



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/956,771	08/01/2013	Julien Gevrey	PT1080US00	6033
132326	7590	09/16/2019	EXAMINER	
Thompson Hine LLP 10050 Innovation Drive Suite 400 Dayton, OH 45342-4934			ZEROUAL, OMAR	
			ART UNIT	PAPER NUMBER
			3628	
			NOTIFICATION DATE	DELIVERY MODE
			09/16/2019	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ipdocket@thompsonhine.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JULIEN GEVREY, DAMIEN CASSAN-BARNEL,
ANTHONY LAPIERRE, MATHIEU LE MARIER, and KARIMOU BA

Appeal 2018-007062
Application 13/956,771
Technology Center 3600

Before MAHSHID D. SAADAT, ALLEN R. MacDONALD, and
NABEEL U. KHAN, *Administrative Patent Judges*.

MacDONALD, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF CASE

Appellant¹ appeals under 35 U.S.C. § 134(a) from a final rejection of claims 1–11. Claims 12–21 have been cancelled. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

Representative Claim

Representative claim 1 under appeal reads as follows (emphasis added):

1. A method comprising:

defining a first subcategory number range indicative of a first issuance context within a first standard category number range for a first set of contract numbers using an index table, the first set of contract numbers corresponding to a first stock provider of a plurality of stock providers, the first set of contract numbers included in a database associated with the index table that stores at least one set of contract numbers for each stock provider among the plurality of stock providers, the first standard category number range being among a plurality of non-overlapping standard category number ranges that are pre-defined for the plurality of stock providers; and

defining a second subcategory number range indicative of a second issuance context within the first standard category number range using the index table, the first and second subcategory number ranges each defining contiguous and non-overlapping portions of the first standard category number range,

wherein a first contract issued for the first stock provider and having a first contract number including a first number from the first subcategory number range is identifiable as having the first issuance context based on the first contract

¹ Appellant identifies the real party in interest as Amadeus S.A.S. Appeal Br. 4.

number, and a second contract issued for the first stock provider and having a second contract number including a second number from the second subcategory number range is identifiable as having the second issuance context based on the second contract number, the first and second contract numbers being allocated from the database.

Appeal Br. 20 (Claims Appendix).

Rejection on Appeal

The Examiner rejected claims 1–11 under 35 U.S.C. § 101 for being directed to patent-ineligible subject matter.² *See* Final Act. 5.

Issue on Appeal

Did the Examiner err in rejecting claim 1 as being directed to patent-ineligible subject matter?

ANALYSIS

A. Section 101 Case Law

Under 35 U.S.C. § 101, a patent may be obtained for “any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof.” The Supreme Court has “long held that this provision contains an important implicit exception: Laws of nature,

² We select claim 1 as representative. Separate patentability, in compliance with 37 C.F.R. § 41.37(c)(iv), is not argued for claims 2–11, with the exception of ancillary arguments regarding the alleged lack of analysis of the dependent claims 2–5 and 8–11. *See* Appeal Br. 15–16. These arguments are separately addressed below. Accordingly, except for our ultimate decision, and our separate discussion regarding dependent claims 2–5 and 8–11, the rejection of claims 2–11 under 35 U.S.C. § 101 is not discussed further herein.

natural phenomena, and abstract ideas are not patentable.” *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 573 U.S. 208, 216 (2014) (quoting *Ass’n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 589 (2013)). The Supreme Court in *Alice* reiterated the two-step framework previously set forth in *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66 (2012), “for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts.” *Alice*, 573 U.S. at 217. The first step in that analysis is to “determine whether the claims at issue are directed to one of those patent-ineligible concepts,” such as an abstract idea. *Id.* The Court acknowledged in *Mayo* that “all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.” *Mayo*, 566 U.S. at 71. Therefore, we look to whether the claims focus on a specific means or method that improves the relevant technology or are instead directed to a result or effect that itself is the abstract idea and otherwise merely recite generic processes and machinery. *See Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1336 (Fed. Cir. 2016). If the claims are not directed to an abstract idea, the inquiry ends. Otherwise, the inquiry proceeds to the second step, in which the elements of the claims are considered “individually and ‘as an ordered combination’ to determine whether the additional elements ‘transform the nature of the claim’ into a patent-eligible application.” *Alice*, 573 U.S. at 217 (quoting *Mayo*, 566 U.S. at 79, 78).

B. *USPTO Section 101 Guidance*

The United States Patent and Trademark Office (USPTO) recently published revised guidance on the application of 35 U.S.C. § 101. USPTO’s

January 7, 2019 Memorandum, *2019 Revised Patent Subject Matter Eligibility Guidance*, 84 Fed. Reg. 50, 50–57 (Jan. 7, 2019) (“Revised Guidance”). Under the Revised Guidance, we first look to whether the claim recites:

- (1) (Step 2A – Prong One) 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); and
- (2) (Step 2A – Prong Two) additional elements that integrate the judicial exception into a practical application (*see* MPEP § 2106.05(a)–(c), (e)–(h)).³

See Revised Guidance 54–55. Only if a claim (1) recites a judicial exception and (2) does not integrate that exception into a practical application, do we then look 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 Revised Guidance 56.

³ We acknowledge that some of these considerations may be properly evaluated under Step 2 of *Alice* (Step 2B of Revised Guidance). Solely for purposes of maintaining consistent treatment within the Office, we evaluate it under Step 1 of *Alice* (Step 2A of Revised Guidance). *See* Revised Guidance 54–55.

C. *Examiner’s § 101 Rejection Alice/Mayo – Steps 1 and 2*

C.1. *USPTO Revised Guidance Step 2A – Prong One*

Applying step 1 of the *Alice/Mayo* analysis, the Examiner concludes claim 1 recites and is directed to an abstract idea.

Claim(s) 1–11 are directed to *the abstract idea of “organizing contract numbers based on main categories and sub-categories”*. While independent claims 1, 6 and 7 do not explicitly recite “organizing contract numbers based on main categories and sub-categories,” the concept of “organizing contract numbers based on main categories and sub-categories” is described by the “defining” steps/functions of independent claim[s] 1, 6 and 7. “Organizing contract numbers based on main categories and subcategories” *is a concept similar to the collecting information, analyzing it, and displaying certain results of [o]btaining and comparing intangible data (CyberSource) and [o]rganizing and manipulating information through mathematical correlations (Digitech)*.

Final Act. 5 (emphasis added); *see also* Ans. 3–4.

As defined by the MPEP and *Cybersource*, an idea of itself are concepts relating to organizing or analyzing information in a way *that can be performed mentally or by [pen and paper] or is analogous to human mental work*

The idea identified in the current claims is an abstract idea because it is an idea of itself *that can be performed by pen and paper*. The database, processor or computer medium are not necessary computer components to perform the claims and the claims limitation do not improve on the functionality of these computer components. The computer components are simply linked as a tool to perform the analog process.

Ans. 7 (Examiner’s citations omitted; panel’s emphasis added).

C.2. *USPTO Revised Guidance Step 2A – Prong Two*

Applying step 2 of the *Alice/Mayo* analysis, the Examiner concludes:

None of independent claims 1, 6 and 7 *improve computer performance* similar to *Enfish, include rules that allow a*

computer to perform new functions similar to McRo, or solve a computer or computer network problem with a computer solution similar to DDR.

....

None of the functions of independent claims 1, 6 and 7 whether taken alone or in an ordered combination ***amount to significantly more than the abstract idea identified above.*** For example, nothing in independent claims 1, 6 and 7 improve[s] another technology or technical field, improve[s] the functioning of the claimed computer system itself, or include[s] any elements that may otherwise be considered to amount to significantly more than the abstract idea.

Final Act. 5–6 (emphasis added).

The claims provide a business improvement and not a technical improvement as Appellant asserts. In EPG, the Federal Court stated that “In Enfish, we applied the distinction [on one hand, computer-functionality improvements and, on the other, uses of existing computers as tools in aid of processes focused on “abstract ideas”] to reject the § 101 challenge at stage one because the claims at issue focused not on asserted advances in uses to which existing computer capabilities could be put, but on a specific improvement—a particular database technique—in how computers could carry out one of their basic functions of storage and retrieval of data ... The present case is different: the focus of the claims is not on such an improvement in computers as tools, but on certain independently abstract ideas that use computers as tools.”

Similarly here, *the focus of the current claims is not on improving the functionality of a computer but the use of existing computers as tools in aid of processes focused on performing abstract ideas.* The improvements the Appellant asserts the claims provide are *economic/business improvements/benefits and not technical improvements.*

Ans. 6–7 (Examiner’s citations omitted; panel’s emphasis added).

C.3 USPTO Revised Guidance Step 2B

Further applying step 2 of the *Alice/Mayo* analysis, the Examiner concludes:

The claims do not include additional elements that are sufficient to amount to significantly more than the judicial exception because the database and index table (claim 1), storage medium, processor, index table and database (claim 6) and processor, memory, index table and database (claim 7) as recited are ***a generic computer that performs functions (i.e. collect, receive, process and transmit data) that are generic computer functions (i.e. receiving, processing, and storing data, and receiving data over a network) that are well-understood, routine, and conventional activities previously known to the industry.*** For example, Courts have held computer-implemented processes not to be significantly more than the abstract idea where the claim as a whole amounts to nothing more than a generic computer merely used to implement an abstract idea, such as an idea that could be done by a human analog by hand. The current application specification discloses ***a generic [computer] performing routine and conventional activities such as gathering information, analyzing and [presenting the information].*** This is similar to the conventional computer and network in *Electric Power Group* that the Federal Circuit found to be not significantly more than the abstract idea

Final Act. 5–6 (Examiner’s citations omitted; panel’s emphasis added); *see also* Ans. 5.

D. Appellant’s § 101 Arguments

D.1. Step 2A, Prong 1

D.1.a.

Appellant contends:

[T]he Examiner fails to explain how each of the rejected claims 1–11 are allegedly directed to the abstract idea of “organizing contract numbers based on main categories and sub-categories” by virtue of the independent claims inclusion of “‘defining’

steps/functions.” Likewise, the Examiner fails to explain how “the ‘defining’ steps/functions of independent claim[s] 1, 6 and 7” describe “organizing contract numbers based on main categories and sub-categories.” . . . [T]he Examiner’s characterization of the claims amounts to ***an improper overgeneralization and simplification of the claims.***

By collectively characterizing the present claims as “organizing contract numbers based on main categories and sub-categories,” the Examiner ***fails to account for the specific requirements of the claims.*** That is, the claimed invention is not limited to the overgeneralization of organizing contract numbers based on main categories and sub-categories. Instead, the claimed invention ***address[es] a problem that the travel industry faces in enabling individual stock providers to allocate contract numbers for travel industry transactions that are both uniquely tailored to the needs of that stock provider and compliant with the standardized category numbers established that an industry association establishes for multiple providers.*** As such, the claimed invention is directed towards ***a particular technique of allocating contract numbers for travel industry transactions*** - not organizing contract numbers based on main categories and sub-categories.

. . . .

No aspect of organizing contract numbers based on main categories and sub-categories necessarily requires using an index table to define number ranges within standard category number ranges for contracts corresponding to a first stock provider that are stored in a database storing contract numbers for multiple stock providers. In this regard, the Examiner ***fails to consider the language of claim 1 pertaining to the claim elements related to the index table and the database storing contract numbers for multiple stock providers.***

. . . .

Appellant further submits that the claimed concept is ***not similar to any judicially recognized exception.*** The MPEP provides that: “Examiners should not go beyond those concepts that are similar to what the courts have identified as abstract

ideas.” Moreover, the PTAB has further maintained that “generalized arguments, not directed to the specific language of the challenged claims, are insufficient to show that the claims ... are directed to a patent-ineligible abstract idea.”

Nevertheless, the only evidence offered by the Examiner in support of the current rejection consists of **generalized arguments**. First, the Examiner states that the alleged abstract idea “is described by the ‘defining’ steps/functions of independent claim[s] 1, 6 and 7.” Next, the Examiner offers generic citations to two Federal Circuit decisions without any accompanying explanation as to how either decision is relevant to the pending claims. Specifically, the Examiner submits that the alleged abstract idea “is a concept similar to the collecting information, analyzing it, and displaying certain results of Obtaining and comparing intangible data (CyberSource) and Organizing and manipulating information through mathematical correlations (Digitech).” *Id. Absent in that conclusory assertion is any explanation as to why (or how) the claimed concept is similar to either concept that the CyberSource and Digitech courts identified as abstract.*

At issue in *CyberSource* was the eligibility of claims that focused on “detecting fraud in a credit card transaction between [a] consumer and a merchant over the internet.” At issue in *Digitech* was the eligibility of claims that focused on the “generation and use of an ‘improved device profile’ that describes spatial and color properties of a device within a digital image processing system.” ***Appellant’s claims have nothing to do with detecting fraud in credit card transactions or describing the spatial and color properties of a digital imaging device.*** As noted above, the claimed invention is directed towards a particular technique of allocating contract numbers for travel industry transactions in travel reservation systems. ***There is no use of an index table that defines provider-specific contract and/or ticket subcategories that remain compliant with standardized categories established for multiple providers*** in the claims at issue in *CyberSource* or *Digitech*. Moreover, in *CyberSource* or *Digitech*, ***no contracts/tickets are identifiable as having a particular issuance context based on a corresponding***

contract number that was allocated from a database that stores contract numbers for multiple providers.

Appeal Br. 10–12, 14–15 (Appellant’s citations omitted; panel’s emphasis added); *see also* Reply Br. 1–5.

D.1.b.

Claim 1 recites the following limitations:

[a] defining a first subcategory number range indicative of a first issuance context within a first standard category number range for a first set of contract numbers . . . , the first set of contract numbers corresponding to a first stock provider of a plurality of stock providers, . . . the first standard category number range being among a plurality of non-overlapping standard category number ranges that are pre-defined for the plurality of stock providers; and

[b] defining a second subcategory number range indicative of a second issuance context within the first standard category number range . . . the first and second subcategory number ranges each defining contiguous and non-overlapping portions of the first standard category number range,

[c] wherein a first contract issued for the first stock provider and having a first contract number including a first number from the first subcategory number range is identifiable as having the first issuance context based on the first contract number, and a second contract issued for the first stock provider and having a second contract number including a second number from the second subcategory number range is identifiable as having the second issuance context based on the second contract number.

In short, claim 1 recites, with the exception of generic computer-implementation (i.e., “using an index table,” “contract numbers included in a database associated with the index table”), a method of collecting contract number information, analyzing the collected contract number information, and organizing the analyzed contract number information into subcategory

number ranges. As such, claim 1 is analogous to those claims the Federal Circuit has found to be directed to an abstract idea. For example, the Federal Circuit has explained in various cases that steps involving collecting, analyzing, and organizing information are drawn to an abstract idea. *See Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016) (“The focus of the asserted claims . . . is on collecting information, analyzing it, and displaying certain results of the collection and analysis”); *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1373 (Fed. Cir. 2011) (“[The claim’s] steps can all be performed in the human mind. Such a method that can be performed by human thought alone is merely an abstract idea and is not patent-eligible under § 101”); *Digitech Image Techs., LLC v. Elecs. for Imaging, Inc.*, 758 F.3d 1344, 1351 (“The . . . claim recites a process of taking two data sets and combining them into a single data set, the device profile. The two data sets are generated by taking existing information . . . and organizing this information into a new form. The . . . claim thus recites an ineligible abstract process of gathering and combining data that does not require input from a physical device”).

Because the claims involve collecting, analyzing, and categorizing information, the claims are directed to “observation, evaluation, judgment, [and] opinion,” which are mental processes. Revised Guidance 52; *see also Elec. Power*, 830 F.3d at 1355 (“[M]erely selecting information, by content or source, for collection, analysis, and display does nothing significant to differentiate a process from ordinary mental processes, whose implicit exclusion from § 101 undergirds the information-based category of abstract ideas”). Under the Revised Guidance, mental processes are identified as a category of abstract ideas. Revised Guidance 52. Accordingly, we conclude

that claim 1 recites a mental process, and, thus, an abstract idea.

D.1.c.

We are not persuaded by Appellant’s argument that claim 1 recites a particular technique of allocating contract numbers for travel industry transactions. *See* Appeal Br. 11. The relevant claim elements identified by Appellant (e.g., “a first issuance context . . . for a first set of contract numbers,” “the first set of contract numbers corresponding to a first stock provider of a plurality of stock providers,” “[a] first standard category number range being amount a plurality of non-overlapping standard category number ranges that are pre-defined for the plurality of stock providers,” “a second issuance context”) merely link the aforementioned method to the field of travel industry transactions. “[L]imiting an abstract idea to one field of use . . . [does] not make the [abstract idea] . . . patentable.” *Bilski v. Kappos*, 561 U.S. 593, 612 (2010).

We are also not persuaded by Appellant’s argument that Examiner’s findings fail to account for the “index table,” recited in claim 1. *See* Appeal Br. 11. Claim 1 merely recites the use of the “index table” as a tool to perform the aforementioned method, and does not specifically recite how the “index table” is used to perform the method. “[T]he prohibition against patenting abstract ideas ‘cannot be circumvented by attempting to limit the use of the [abstract idea] . . . to a particular technological environment’.” *Bilski*, 561 U.S. at 610 (citation omitted).

D.2. *Step 2A, Prong 2*

Appellant also contends:

Appellant’s claims are focused on *a specific technique of improving travel reservation systems* by enabling such systems to decouple contract definitions from contract number range

storage and handling. In doing so, the claimed invention enables travel reservation systems to issue or otherwise process contract numbers *that are both compliant with standardized category numbers and uniquely tailored to the needs of a particular stock provider.*

....

Applicant's claimed invention recite *a particular technique to address this specific problem* encountered by travel reservation systems. In particular, the claimed invention enables such systems to issue or otherwise process contract numbers that are both compliant with standardized category numbers and uniquely tailored to the needs of a particular stock provider. To that end, the claimed invention employs *an index table* that decouples contract definitions for a particular stock provider from contract number range storage and handling in *a database* storing contract numbers for multiple stock providers.

....

Thus, the claimed invention is patent-eligible in as much as the amended claims recite *a particular technique to accomplish a specific improvement over prior systems*, resulting in *an improved allocation of contract numbers for travel industry transactions in travel reservation systems.*

Appeal Br. 12–14 (Appellant's citations omitted; panel's emphasis added);
see also Reply Br. 2.

In addition to the aforementioned abstract idea, claim 1 recites that the first and second subcategory number ranges are defined using “an index table,” and further recites the contracts numbers are included in, and allocated from, “a database associated with the index table.” The recited “index table” and “database” do not transform claim 1 into something more than the aforementioned abstract idea, because such elements do no more than generally link the use of the aforementioned abstract idea to a particular technological environment. *See* Manual of Patent Examining Procedure

(“MPEP”) § 2106.05(h); *see also FairWarning IP, LLC v. Iatric Systems, Inc.*, 839 F.3d 1089, 1095 (Fed. Cir. 2016) (“Although [the] . . . claims require the use of a computer, it is this incorporation of a computer, *not* the claimed rule, that purportedly ‘improve[s] [the] existing technological process’ by allowing the automation of further tasks.”) (citation omitted).

Appellant’s argument that claim 1 is directed to a specific technique of improving travel reservation systems (*see* Appeal Br. 12) is not persuasive. Consistent with the Examiner’s findings, the argued improvement is not an improvement to a technical field, but instead is an improvement to the underlying mental process (i.e., the method of collecting, analyzing, and organizing the analyzed contract number information into subcategory number ranges). *See* Ans. 6–7. Also consistent with the Examiner’s findings, it is the incorporation of a general-purpose computer including an index table and a database associated with the index table that purportedly improves the existing technological process of travel reservation by allowing the automation of further tasks, rather than the incorporation of the aforementioned method. *See* Ans. 7; *see also FairWarning*, 839 F.3d at 1095.

Accordingly, consistent with the Examiner’s findings, claim 1 does not include an improvement to another technology or technical field, an improvement to the functioning of the computer itself (*see* MPEP § 2106.05(a)), or meaningful limitations beyond generally linking the use of an abstract idea to a particular technological environment (*see* MPEP § 2106.05(h)). *See* Final Act. 5–6; *see also* Ans. 4–6. Further, in view of Appellant’s Specification (*see, e.g.*, Spec. ¶¶ 29–32, discussed below in further detail), and consistent with the Examiner’s findings, we conclude

that claim 1 does not integrate the judicial exception into a practical application. We determine claim 1 does not recite:

- (i) an improvement to the functioning of a computer;
- (ii) an improvement to another technology or technical field;
- (iii) an application of the abstract idea with, or by use of, a particular machine;
- (iv) a transformation or reduction of a particular article to a different state or thing; or
- (v) other meaningful limitations beyond generally linking the use of the abstract idea to a particular technological environment.

See MPEP §§ 2106.05(a)–(c), (e)–(h). We agree with the Examiner that claim 1 is *directed to* a judicial exception.

D.3. Step 2B

Also as to claim 1, Appellant contends:

Applicant submits that even when considered individually, the elements of the claims recite computer-implemented functions that are *not generic (i.e., not well-understood, routine, and conventional activities previously known in the industry)*. For example, each of the rejected claims include features related to *using an index table* to define provider-specific contract and/or ticket subcategories that remain compliant with standardized categories established for multiple providers. Each of the claims also include features related to *a database* associated with the index table that stores contract numbers for the multiple stock providers.

These features, either individually or in combination, *do not appear in any prior art references, such as widely known industry references, standards, or publications*. Additionally, the Examiner has not provided any evidence supporting the contrary.

....

Moreover, even if the present claims could be considered to be directed to an abstract idea, Appellant submits that the claims remain patent eligible because *they recite an inventive concept that satisfies the “significantly more test” under BASCOM when properly considered as an ordered combination.*

In *BASCOM*, the Federal Circuit found claims patent-eligible that contain an “inventive concept” that transformed an abstract idea into a patent-eligible invention. At issue in *BASCOM* were claims directed to the abstract idea of “filtering content on the Internet.” A district court had “looked at each limitation [of the *BASCOM* claims] individually and noted that the limitations ‘local client computer,’ ‘remote ISP server,’ ‘Internet computer network,’ and ‘controlled access network accounts’ are described in the [*BASCOM*] specification as [well-known] generic computer components.” In applying the second part of the *Alice* framework, the Federal Circuit agreed with that finding of the district court.

However, the Federal Circuit explained, “the inventive concept inquiry requires more than recognizing that each claim element, by itself, was known in the art.” Rather, “the inventive concept can be found in the non-conventional and non-generic arrangement of known conventional pieces.” In view of that standard, the *BASCOM* court found that “[t]he inventive concept described and claimed in the ‘606 patent is the installation of a filtering tool at a specific location, remote from the end-users, with customizable filtering features specific to each end user.”

Here, even assuming, *arguendo*, that the rejected claims recite known conventional pieces (a point not conceded), *the particular arrangement of features and elements recited by the rejected claims are drawn to technical improvements over the prior art.* For example, Appellant’s specification describes one inventive aspect of the present invention as being related to managing provider-specific contract definitions in a data structure that is separate and distinct from a data structure that stores and handles contract numbers for multiple stock providers.

Specifically, *an index table* is configured to allow a particular stock provider to define number ranges within standard category number ranges for contracts corresponding to that particular stock provider. The provider-specific contract definitions are both uniquely tailored to the needs of the particular stock provider and compliant with standardized category numbers that are established by a travel industry association for multiple stock providers (which include the particular stock provider). Associated with the index table is *a database* is configured to store contract numbers for the multiple stock providers. Contracts/tickets for specific travel stock/services are identifiable as having a particular issuance context based on a corresponding contract number that was allocated from the database.

Similar to the claims held patent eligible by the Federal Circuit in *BASCOM*, none of the rejected claims merely apply an abstract idea to generic computer components. Rather, each of the rejected claims contain an “inventive” concept that may at least be found in *a non-conventional and non-generic arrangement of components and data structures in computer-implemented travel reservation systems as well as the operations performed by such reservation systems in particular sequences*.

Appeal Br. 16–18 (Appellant’s citations omitted; panel’s emphasis added); *see also* Reply Br. 5–6.

Consistent with the Examiner’s findings, the recited “index table” and “database” are generic computer components that perform functions (e.g., receiving, processing, and storing data) that are well-understood, routine, and conventional to one of ordinary skill in the art. *See* Final Act. 5–6; *see also* Ans. 5. Further, Appellant’s Specification provides objective evidence that the recited “index table” and “database” are generic computer components that perform functions that are well-understood, routine, and conventional to one of ordinary skill in the art, as shown below:

Referring now to FIG. 2, the GDS 12, airline systems 14, travel agency systems 16, and BSP system 18 of operating environment 10 may be implemented on *one or more computer devices or systems, such as exemplary computer system 22*. The computer system 22 may include *a processor 24, a memory 26*, a mass storage memory device 28, an input/output (I/O) interface 30, and a user interface 32.

The processor 24 may include *one or more devices selected from microprocessors, micro-controllers, digital signal processors, microcomputers, central processing units, field programmable gate arrays, programmable logic devices, state machines, logic circuits, analog circuits, digital circuits, or any other devices that manipulate signals (analog or digital) based on operational instructions that are stored in the memory 26*. The memory 26 may include *a single memory device or a plurality of memory devices including but not limited to read-only memory (ROM), random access memory (RAM), volatile memory, non-volatile memory, static random access memory (SRAM), dynamic random access memory (DRAM), flash memory, cache memory, or any other device capable of storing information*. The mass storage memory device 28 may include data storage devices such as a hard drive, optical drive, tape drive, non-volatile solid state device, or any other device capable of storing information. A database 36 may reside on the mass storage memory device 28, and may be used to collect and organize data used by the various systems and modules described herein.

Processor 24 may operate under the control of an operating system 38 that resides in memory 26. The operating system 38 may manage computer resources so that computer program code embodied as one or more computer software applications, such as application 40 residing in memory 26 may have instructions executed by the processor 24. In an alternative embodiment, the processor 24 may execute the applications 40 directly, in which case the operating system 38 may be omitted. One or more data structures 42 may also reside in memory 26, and may be used by the processor 24, operating system 38, and/or application 40 to store or manipulate data.

The I/O interface 30 may provide a machine interface that operatively couples the processor 24 to other devices and systems, such as the network 20. The application 40 may thereby work cooperatively with the network 20 by communicating via the I/O interface 30 to provide the various features, functions, and/or modules comprising embodiments of the invention. The application 40 may also have program code that is executed by one or more external resources (not shown), or otherwise rely on functions and/or signals provided by other system or network components external to the computer system 22. Indeed, ***given the nearly endless hardware and software configurations possible, persons having ordinary skill in the art will understand that embodiments of the invention may include applications that are located externally to the computer system 22, distributed among multiple computers or other external resources, or provided by computing resources (hardware and software) that are provided as a service over the network 20, such as a cloud computing service.***

Spec. ¶¶ 29–32 (emphasis added).

Appellant’s argument that the elements of claim 1 do not recite computer-implemented functions that are well-understood, routine, and conventional because the elements do not appear in any prior art references (*see* Appeal Br. 16) is not persuasive. This argument conflates the novelty and non-obviousness tests under 35 U.S.C. §§ 102, 103 with the patent-eligibility test under 35 U.S.C. § 101.

Further, we are not persuaded by Appellant’s argument that claim 1 is similar to the claims at issue in *BASCOM Global Internet Servs., Inc. v. AT&T Mobility LLC.*, 827 F.3d 1341 (Fed. Cir. 2016). *See* Appeal Br. 17. Unlike the claims at issue in *BASCOM*, claim 1 fails to recite the technical details that distinguishes the claimed method of collecting, analyzing, and organizing contract number information into subcategory number ranges

from prior processes of collecting, analyzing, and organizing contract number information into subcategory number ranges.

In view of Appellant's Specification, and consistent with the Examiner's determinations, we determine claim 1 does not recite:

- (vi) a specific limitation other than what is well-understood, routine, conventional activity in the field or unconventional steps that confine the claim to a particular useful application.

See MPEP § 2106.05(d).

E. *Other § 101 Arguments*

Appellant also contends:

[T]he Examiner completely ***abrogated his obligation to provide any analysis of the remaining dependent claims*** rejected under 35 U.S.C. § 101. Rather, the Examiner merely states that “[n]one of the dependent claims when separately considered in combination with each dependent claims parent claim(s) overcome the above analysis and are therefore similarly rejected as being ineligible. For example, dependent claims 2-5 and 8-11 further narrow the described abstract idea above but do not otherwise alter Examiners analysis above. As such, ***the Examiner clearly has given no consideration to or any basis whatsoever for the rejection of dependent claims 2-5 and 8-11 that depend from independent claims 1 and 7, respectively.***

Appeal Br. 15 (Appellant's citations omitted; panel's emphasis added).

This argument is not persuasive either. As Appellant concedes, the Examiner did address dependent claims 2–5 and 8–11, finding that the claims “further narrow the described abstract idea above[,] but do not otherwise alter [the Examiner's analysis].” Final Act. 6; *see also* Ans. 10–11. We agree with the Examiner's findings that the above analysis of independent claim 1 equally applies to dependent claims 2–5 and 8–11.

For example, claim 2 recites the following limitations:

[d] for a second set of contract numbers corresponding to a second stock provider, defining a third subcategory number range within the first standard category number range and corresponding to a third issuance context different from either of the first and second issuance contexts, [and]

[e] wherein a third contract issued for the second stock provider and having a third contract number including a third number from the third subcategory number range is identifiable as having the third issuance context based on the third contract number.

Thus, claim 2 recites a further step of the method of collecting, analyzing, and organizing contract number information (i.e., receiving a second set of contract numbers and organizing the second set of contract numbers into a third subcategory number range). The aforementioned recited step of claim 2 does not distinguish the claim from the aforementioned abstract idea or transform the claim into something significantly more than the aforementioned abstract idea. Such an analysis equally applies to claims 3–5 and 8–11. Accordingly, we conclude that claims 2–5 and 8–11 are also not patent-eligible.

CONCLUSIONS

- (1) The Examiner has not erred in rejecting claims 1–11 under 35 U.S.C. § 101.
- (2) Claims 1–11 are not patentable.

DECISION

We affirm the Examiner's rejections of claims 1–11 under 35 U.S.C. § 101.

Appeal 2018-007062
Application 13/956,771

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

In summary:

Claims Rejected	Basis	Affirmed	Reversed
1-11	§ 101		1-11

AFFIRMED