



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.
13/192,565	07/28/2011	Monika Gupta	IN920110119US1 (790.127)	6289
89885	7590	03/10/2020	EXAMINER	
FERENCE & ASSOCIATES LLC 409 BROAD STREET PITTSBURGH, PA 15143			GURSKI, AMANDA KAREN	
			ART UNIT	PAPER NUMBER
			3623	
			MAIL DATE	DELIVERY MODE
			03/10/2020	PAPER

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.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte MONIKA GUPTA, DEBDOOT MUKHERJEE,
VIBHA SINGHAL SINHA, LIANGJIE ZHANG, and NIANJUN ZHOU

Appeal 2018-004760
Application 13/192,565
Technology Center 3600

Before MURRIEL E. CRAWFORD, NINA L. MEDLOCK, and
MATTHEW S. MEYERS, *Administrative Patent Judges*.

MEDLOCK, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant¹ appeals under 35 U.S.C. § 134(a) from the Examiner’s final rejection of claims 14–17 and 19–25. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

CLAIMED INVENTION

Appellant’s claimed invention relates to “[m]ethods and arrangements for dynamically facilitating project assembly” (Spec. Abstract).

Claims 14 and 15 are the independent claims on appeal. Claim 14, reproduced below with bracketed notations added, is illustrative of the claimed subject matter:

14. An apparatus comprising:
 - [(a)] at least one processor; and
 - [(b)] a computer readable storage medium having computer readable program code embodied therewith and executable by the at least one processor, the computer readable program code comprising:
 - [(c)] computer readable program code configured to facilitate submission of a project plan with a chosen set of plan components, wherein the chosen set of plan components comprises required hardware, software, and worker resources for carrying out a project associated with the project plan and a schedule associated with the project;

¹ We use the term “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. Our decision references Appellant’s Appeal Brief (“Appeal Br.,” filed December 12, 2017) and Reply Brief (“Reply Br.,” filed April 5, 2018), and the Examiner’s Answer (“Ans.,” mailed February 5, 2018) and Final Office Action (“Final Act.,” mailed July 12, 2017). Appellant identifies International Business Machines Corporation as the real party in interest (Appeal Br. 3).

[(d)] computer readable program code configured to query a cloud portal, having access to a plurality of hardware and software resources and having access to schedules of a plurality of worker resources, for information on the chosen plan components, wherein the cloud portal comprises a plurality of preconfigured images comprising standardized configurations of hardware and software resources and wherein at least one of the plurality of preconfigured images comprising the information on the chosen plan components is cloned in response to the query;

the at least one of the plurality of preconfigured images that is cloned comprising an image including the required hardware and software resources and fulfilling the chosen set of plan components and wherein at least one license is assigned, by the cloud portal, to the software resources included in the cloned at least one of the plurality of preconfigured images;

[(e)] computer readable program code configured to receive from the cloud portal the cloned at least one of the plurality of preconfigured images comprising information on the chosen plan components;

[(f)] computer readable program code configured to generate plan recommendations based on the received cloned at least one of the plurality of preconfigured images, wherein the plan recommendations include at least one recommendation of another plan having at least one plan component differing from the chosen plan components, wherein the plan recommendations comprise recommended plans meeting the chosen set of plan components and a predetermined pricing constraint;

[(g)] computer readable program code configured to facilitate selection of a recommended plan; and

[(h)] computer readable program code configured to provision, by the cloud portal, the hardware, software, and worker resources necessary for carrying out the selected plan.

REJECTIONS

Claims 14–17 and 19–25 are rejected under 35 U.S.C. § 101 as directed to a judicial exception without significantly more.

Claims 14–17, 19–21, 24, and 25 are rejected under 35 U.S.C. § 103(a) as unpatentable over Motwani et al. (US 2007/0260502 A1, published Nov. 8, 2007) (“Motwani”), Sabin et al. (US 2013/0007840 A1, published Jan. 3, 2013) (“Sabin”), Devarakonda et al. (US 2013/0019015 A1, published Jan. 17, 2013) (“Devarakonda”), and Weinberger (US 2008/0243575 A1, published Oct. 2, 2008).

Claims 22 and 23 are rejected under 35 U.S.C. § 103(a) as unpatentable over Motwani, Sabin, Devarakonda, Weinberger, and Dromgold (US 2007/0150327 A1, published June 28, 2007).

ANALYSIS

Patent Ineligible Subject Matter

Appellant argues the pending claims as a group (Appeal Br. 16–25). We select independent claim 14 as representative. The remaining claims stand or fall with claim 14. *See* 37 C.F.R. §41.37(c)(1)(iv).

Under 35 U.S.C. § 101, an invention is patent eligible if it claims a “new and useful process, machine, manufacture, or composition of matter.” 35 U.S.C. § 101. The Supreme Court, however, has long interpreted § 101 to include an implicit exception: “[l]aws of nature, natural phenomena, and abstract ideas” are not patentable. *Alice Corp. v. CLS Bank Int’l*, 573 U.S. 208, 216 (2014).

The Supreme Court, in *Alice*, reiterated the two-step framework previously set forth in *Mayo Collaborative Services v. Prometheus Laboratories, 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 Corp.*, 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.” *Id.* If the claims are not directed to a patent-ineligible concept, e.g., an abstract idea, the inquiry ends. Otherwise, the inquiry proceeds to the second step where the elements of the claims are considered “individually and ‘as an ordered combination’” to determine whether there are additional elements that “‘transform the nature of the claim’ into a patent-eligible application.” *Id.* (quoting *Mayo*, 566 U.S. at 79, 78). This is “a search for an ‘inventive concept’ — *i.e.*, an element or combination of elements that is ‘sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.’” *Id.* at 217–18 (alteration in original).

In rejecting the pending claims under 35 U.S.C. § 101, the Examiner determined that the claims are directed to “facilitating submission of a project plan with a chosen set of plan components, querying for information in the form of preconfigured images on plan components, receiving image clones of the information, generating plan recommendations, and facilitating selection of a recommended plan” or simply put to “[f]acilitating submissions of plans and making recommendations,” *i.e.*, to an abstract idea similar to other concepts that the courts have held abstract (Final Act. 7–8). The Examiner also determined that the claims do not include additional elements that are sufficient to amount to significantly more than the abstract idea itself (*id.* at 8–9).

After Appellant’s briefs were filed and the Examiner’s Answer mailed, the U.S. Patent and Trademark Office (the “USPTO”) published revised guidance for use by USPTO personnel in evaluating subject matter eligibility under 35 U.S.C. § 101. 2019 REVISED PATENT SUBJECT MATTER ELIGIBILITY GUIDANCE, 84 Fed. Reg. 50, 57 (Jan. 7, 2019) (the “2019

Revised Guidance”). That guidance revised the USPTO’s examination procedure with respect to the first step of the *Mayo/Alice* framework by (1) “[p]roviding groupings of subject matter that [are] considered an abstract idea”; and (2) clarifying that a claim is not “directed to” a judicial exception if the judicial exception is integrated into a practical application of that exception. *Id.* at 50. The 2019 Revised Guidance, by its terms, applies to all applications, and to all patents resulting from applications, filed before, on, or after January 7, 2019. *Id.*^{2,3}

Step One of the Mayo/Alice Framework (2019 Revised Guidance, Step 2A)

The first step in the *Mayo/Alice* framework, as mentioned above, is to determine whether the claims at issue are “directed to” a patent-ineligible concept, e.g., an abstract idea. *Alice Corp.*, 573 U.S. at 217. This first step, as set forth in the 2019 Revised Guidance (i.e., Step 2A), is a two-prong test; in Step 2A, Prong One, we look to whether the claim recites a judicial exception, e.g., one of the following three groupings of abstract ideas: (1) mathematical concepts; (2) certain methods of organizing human

² The 2019 Revised Guidance supersedes MANUAL OF PATENT EXAMINING PROCEDURE (“MPEP”) § 2106.04(II) and also supersedes all versions of the USPTO’s “Eligibility Quick Reference Sheet Identifying Abstract Ideas.” See 2019 Revised Guidance, 84 Fed. Reg. at 51 (“Eligibility-related guidance issued prior to the Ninth Edition, R-08.2017, of the MPEP (published Jan. 2018) should not be relied upon.”). Accordingly, Appellant’s arguments challenging the sufficiency of the Examiner’s rejection will not be addressed to the extent those arguments are based on now superseded USPTO guidance.

³ The USPTO issued an update on October 17, 2019 (the “October 2019 Update: Subject Matter Eligibility,” available at https://www.uspto.gov/sites/default/files/documents/peg_oct_2019_update.pdf) clarifying the 2019 Revised Guidance in response to comments solicited from the public.

activity, e.g., fundamental economic principles or practices, commercial or legal interactions; and (3) mental processes. 2019 Revised Guidance, 84 Fed. Reg. at 54. If so, we next consider whether the claim includes additional elements, beyond the judicial exception, that “integrate the [judicial] exception into a practical application,” i.e., that apply, rely on, or use the judicial exception in a manner that imposes a meaningful limit on the judicial exception, such that the claim is more than a drafting effort designed to monopolize the judicial exception (“Step 2A, Prong Two”). *Id.* at 54–55. Only if the claim (1) recites a judicial exception and (2) does not integrate that exception into a practical application do we conclude that the claim is “directed to” the judicial exception, e.g., an abstract idea. *Id.*

We are not persuaded by Appellant’s arguments that the Examiner erred in determining that claim 14 is directed to an abstract idea (Appeal Br. 16–24). The Federal Circuit has explained that “the ‘directed to’ inquiry applies a stage-one filter to claims, considered in light of the specification, based on whether ‘their character as a whole is directed to excluded subject matter.’” *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016) (quoting *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015)). It asks whether the focus of the claims is on a specific improvement in relevant technology or on a process that itself qualifies as an “abstract idea” for which computers are invoked merely as a tool. *See id.* at 1335–36. Here, it is clear from the Specification (including the claim language) that the claims focus on an abstract idea, and not on any improvement to technology and/or a technical field.

The Specification is titled “METHODS AND SYSTEMS FOR DYNAMICALLY FACILITATING PROJECT ASSEMBLY,” and

describes, in the Background section, that a custom application development typically starts from a standard project management tooling environment (Spec. ¶ 1). However, according to the Specification, it can be very difficult to change or align a change of project requirements and associated resources with work breakdown structures (*id.*).

The claimed invention ostensibly addresses this issue by providing a method and apparatus for dynamically facilitating project assembly. Thus, when a project plan with a chosen set of plan components is submitted, a cloud portal is queried for information on the chosen plan components. Plan recommendations are generated based on information received from the cloud portal, and a recommended plan is selected (*id.* ¶ 2).

Consistent with this disclosure, claim 14 recites an apparatus comprising at least one processor and a computer readable storage medium having computer readable program code, executable by the at least one processor, configured to: (1) facilitate submission of a project plan with a chosen set of plan components, i.e.,

computer readable program code configured to facilitate submission of a project plan with a chosen set of plan components, wherein the chosen set of plan components comprises required hardware, software, and worker resources for carrying out a project associated with the project plan and a schedule associated with the project

(limitation (c)); (2) query a cloud portal for information on the plan components, i.e.,

computer readable program code configured to query a cloud portal, having access to a plurality of hardware and software resources and having access to schedules of a plurality of worker resources, for information on the chosen plan components, wherein the cloud portal comprises a plurality of preconfigured images comprising standardized configurations of

hardware and software resources and wherein at least one of the plurality of preconfigured images comprising the information on the chosen plan components is cloned in response to the query;

the at least one of the plurality of preconfigured images that is cloned comprising an image including the required hardware and software resources and fulfilling the chosen set of plan components and wherein at least one license is assigned, by the cloud portal, to the software resources included in the cloned at least one of the plurality of preconfigured images

(limitation (d)); (3) generate plan recommendations based on the information received from the cloud portal, i.e.,

computer readable program code configured to receive from the cloud portal the cloned at least one of the plurality of preconfigured images comprising information on the chosen plan components; [and]

computer readable program code configured to generate plan recommendations based on the received cloned at least one of the plurality of preconfigured images, wherein the plan recommendations include at least one recommendation of another plan having at least one plan component differing from the chosen plan components, wherein the plan recommendations comprise recommended plans meeting the chosen set of plan components and a predetermined pricing constraint

(limitations (e) and (f)); and (4) facilitate selection of a recommended plan, and provision the hardware, software, and worker resources for carrying out the selected plan, i.e., “computer readable program code configured to facilitate selection of a recommended plan”; and “computer readable program code configured to provision, by the cloud portal, the hardware, software, and worker resources necessary for carrying out the selected plan” (limitations (g) and (h)). These limitations, when given their broadest reasonable interpretation, recite receiving a project plan with a chosen set of plan components, collecting information on the plan components, generating

plan recommendations based on the collected information, and provisioning the resources, including hardware, software, and worker resources, needed to carry out a selected one of the plan recommendations.

Claim 14 contemplates that computer readable program code, configured to perform the recited functions, is executed by a processor. Yet, we agree with the Examiner that these functions are acts that could be performed by a human, e.g., mentally or manually, using pen and paper (Final Act. 3 (“Facilitating submission of a project plan . . . involves the simple act of one entity providing information to another. A query for information in the form of preconfigured images is equivalent to requesting pictures that apply to a user’s interest. Receiving image clones is no different from receiving copies of requested images. Generating plan recommendations and facilitating selection from those recommendations boils down to making recommendations and then making a choice. All of these functions can easily be performed through interaction of people and the simple exchange of information”) *see also id.* at 8 (“A user can create a project plan and make a recommendation based on some input or decision with only pen to paper actions and/or mental calculation.”)). Simply put, claim 14 recites a mental process, i.e., a concept performed in the human mind, including an evaluation or judgment, and therefore, an abstract idea. *See* 2019 Revised Guidance, 84 Fed. Reg. at 52; *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1373 (Fed. Cir. 2011) (holding that method steps that can be performed in the human mind, or by a human using a pen and paper, are unpatentable mental processes). *See also Elec. Power Grp., LLC v. Alstom, S.A.*, 830 F.3d 1350, 1355 (Fed. Cir. 2016) (explaining that the Federal Circuit treats “analyzing information by steps people go

through in their minds, or by mathematical algorithms, without more, as essentially mental processes within the abstract-idea category”); *Versata Dev. Grp., Inc. v. SAP Am., Inc.*, 793 F.3d 1306, 1335 (Fed. Cir. 2015) (“Courts have examined claims that required the use of a computer and still found that the underlying, patent-ineligible invention could be performed via pen and paper or in a person’s mind.”).

Having concluded that claim 14 recites a judicial exception, i.e., an abstract idea (Step 2A, Prong One), we next consider whether the claim recites additional elements that integrate the judicial exception into a practical application (Step 2A, Prong Two).

The only additional elements recited in claim 14, beyond the abstract idea, are the “processor”; “computer readable storage medium”; and “cloud portal” — elements that, as the Examiner observed, are recited as generic computer components (Final Act. 4); they also are described as such in the written disclosure (*see, e.g.*, Spec. ¶¶ 35–43). We find no indication in the Specification that the operations recited in claim 14 require any specialized computer hardware or other inventive computer components, i.e., a particular machine, invoke any assertedly inventive programming, or that the claimed invention is implemented using other than generic computer components to perform generic computer functions. *See DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1256 (Fed. Cir. 2014) (“[A]fter *Alice*, there can remain no doubt: recitation of generic computer limitations does not make an otherwise ineligible claim patent-eligible.”).

We also find no indication in the Specification that the claimed invention effects a transformation or reduction of a particular article to a different state or thing. Nor do we find anything of record that attributes an

improvement in technology and/or a technical field to the claimed invention or that otherwise indicates that the claimed invention integrates the abstract idea into a “practical application,” as that phrase is used in the 2019 Revised Guidance.⁴

As an initial matter, we are not persuaded of Examiner error to the extent Appellant maintains that the Examiner has failed to establish a prima facie case of patent ineligibility (Appeal Br.16–18). The Federal Circuit has observed repeatedly that “the prima facie case is merely a procedural device that enables an appropriate shift of the burden of production.” *Hyatt v. Dudas*, 492 F.3d 1365, 1369 (Fed. Cir. 2007) (citing *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992)). The court has, thus, held that the USPTO carries its procedural burden of establishing a prima facie case when its rejection satisfies the requirements of 35 U.S.C. § 132 by notifying the applicant of the reasons for the rejection, “together with such information and references as may be useful in judging of the propriety of continuing the prosecution of [the] application.” *See In re Jung*, 637 F.3d 1356, 1362 (Fed. Cir. 2011) (alteration in original). Thus, what is required of the Office is that it sets forth the statutory basis of the rejection in a sufficiently articulate and informative manner as to meet the notice requirement of § 132. *Id.*; *see also Chester v. Miller*, 906 F.2d 1574, 1578 (Fed. Cir. 1990) (“Section 132

⁴ The 2019 Revised Guidance references MPEP § 2106.05(a)–(c) and (e) in describing the considerations that are indicative that an additional element or combination of elements integrates the judicial exception, e.g., the abstract idea, into a practical application. 2019 Revised Guidance, 84 Fed. Reg. at 55. If the recited judicial exception is integrated into a practical application, as determined under one or more of these MPEP sections, the claim is not “directed to” the judicial exception.

is violated when a rejection is so uninformative that it prevents the applicant from recognizing and seeking to counter the grounds for rejection.”).

Here, as described above, the Examiner notified Appellant that the claims are directed to “facilitating submission of a project plan with a chosen set of plan components, querying for information in the form of preconfigured images on plan components, receiving image clones of the information, generating plan recommendations, and facilitating selection of a recommended plan,” i.e., to an abstract idea similar to other concepts that the courts have found abstract; and that the claims do not include additional elements or a combination of elements sufficient to amount to significantly more than the abstract idea itself (Final Act. 7–9). The Examiner, thus, set forth the statutory basis of the rejection in a sufficiently articulate and informative manner as to meet the notice requirement of 35 U.S.C. § 132. And we find that, in doing so, the Examiner established a *prima facie* case of patent ineligibility.

We also are not persuaded of Examiner error by Appellant’s argument that the present claims are analogous to those at issue in *DDR Holdings* (Appeal Br. 20–21). The claims at issue in *DDR Holdings* were directed to retaining website visitors, and in particular to a system that modified the conventional web browsing experience by directing a user of a host website, who clicks an advertisement, to a “store within a store” on the host website, rather than to the advertiser’s third-party website. *DDR Holdings*, 773 F.3d at 1257–1258. The court determined that “the claims address a business challenge (retaining website visitors) [that] is a challenge particular to the Internet.” *Id.* at 1257. The court also determined that the invention was “necessarily rooted in computer technology in order to overcome a problem

specifically arising in the realm of computer networks,” and that the claimed invention did not simply use computers to serve a conventional business purpose. *Id.* Rather, there was a change to the routine, conventional functioning of Internet hyperlink protocol. *Id.*

Appellant argues here that the present claims, like those in *DDR Holdings*, are “necessarily rooted in computer technology” because the claims address a “specific computer problem,” i.e., generating plan recommendations based on information received from a cloud portal (Appeal Br. 21). Yet, we are not persuaded that generating project plan recommendations is a computer problem, as opposed to a business problem. And, unlike the situation in *DDR Holdings*, there is no indication here that the claimed computer components are used other than in their normal, expected, and routine manner for receiving, storing, and processing information. *DDR Holdings*, 773 F.3d at 1256 (“[A]fter *Alice*, there can remain no doubt: recitation of generic computer limitations does not make an otherwise ineligible claim patent-eligible.”).

The court also expressly cautioned in *DDR Holdings* that “not all claims purporting to address Internet-centric challenges are eligible for patent.” *Id.* at 1258. Thus, in *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709 (Fed. Cir. 2014), although the patentee argued that its claims were “directed to a specific method of advertising and content distribution that was previously unknown and never employed on the Internet before,” *Ultramercial*, 772 F.3d at 714, the court found that this alone could not render its claims patent eligible where the claims merely recited the abstract idea of “offering media content in exchange for viewing an advertisement,” along with “routine additional steps such as updating an activity log,

requiring a request from the consumer to view the ad, restrictions on public access, and use of the Internet.” *Id.* at 715–716.

Similarly here, we find that the invocation of a cloud portal is not sufficient to transform Appellant’s otherwise patent-ineligible abstract idea into patent-eligible subject matter. We find, as did the Examiner, that the claims are directed to the abstract idea of facilitating submissions of plans and making recommendations. Narrowing that abstract idea to generating recommendations based on information received from a cloud portal merely limits the use of the abstract idea to a particular technological environment, which the Court made clear in *Alice* is insufficient to transform an otherwise patent-ineligible abstract idea into patent-eligible subject matter. *See Alice Corp.*, 573 U.S. at 222.

Appellant further argues that the claims are directed to “specific programming that improves the operation of the device itself” and, therefore, not directed to an abstract idea (Appeal Br. 21). Yet, as the Examiner observed, “[s]pecific’ programming of software is needed for virtually every instance of software executing on hardware” (Final Act. 4). And although Appellant maintains that the claims are directed to “specific programming,” Appellant does not identify the specific programming and/or a specific cloud portal or otherwise explain how computer functionality, i.e., the “operation of the device itself,” is improved (*id.*).

That there is “no risk that the claims will ‘tie up’ the subject matter of ‘plan generations,’ or pre-empt others from ‘plan generation’” (Appeal Br. 22) also is alone insufficient for patent eligibility. Although the Supreme Court has described “the concern that drives [the exclusion of abstract ideas from patent-eligible subject matter] as one of pre-emption,”

Alice Corp., 573 U.S. at 216, characterizing preemption as a driving concern for patent eligibility is not the same as characterizing preemption as the sole test for patent eligibility. “The Supreme Court has made clear that the principle of preemption is the basis for the judicial exceptions to patentability” and “[f]or this reason, questions on preemption are inherent in and resolved by the § 101 analysis.” *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015) (citing *Alice Corp.*, 573 U.S. at 216). “[P]reemption may signal patent ineligible subject matter, [but] the absence of complete preemption does not demonstrate patent eligibility.” *Id.*

We conclude, for the reasons outlined above, that claim 14 recites a mental process, i.e., an abstract idea, and that the additional elements recited in the claim are no more than generic computer components used as tools to perform the recited abstract idea. As such, they do not integrate the abstract idea into a practical application. *See Alice Corp.*, 573 U.S. at 223–24 (“[W]holly generic computer implementation is not generally the sort of ‘additional featur[e]’ that provides any ‘practical assurance that the process is more than a drafting effort designed to monopolize the [abstract idea] itself.’” (quoting *Mayo*, 566 U.S. at 77)). Accordingly, we agree with the Examiner that claim 14 is directed to an abstract idea.

Step Two of the Mayo/Alice Framework (2019 Revised Guidance, Step 2B)

Having determined under step one of the *Mayo/Alice* framework that claim 14 is directed to an abstract idea, we next consider under Step 2B of the 2019 Revised Guidance, the second step of the *Mayo/Alice* framework, whether claim 14 includes additional elements or a combination of elements that provides an “inventive concept,” i.e., whether the additional elements

amount to “significantly more” than the judicial exception itself.

2019 Revised Guidance, 84 Fed. Reg. at 56.

Appellant ostensibly maintains that even if the pending claims are directed to an abstract idea, the claims are nonetheless patent eligible because the claims recite “methods and systems for generating plan recommendations using information received from a cloud portal that clearly were not well-understood, routine and conventional in the field at the time of filing” (App. Br. 25). That argument is not persuasive at least because generating plan recommendations using information received from a cloud portal, e.g., limitations (d), (e), and (f) of claim 14, is part of the abstract idea; the limitations are not additional elements to be considered when determining whether claim 14 includes additional elements or a combination of elements that is sufficient to amount to significantly more than the judicial exception.

It could not be clearer from *Alice*, that under step two of the *Mayo/Alice* framework, the elements of each claim are considered both individually and “as an ordered combination” to determine whether the additional elements, i.e., the elements *other* than the abstract idea itself, “transform the nature of the claim” into a patent-eligible application. *Alice Corp.*, 573 U.S. at 217 (internal quotations and citation omitted); *see Mayo*, 566 U.S. at 72–73 (requiring that “a process that focuses upon the use of a natural law also contain *other* elements or a combination of elements, sometimes referred to as an ‘inventive concept,’ sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the natural law itself” (emphasis added) (internal citation omitted)). In other

words, the inventive concept under step two of the *Mayo/Alice* test cannot be the abstract idea itself:

It is clear from *Mayo* that the “inventive concept” cannot be the abstract idea itself, and *Berkheimer* . . . leave[s] untouched the numerous cases from this court which have held claims ineligible because the only alleged “inventive concept” is the abstract idea.

Berkheimer v. HP, Inc., 890 F.3d 1369, 1374 (Fed. Cir. 2018) (Moore, J., concurring); *see also BSG Tech LLC v. BuySeasons, Inc.*, 899 F.3d 1281, 1290 (Fed. Cir. 2018) (“It has been clear since *Alice* that a claimed invention’s use of the ineligible concept to which it is directed cannot supply the inventive concept that renders the invention ‘significantly more’ than that ineligible concept.”) (internal citation omitted).

The Examiner determined here, and we agree, that the only claim elements beyond the abstract idea are the “processor”; “computer readable storage medium”; and “cloud portal,” i.e., generic computer components used to perform generic computer functions (Final Act. 4) — a determination amply supported by, and fully consistent with the Specification (*see, e.g.*, Spec. ¶¶ 35–43).⁵ Appellant cannot reasonably contend, nor does Appellant, that there is a genuine issue of material fact regarding whether the operation of these components is well-understood,

⁵ The Office’s April 19, 2018 Memorandum to the Examining Corps from Deputy Commissioner for Patent Examination Policy, Robert W. Bahr, entitled, Changes in Examination Procedure Pertaining to Subject Matter Eligibility, Recent Subject Matter Eligibility Decision (*Berkheimer v. HP, Inc.*), available at <https://www.uspto.gov/sites/default/files/documents/memo-berkheimer-20180419.PDF>, expressly directs that an examiner may support the position that an additional element (or combination of elements) is well-understood, routine or conventional with “[a] citation to an express statement in the specification . . . that demonstrates the well-understood, routine, conventional nature of the additional element(s)” (*id.* at 3).

routine, or conventional, where, as here, there is nothing in the Specification to indicate that the operations recited in claim 14 require any specialized hardware or inventive computer components or that the claimed invention is implemented using other than a generic computer component to perform generic computer functions, e.g., receiving, storing, transmitting, and processing information. Indeed, the Federal Circuit, in accordance with *Alice*, has “repeatedly recognized the absence of a genuine dispute as to eligibility” where claims have been defended as involving an inventive concept based “merely on the idea of using existing computers or the Internet to carry out conventional processes, with no alteration of computer functionality.” *Berkheimer*, 890 F.3d at 1373 (Moore, J., concurring) (internal citations omitted); *see also BSG Tech*, 899 F.3d at 1291 (“BSG Tech does not argue that other, non-abstract features of the claimed inventions, alone or in combination, are not well-understood, routine and conventional database structures and activities. Accordingly, the district court did not err in determining that the asserted claims lack an inventive concept.”).

Appellant also misapprehends the controlling precedent to the extent Appellant maintains that claim 14 is patent eligible because the claim represents a software improvement to generating plan recommendations that is “*novel and non-obvious as compared to prior art techniques*” (Appeal Br. 24). Neither a finding of novelty nor a non-obviousness determination automatically leads to the conclusion that the claimed subject matter is patent eligible. Although the second step in the *Mayo/Alice* framework is termed a search for an “inventive concept,” the analysis is not an evaluation of novelty or non-obviousness, but rather, a search for “an element or

combination of elements that is ‘sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.’” *Alice Corp.*, 573 U.S. at 217–18 (citation omitted). “Groundbreaking, innovative, or even brilliant discovery does not by itself satisfy the § 101 inquiry.” *Ass’n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 591 (2013). A novel and non-obvious claim directed to a purely abstract idea is, nonetheless, patent ineligible. *See Mayo*, 566 U.S. at 90; *see also Diamond v. Diehr*, 450 U.S. 175, 188–89 (1981) (“The ‘novelty’ of any element or steps in a process, or even of the process itself, is of no relevance in determining whether the subject matter of a claim falls within the § 101 categories of possibly patentable subject matter.”).

We are not persuaded, on the present record, that the Examiner erred in rejecting independent claim 14 under 35 U.S.C. § 101. Therefore, we sustain the Examiner’s rejection of claim 14, and claims 15–17 and 19–25, which fall with claim 14.

Obviousness

Independent Claims 14 and 15 and Dependent Claims 16, 17, 19–21, 24, and 25

We are not persuaded of Examiner error by Appellant’s arguments that a person of skill in the art would not have been motivated to combine the teachings of Motwani with either Sabin or Devarakonda because Sabin and Devarakonda are both in a completely different field of endeavor from Motwani, i.e., that Motwani is directed to a system for project management software that permits the allocation of resources to projects without tasks while Sabin is directed to a system for preventing information disclosure via

dynamic secure cloud resources and Devarakonda is directed to a system for allocating resources devoted to an application that is running on the cloud (Appeal Br. 26–28).

As the Examiner observes, and we agree, Motwani clearly describes a user conceiving a resource plan, and a computer assisting in the resource allocation plan requirements with the use of a network, which reasonably includes the use of cloud computing (Ans. 7–8). And, as the Examiner explains, both Sabin and Devarakonda involve the use of a cloud networking environment (*id.* at 8). We agree with the Examiner that although “Devarakonda utilizes a cloud specifically (as does Sabin), while Motwani generally leaves [its] invention open to all kinds of networking systems,” this does not “render the three [references] completely different and unobvious to combine because of differing levels of specificity” (*id.*).

Appellant argues that even if the references can properly be combined, the references fail to disclose or suggest all the claim limitations. In particular, Appellant argues that none of Motwani, Sabin, and Devarakonda discloses or suggests

generat[ing] plan recommendations based on the received cloned at least one of the plurality of preconfigured images, wherein the plan recommendations include at least one recommendation of another plan having at least one plan component differing from the chosen plan components, wherein the plan recommendations comprise recommended plans meeting the chosen set of plan components and a predetermined pricing constraint[,]

i.e., limitation (f), as recited in claim 14, and similarly recited in claim 15 (Appeal Br. 28–30).

Appellant’s argument is not persuasive at least because claims 14 and 15 stand rejected under 35 U.S.C. § 103 as obvious over the combination of

Motwani, Sabin, Devarakonda, *and* Weinberger, and not only any one of them alone. The argument that a single reference alone does not disclose all the recited claim limitations is not persuasive because “[n]on-obviousness cannot be established by attacking references individually where the rejection is based upon the teachings of a combination of references.” *See In re Merck & Co.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986). Moreover, the Examiner relies on Weinberger as teaching project plans having components and predetermined pricing constraints (Final Act. 15).

In view of the foregoing, we sustain the Examiner’s rejection of independent claims 14 and 15 under 35 U.S.C. § 103(a). We also sustain the Examiner’s rejection of dependent claims 16, 17, 19–21, 24, and 25, which are not argued separately.

Dependent Claims 22 and 23

Claim 22 depends directly from independent claim 15, and claim 23 depends from claim 22. Appellant does not present any separate argument in support of the patentability of these dependent claims. Therefore, we sustain the Examiner’s rejection of claims 22 and 23 under 35 U.S.C. § 103(a).

CONCLUSION

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
14–17, 19–25	101	Eligibility	14–17, 19–25	

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
14–17, 19–21, 24, 25	103(a)	Motwani, Sabin, Devarakonda, Weinberger	14–17, 19–21, 24, 25	
22, 23	103(a)	Motwani, Sabin, Devarakonda, Weinberger, Dromgold	22, 23	
Overall Outcome			14–17, 19–25	

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

AFFIRMED