claims provided 'significantly more' than the recited judicial exception (e.g., because the additional elements were unconventional in combination)." (see Fed. Reg. and USPTO Guidance)

   The Examiner's analysis is reminiscent of his approach to rejections of Appellant's invention based on prior art for about three or four years – an approach commonly referred to as "throwing mud on the wall and hoping it sticks." You only have to consider the Baig reference offered by the Examiner as prior art. Don't laugh too hard.

Nowhere on the planet can you find "accounting is a fundamental economic practice" or "a method of organizing human activity." The one exception is the Examiner who declares Claim 1 is an "accounting system," and an "accounting system" falls under both categories (see page 12 top). Hence, Claim 1, according to the Examiner in double whammy style, is an abstract idea.

Interestingly, “cash basis trial balance” appears in Claim 1 3 times, and appears in the specifications 25 times. The invention’s use of the “cash basis trial balance” is but one of numerous new concepts in financial accounting that are integrated to overcome many problems in the prior art.

The Examiner cannot seem to come to grips with the realization that the most commonly understood meaning of the term “accounting system” is no different than the commonly understood meaning of the terms “financial accounting system” or “financial accounting and reporting system” both of which also appropriately describe the invention.

The examiner might tell you keeping score at a football game, a baseball game, a wrestling match, etc., is an accounting system. So HE says. However, the Examiner has not, and cannot cite a single financial accounting system that can meet the definition of an “abstract idea.” Why? There exist only two types of financial accounting systems – SEA and DEA.

SEA is most commonly characterized as recording cash transactions and creating cash basis financial statements.

DEA is most commonly characterized as recording financial transactions as double entries (debits and credits) and creating accrual basis financial statements, a balance sheet and income statement.

Appellant’s invention is a substantially different, and a new and unique type of financial accounting system. It is the first new type of accounting in 500 years, and the only such system that overcomes deficiencies inherent in other financial accounting systems.

The various authoritative definitions of the word “accounting” all describe accounting as “financial accounting” or “financial accounting and reporting.” You could do 50 surveys and learn that most people equate the word “accounting” with the ordinary dictionary definition provided in yourdictionary.com.

Perhaps the idea never occurred to the USPTO to start at Step 1: Is the process or method described in Claim 1 an abstract idea? If you are not getting a little more suspicious, you should be! After all, the word “abstract” has only been around for 500 years? It is well understood, routine, conventional, widely prevalent, in common use, in any industry. Further, to be a skilled artisan in the use of the word, you only need to have a brain and a dictionary. We will be open-minded and discuss all of the above.

The Examiner first concludes that “an accounting system” falls within the enumerated sub-grouping, “fundamental economic activity,” as well as the grouping, “methods of organizing human activity.” Both groups are based on court decisions in which subject matter of claims have been held to be patent ineligible. USPTO guidance identifies these groupings for examiners to follow.

The Examiner’s conclusion is problematic: There exist no precise definitions of these “group” names. This is somewhat consistent with a similar problem with the term “abstract idea.” There is no shortage in the world of patent attorneys who would like to see a definition of “abstract idea.” Lacking appropriate and workable definitions, examiners in general are given too much latitude to make **subjective** decisions when they should be rendering **objective** decisions!

Q1. **Is an "accounting system" a fundamental economic activity?** It is in no way, shape, or form a fundamental anything. While economic activity covers about everything under the sun, actions that involve the production, distribution and consumption of goods and services at all levels within a society, **fundamental** economic activity has its limits!

For an accounting system to be characterized as a fundamental economic activity, how can you explain that historically there exist only two types of financial accounting and reporting systems, SEA and DEA. What are the fundamental rules of art that make a financial accounting and reporting system a fundamental economic activity?

If an accounting system is a fundamental economic activity, what is fundamental about SEA and DEA that characterizes them as a fundamental economic activity? SEA and DEA are totally different processes, as are the products they create (e.g., financial statements). It seems to be a considerable stretch to conclude that financial accounting and reporting systems are fundamental economic activities.

> Definition of **Fundamental** (yourdictionary.com): The definition of fundamental is a basic truth or law; 1) of or forming a foundation or basis; basic; essential: the *fundamental* rules of art; 2) relating to what is basic; radical: a *fundamental* alteration on which others are based; primary; original: a *fundamental* type.
>
> Definition of **Fundamental** (businessdictionary.com): Being a core component or fact upon which other aspects are built. A **fundamental** fact is a fact that is vital, and must be known before secondary assumptions or conclusions can be drawn.
>
> Definition of **Economic Activity** (per businessdictionary.com). Actions that involve the production, distribution and consumption of goods and services at all levels within a society.

Q2. **What human activity is a "financial accounting and reporting system" organizing?** Logically speaking, a "financial accounting and reporting system" organizes transactional data for the primary purpose of creating financial statements and reports. It is not clear how the Examiner arrives at his conclusion.

> **Definition of Accounting** (businessdictionary.com). Accounting is the practice and body of knowledge concerned primarily with 1) methods for recording transactions, 2) keeping financial records, 3) performing internal audits, 4) reporting and analyzing financial information to the management, and 5) advising on taxation matters. It is a systematic process of identifying, recording, measuring, classifying, verifying, summarizing, interpreting, and communicating financial information.
>
> SLS Note: This somewhat detailed definition that "accounting" is a systematic process appears to support the notion that the word "accounting" is generally recognizable as financial accounting and reporting. Given that there are only two generally recognized types of financial accounting and reporting systems, SEA and DEA, appellant's invention introduces a third type of financial accounting and reporting system that is not just different from prior art, but adds significantly more, as discussed previously, and, as documented in the specifications.

- USPTO Step 2A, Prong2.

  PTAB 5/282020: Rejection is based on the Fed Cir 2016 "Under the Mayo/Alice framework, a claim directed to **a newly discovered" abstract idea "cannot rely on** the novelty of that discovery for the inventive concept necessary for patent eligibility." (Note: the PTAB is following the Examiner rather than independently deciding.)

  Important: This conclusion is clearly intended to avoid proceeding to USPTO Step 2B. Why? The Examiner knows for certain he cannot overcome the "improvement" over prior art. His only argument at this point, to not be required to proceed to Step 2B, is to conclude that Claim 1 is 1) an accounting system, 2) accounting systems are an abstract idea, and 3) therefore Appellant's invention is not patent eligible because it is a "newly discovered" abstract idea. This constitutes a back door approach to rejecting Claim 1 as patent eligible.

- USPTO Step 2B. The Examiner does not appear to address Step 2B. There does not appear to be an explanation either. The confusion, at least on my part, comes from the addition of Fig. 2 in the October 2019 updated PEG (Patent Examiner Guidelines), "Streamlined Analysis."

- Would the concept of an "accounting system" pass the patent eligibility requirement based solely on the merits? Why is it not possible to analyze an "accounting system" directly to determine if it is an abstract idea. After all, there is a commonly accepted, universal, definition of an accounting system.

  Accounting is universally recognized as a "process" and patent eligibility is open to any new and useful process.

  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. (July 19, 1952, ch. 950, 66 Stat. 797.)

  The term "process" means process, art or method, and includes a new use of a known process, machine, manufacture, composition of matter, or material. (source: 35 U.S. Code Section 101)

  The importance of these excerpts is that they appear to say that "a new and useful process, including a new and useful method" is patent eligible. Also, they appear to say that such patent eligibility includes "a new use of a known process."

- Is an "accounting system" an abstract idea? To answer this question requires a definition of what an "abstract idea" is. Lacking such a definition, at least for purposes of determining patent eligibility, the common, ordinary definition will be used.

  The PTAB agrees with the Examiner that an "accounting system" falls within two judicial categorical exceptions, and therefore is labeled an abstract idea, and in turn, are patent ineligible. The problem here is that the conclusion is significantly more subjective than objective.

  Whoever heard of an abstract idea that is over 500 years old, is well understood, taught, and practiced world-wide for that entire five centuries? Answer: no one. This is because it is not an abstract idea. It is clearly concrete reality, so much so that every practicing auditor and accountant understands and agrees with the meaning of double entry accounting – posting of journal entries, debits and credits, problems, etc.

Note 1. Because “an accounting system” does not fall clearly within the enumerated groupings of abstract ideas (it is not specifically identified in the guidance), it appears the Examiner has determined that Claim 1 should be treated as reciting an abstract idea (see Guidance top of page 3).

Note 2. Whatever the circumstance, in this instance, an “accounting system” has been considered to be an “abstract idea.” This alone becomes problematic in that Appellant cannot argue directly that claim 1 is NOT an abstract idea because an “appropriate and workable” definition of an “abstract idea” (specifically for the purpose of determining patent eligibility), has not been provided in the guidance, or perhaps nowhere. Instead, the Examiner/PTAB back into their conclusion that Claim 1 is an abstract idea by first determining that “an accounting system” falls within the enumerated sub-grouping 1) “fundamental economic principles or practices”, and 2) “methods of organizing human activity.”

- None of the examples identified in the Guidance for “Certain Methods of Organizing Human Activity,” including the related sub-grouping “fundamental economic principles or practices,” are identified as an “accounting system.” (see Section B starting at bottom page 4 to page 5)

    1) There are no judicial exceptions that identify accounting as a fundamental economic practice.
    2) There are no judicial exceptions that identify accounting as a method of organizing human activity.
    3) There are no judicial exceptions that identify accounting as an abstract idea.

    The guidance states in part: “The 2019 PEG instructs examiners to refer to the groupings of abstract ideas enumerated in Section 1 of the 2019 PEG (i.e., mathematical concepts, certain methods of organizing human activities, and mental processes) in order to identify abstract ideas.” (bottom page 2)

- Per the guidance (bottom page 4): Clarification was requested about the scope of the “certain methods of organizing human activity” grouping. This points to the obvious concern about how this part of the guidance would be interpreted and applied. And perhaps this explains the qualification of the word “certain” in “Certain Methods of Organizing Human Activity.”

    The guidance addresses this issue (bottom page 4): “The term ‘certain’ qualifies the ‘certain methods of organizing human activity’ as a reminder of several points.”

    “First, not all methods of organizing human activity are abstract ideas …”

    “Second, this grouping is limited to activity that falls within the enumerated sub-groupings of fundamental eonomic principles or practices, … and is not to be expanded beyond these enumerated sub-groupings except in rare circumstances as explained in Section III(C) of the 2019 PEG.”

    “Finally, the sub-groupings encompass both activity of a single person … and activity that involves multiple people … and thus, certain activity between a person and a computer … The number of people involved in the activity is not dispositive as to whether a claim limitation falls within this grouping. Instead, the determination should be based on whether the activity itself falls within one of the sub-groupings.”

    Note: It might be noteworthy that Claim 1, technically speaking, does not fall within the term “a method of organizing human activity.” Claim 1 more appropriately falls within the term “a

method of organizing financial transactions." Put another way, Claim 1 **clearly** has the focus on "organizing financial transaction activity", and not on "organizing human activity." Claim 1 is not directed to organizing human activity, and in turn, by definition cannot fall within the sub-grouping "fundamental economic principles or practices" as outlined in the guidance, because in the guidance that sub-grouping falls within the broader group identified as a "certain method of organizing human activity." (Guidance page 5, middle) This appears to lead to the conclusion that there are no judicial exceptions to claim 1.

Note: It might be noteworthy that Claim 1 describes alternative methodology to what is widely recognized by those skilled in the art.

- Does Claim 1 fall within the meaning of an "abstract idea" for purposes of patent eligibility? This is a difficult question to answer, given the 2019 PEG (Patent Eligibility Guidance). The guidance has a primary focus on judicial exceptions, and has not provided a more precise definition of an "abstract idea." Given the absence in the guidance for a more precise explanation of what constitutes an "abstract idea" that renders a patent claim ineligible, it is appropriate to instead apply the ordinary and commonly-accepted meaning of an "abstract idea."

- Examiner Ignores Common and Ordinary Definition of an Abstract Idea. The Examiner inextricably fails to even consider the common and ordinary language usage, and thereby the meaning, of the term "abstract idea." The Supreme Court has generally taken the stance that patent law interpretations will be based on common and ordinary language usage. It is even more perplexing that the Examiner would use the interpretation of the Supreme Court and resort to a back door approach to decide one way, and ignore the practice of the Supreme Court to base its interpretations on common and ordinary language usage to get a substantially different decision.

- Abstract Idea. Following is an explanation of the meaning of an "abstract idea", from the perspective of patent eligibility, per yourdictionary.com.

  Definition of Abstract (yourdictionary.com). Abstract is defined as 1) something that is not physical or concrete (e.g., the idea of justice), 2) not easy to understand because of being extremely complex, 3) remote from concrete reality, 4) abstruse, 5) theoretical, 6) not practical or applied.

  Definition of Idea (yourdictionary.com). The definition of idea is a thought, belief, opinion or plan.

  Put another way, an abstract idea can be visualized, but it is difficult, perhaps not even possible, to be illustrated with concrete, meaning real, examples.

  Abstract ideas are concepts that need to be visualized, as they cannot be illustrated through concrete (real) examples.

First, it is simply not possible to legitimately identify Claim 1 as an "abstract idea" when there is no definition, or explanation, of the meaning of an "abstract idea." The "guidelines" refer to "certain groupings of abstract ideas."

To fill the definitional void of "abstract idea," one can go to a general definition. Per yourdictionary.com, "Abstract is defined as something that is not physical or concrete (e.g., the idea of justice), not easy to understand because of being extremely complex, remote from concrete reality; theoretical; not practical or applied."

> If this definition is to be believed, the concept of “accounting” is not an abstract idea. Any representation of “accounting” is indeed a concrete reality, and therefore, by definition is not an abstract idea.
>
> Per accountingtools.com, “accounting is the systematic recordation of the financial transactions of a business.” Financial accounting and reporting systems are typically categorized into one of two types: 1) single-entry systems, and 2) double-entry systems. The same source also states “Accounting encompasses additional activities such as a chart of accounts, setting up the general ledger, creating internal (management) financial reports, creating external financial statements and reports, such as for bank loans and shareholders, budgets, tax returns, and internal controls that provide assurance regarding the auditability, accuracy, and reliability of the underlying financial transactional source data used to create the financial statements and reports.”
>
> Indeed, IRS Publication 583 states that “You must decide whether to use a single-entry or a double-entry bookkeeping system.” And the same publication states that when you own more than one business, you can use a different accounting method for each business if the method you use for each clearly shows your income.

How did the Examiner reach this abstract conclusion? Examiner states (page 6) that “Under the 2019 Revised Guidance and the October 2019 Update, we first look to whether the claim recites:

> (1) any judicial exceptions, including certain groupings of abstract ideas (i.e., mathematical concepts, certain methods of organizing human activity such as a fundamental economic practice, or mental processes) ("Step 2A, Prong One"); and
>
> (2) additional elements that integrate the judicial exception into a practical application (see MPEP 2106.05(a)—(c), (e)—(h) (9th ed. Rev. 08.2017, Jan. 2018)) ("Step 2A, Prong Two”).

- USPTO Step 2A, Prong1. The Examiner is somewhat arbitrarily concluding that an accounting system is an “abstract idea” because it is a “fundamental economic practice.” Accounting is not only not a fundamental anything, it is not even an abstract idea. The Examiner would only have had to look at a dictionary to learn that.

- USPTO Step 2A, Prong2. The Examiner appears to deviate from the Federal Register (see Attachment) at this step. In doing so, he totally bypasses Step 2B with a trick. Why? Because he knew he was in trouble at Step 2B and did not know how to handle it for the conclusion he already had made up his mind on. With his trick, the Examiner appears to get some help from Figure 2 in the “updated” USPTO guidance.

- USPTO Step 2B. The Examiner suspiciously appears to bypass Step 2B with a trick. Why is this so suspicious? Step 2B is labeled as “The Inventive Concept.” Does the invention integrate an inventive concept into a practical application? I don’t know that you can get any more practical. Consider the following **comparison of the Invention and Prior Art**.

- **Financial Accounting Characteristics. (GAAP = Generally Accepted Accounting Principles)**

	Invention	Prior Art
Simple to Maintain Day to Day	Y	N
Double Entry Method of Bookkeeping	N	Y
Posting of Journal Transactions to GL Required	N	Y
Posting of J. Transactions to Sub Ledgers Required	N	Y

- **Financial Statement Reporting Capability.**

GAAP Accrual Basis – Entity as a Whole	Y	Y
GAAP Accrual Basis – Business Segment	Y	N
GAAP Accrual Basis – Business Segment Group	Y	N
Tax Accrual Basis – Entity as a Whole	Y	Y
Tax Accrual Basis – Business Segment	Y	N
Tax Accrual Basis – Business Segment Group	Y	N
GAAP & Tax Accrual Basis – Entity as a Whole	Y	**No**
GAAP & Tax Accrual Basis – Business Segment	Y	N
GAAP & Tax Accrual Basis – Business Seg. Group	Y	N
Cash Basis – Entity as a Whole	Y	N
Cash Basis – Business Segment	Y	N
Cash Basis – Business Segment Group	Y	N
Tax Cash Basis – Entity as a Whole	Y	N
Tax Cash Basis – Business Segment	Y	N
Tax Cash Basis – Business Segment Group	Y	N
Commitment Basis – Entity as a Whole	Y	N
Commitment Basis – Business Segment	Y	N
Commitment Basis – Business Segment Group	Y	N

- **Auditability of Financial Statements and Reports.**

Manageable Auditability	High Level	Low Level
Electronic-Based Internal Controls	Extensive	Very Limited
Daily/Monthly Fraud & Embezzlement Protection	Y	N
Regression Auditing Capability	Y	N
Self-Auditing (Risk Analysis) Fraud Protection	Y	N

The focus of this document has been on Claim 1 to keep the discussion as simple and minimal as possible, yet sufficient to make my point. Thank you for reading it.