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BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte NEIL O’CONNOR, DAWID NOWAK,
and TONY MCCORMACK

Appeal 2018-007153
Application 14/103,972
Technology Center 3600

Before ANTON W. FETTING, JOSEPH A. FISCHETTI, and
MICHAEL C. ASTORINO, *Administrative Patent Judges*.

FETTING, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE¹

Neil O’Connor, Dawid Nowak, and Tony McCormack (Appellant²)
seek review under 35 U.S.C. § 134 of a final rejection of claims 1–9 and 13–

¹ Our decision will make reference to the Appellant’s Appeal Brief (“App. Br.,” filed March 16, 2018) and Reply Brief (“Reply Br.,” filed July 3, 2018), and the Examiner’s Answer (“Ans.,” mailed May 3, 2018), and Final Action (“Final Act.,” mailed October 16, 2017).

² We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies the real party in interest as Microsoft, Inc. (App. Br. 3).

20, the only claims pending in the application on appeal. We have jurisdiction over the appeal pursuant to 35 U.S.C. § 6(b).

The Appellant invented a way for a customer to authenticate an agent when the agent initiates an interaction with the customer. Spec. para. 2.

An understanding of the invention can be derived from a reading of exemplary claim 13, which is reproduced below (bracketed matter and some paragraphing added).

13. A computer-implemented method for authenticating an agent, the method comprising:

[1] receiving a request for an agent-initiated interaction on a customer device;

[2] generating a first secure code for authenticating the agent-initiated interaction between the customer communication device and an agent device;

[3] providing the first secure code to the agent device;

[4] receiving a second secure code from an authentication device that is separate from the customer communication device;

[5] verifying the second secure code by determining, independently of a registry, whether the second secure code corresponds to the first secure code; and

[6]

[6.1] providing, independently of a registry, an indication that the second secure code corresponds to the first secure code based on the determination that the second secure code corresponds to the first secure code

or

[6.2] providing an indication that the second secure code does not correspond to the first secure code based on the determination that the second secure code does not correspond to the first secure code.

Claims 1–9 and 13–20 stand rejected under 35 U.S.C. § 101 as directed to a judicial exception without significantly more.

Claims 1–9 and 13–20 stand rejected under 35 U.S.C. § 112(a) as lacking a supporting written description within the original disclosure.

Claims 1–9 and 13–20 stand rejected under 35 U.S.C. § 112(b) as failing to particularly point out and distinctly claim the invention.

ISSUES

The issues of eligible subject matter turn primarily on whether the claims recite more than abstract conceptual advice of results desired.

The issues of written description matter turn primarily on whether the originally filed disclosure supports the phrase “independently of a registry” in limitation 5.

The issues of indefiniteness matter turn primarily on whether one of ordinary skill would understand the limitations.

ANALYSIS

Initially we construe the claim term “agent.” This is a term with multiple potential meanings, including manifestations as people or as interactive or background computer processes. The Specification uniformly describes an agent as being one who initiates a call, and in particular, might be an imposter. Spec. para. 6. The Specification also describes an agent as encompassing both live and interactive embodiments. Spec. para. 37. Accordingly, we construe an agent as one with intention to so act, and so is a human or a software process programmed to interact, as contrasted with a background software process that avoids interaction.

*Claims 1–9 and 13–20 rejected under 35 U.S.C. § 101 as directed to a
judicial exception without significantly more*

STEP 1³

Claim 13, as a method claim, nominally recites one of the enumerated categories of eligible subject matter in 35 U.S.C. § 101. The issue before us is whether it is directed to a judicial exception without significantly more.

STEP 2

The Supreme Court:

set forth a framework for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts. First, . . . determine whether the claims at issue are directed to one of those patent-ineligible concepts. If so, we then ask, “[w]hat else is there in the claims before us? To answer that question, . . . consider the elements of each claim both individually and “as an ordered combination” to determine whether the additional elements “transform the nature of the claim” into a patent-eligible application. [The Court] described step two of this analysis as 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.”

Alice Corp., Pty. Ltd. v. CLS Bank Intl, 573 U.S. 208, 217–18 (2014)

(citations omitted) (*citing Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 566 U.S. 66 (2012)). To perform this test, we must first determine what the claims are directed to. This begins by determining whether the claims recite one of the judicial exceptions (a law of nature, a natural phenomenon, or an abstract idea). Then, if claims recite a judicial

³ For continuity of analysis, we adopt the steps nomenclature from 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (Jan. 7, 2019) (“Revised Guidance”).

exception, determining whether the claims at issue are directed to the recited judicial exception, or whether the recited judicial exception is integrated into a practical application of that exception, i.e., that the claims “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.” Revised Guidance at 54. If the claims are directed to a judicial exception, then finally determining whether the claims provide an inventive concept because the additional elements recited in the claims provide significantly more than the recited judicial exception.

STEP 2A Prong 1

At a high level, and for our preliminary analysis, we note that method claim 13 recites receiving a request, generating, providing, receiving, and verifying code data, and providing an indication. Providing data is transmitting data. Verifying data is generic data analysis. Thus, claim 13 recites receiving, generating, transmitting, and analyzing data. None of the limitations recite technological implementation details for any of these steps, but instead recite only results desired by any and all possible means.

From this we see that claim 13 does not recite the judicial exceptions of either natural phenomena or laws of nature.

Under Supreme Court precedent, claims directed purely to an abstract idea are patent in-eligible. As set forth in the Revised Guidance, which extracts and synthesizes key concepts identified by the courts, abstract ideas include (1) mathematical concepts⁴, (2) certain methods of organizing

⁴ See, e.g., *Gottschalk v. Benson*, 409 U.S. 63, 71–72 (1972); *Bilski v. Kappos*, 561 U.S. 593, 611 (2010); *Mackay Radio & Telegraph Co. v. Radio*

human activity⁵, and (3) mental processes⁶. Among those certain methods of organizing human activity listed in the Revised Guidance are commercial or legal interactions. Like those concepts, claim 13 recites the concept of judging whether an agent can be trusted. Specifically, claim 13 recites operations that would ordinarily take place in advising one to verify and relate whether two codes received from different devices correspond. The advice to verify and relate whether two codes received from different devices correspond involves authenticating an agent, which is an economic act, and receiving a request for an agent-initiated interaction, which is an act ordinarily performed in the stream of commerce. For example, claim 13 recites “authenticating an agent,” which is an activity that would take place whenever one is approaching an agent in a commercial interaction. Similarly, claim 13 recites “receiving a request for an agent-initiated interaction,” which is also characteristic of agent interaction in commerce.

The Examiner determines the claims to be directed to authenticating an agent. Final Act. 7.

The preamble to claim 13 recites that it is a method for authenticating an agent. The steps in claim 13 result in indicating whether two codes

Corp. of Am., 306 U.S. 86, 94 (1939); *SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1163 (Fed. Cir. 2018).

⁵ See, e.g., *Bilski*, 561 U.S. at 628; *Alice*, 573 U.S. at 219-20; *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 715 (Fed. Cir. 2014); *Smart Sys. Innovations, LLC v. Chicago Transit Auth.*, 873 F.3d 1364, 1383 (Fed. Cir. 2017); *In re Marco Guldenaar Holding B.V.*, 911 F.3d 1157, 1160–61 (Fed. Cir. 2018).

⁶ See, e.g., *Benson*, 409 U.S. at 67; *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1371–72 (Fed. Cir. 2011); *Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1318 (Fed. Cir. 2016).

correspond absent any technological mechanism other than a conventional computer for doing so.

As to the specific limitations, limitations 1 and 4 recite receiving data. Limitations 2, 3, 5, and 6 recite generic and conventional generating, transmitting, and analyzing of code data, which advise one to apply generic functions to get to these results. The limitations thus recite advice for verifying and relating whether two codes received from different devices correspond. To advocate verifying and relating whether two codes received from different devices correspond is conceptual advice for results desired and not technological operations.

The Specification at paragraph 2 describes the invention as relating to a way for a customer to authenticate an agent when the agent initiates an interaction with the customer. Thus, all this intrinsic evidence shows that claim 13 recites judging whether an agent can be trusted. This is consistent with the Examiner's determination.

This in turn is an example of commercial or legal interactions as a certain method of organizing human activity because judging whether an agent can be trusted is a common sense measure in deciding to interact in commerce. The concept of judging whether an agent can be trusted by verifying and relating whether two codes received from different devices correspond is one idea for how to help judge this. The steps recited in claim 13 are part of how this might conceptually be premised.

Our reviewing court has found claims to be directed to abstract ideas when they recited similar subject matter. *Interval Licensing LLC v. AOL, Inc.*, 896 F.3d 1335, 1338 (Fed. Cir. 2018) (Managing control over content

usage); *Easyweb Innovations LLC v. Twitter, Inc.*, 689 Fed. App'x. (Fed. Cir. 2017)(non-precedential)(Authenticating participant).

From this we conclude that at least to this degree, claim 13 recites judging whether an agent can be trusted by verifying and relating whether two codes received from different devices correspond, which is a commercial and legal interaction, one of certain methods of organizing human activity identified in the Revised Guidance, and, thus, an abstract idea.

STEP 2A Prong 2

The next issue is whether claim 13 not only recites, but is more precisely directed to this concept itself or whether it is instead directed to some technological implementation or application of, or improvement to, this concept i.e. integrated into a practical application.⁷

At the same time, we tread carefully in construing this exclusionary principle lest it swallow all of patent law. At some level, “all inventions ... embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.” Thus, an invention is not rendered ineligible for patent simply because it involves an abstract concept. “[A]pplication[s]” of such concepts “ ‘to a new and useful end,’ ” we have said, remain eligible for patent protection. Accordingly, in applying the § 101 exception, we must distinguish between patents that claim the “ ‘buildin[g] block[s]’ ” of human ingenuity and those that integrate the building blocks into something more.

Alice, 573 U.S. at 217 (citations omitted).

Taking the claim elements separately, the operation performed by the computer at each step of the process is expressed purely in terms of results,

⁷ See, e.g., *Alice*, 573 U.S. at 223, discussing *Diamond v. Diehr*, 450 U.S. 175 (1981).

devoid of implementation details. Steps 1 and 4 are pure data gathering steps. Limitations describing the nature of the data do not alter this. Steps 2 and 3 recite basic conventional data operations such as generating, updating, and storing data. Step 6 is insignificant post solution activity, such as storing, transmitting, or displaying the results. Step 5 recites generic computer processing expressed in terms of results desired by any and all possible means and so present no more than conceptual advice. All purported inventive aspects reside in how the data is interpreted and the results desired, and not in how the process physically enforces such a data interpretation or in how the processing technologically achieves those results.

Viewed as a whole, Appellant's claim 13 simply recites the concept of judging whether an agent can be trusted by verifying and relating whether two codes received from different devices correspond as performed by a generic computer. This is no more than conceptual advice on the parameters for this concept and the generic computer processes necessary to process those parameters, and do not recite any particular implementation.

Claim 13 does not, for example, purport to improve the functioning of the computer itself. Nor does it effect an improvement in any other technology or technical field. The 27 pages of spell out different generic equipment⁸ and parameters that might be applied using this concept and the particular steps such conventional processing would entail based on the concept of judging whether an agent can be trusted by verifying and relating

⁸ The Specification describes a computer as any computing devices, such as, for example, a server, a workstation, a laptop, a tablet computer, smart phone, or otherwise any processor based device configured to execute instructions. Spec. para. 30.

whether two codes received from different devices correspond under different scenarios. They do not describe any particular improvement in the manner a computer functions. Instead, claim 13 at issue amounts to nothing significantly more than an instruction to apply judging whether an agent can be trusted by verifying and relating whether two codes received from different devices correspond using some unspecified, generic computer. Under our precedents, that is not enough to transform an abstract idea into a patent-eligible invention. *See Alice*, 573 U.S. at 225–26.

None of the limitations reflect an improvement in the functioning of a computer, or an improvement to other technology or technical field, applies or uses a judicial exception to effect a particular treatment or prophylaxis for a disease or medical condition, implements a judicial exception with, or uses a judicial exception in conjunction with, a particular machine or manufacture that is integral to the claim, effects a transformation or reduction of a particular article to a different state or thing, or applies or uses the judicial exception in some other meaningful way beyond generally linking the use of the judicial exception to a particular technological environment, such that the claim as a whole is more than a drafting effort designed to monopolize the exception.

We conclude that claim 13 is directed to achieving the result of judging whether an agent can be trusted by advising one to verify and relate whether two codes received from different devices correspond, as distinguished from a technological improvement for achieving or applying that result. This amounts to commercial or legal interactions, which fall within certain methods of organizing human activity that constitute abstract

ideas. The claim does not integrate the judicial exception into a practical application.

STEP 2B

The next issue is whether claim 13 provides an inventive concept because the additional elements recited in the claim provide significantly more than the recited judicial exception.

The introduction of a computer into the claims does not generally alter the analysis at *Mayo* step two:

the mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention. Stating an abstract idea “while adding the words ‘apply it’” is not enough for patent eligibility. Nor is limiting the use of an abstract idea “to a particular technological environment.” Stating an abstract idea while adding the words “apply it with a computer” simply combines those two steps, with the same deficient result. Thus, if a patent’s recitation of a computer amounts to a mere instruction to “implement[t]” an abstract idea “on . . . a computer,” that addition cannot impart patent eligibility. This conclusion accords with the preemption concern that undergirds our § 101 jurisprudence. Given the ubiquity of computers, wholly generic computer implementation is not generally the sort of “additional feature[e]” that provides any “practical assurance that the process is more than a drafting effort designed to monopolize the [abstract idea] itself.”

Alice, 573 U.S. at 223–24 (citations omitted).

“[T]he relevant question is whether the claims here do more than simply instruct the practitioner to implement the abstract idea [] on a generic computer.” *Alice*, 573 U.S. at 225. They do not.

Taking the claim elements separately, the function performed by the computer at each step of the process is purely conventional. Using a computer for receiving, generating, transmitting, and analyzing data amounts

to electronic data query and retrieval—one of the most basic functions of a computer. All of these computer functions are generic, routine, conventional computer activities that are performed only for their conventional uses. *See Elec. Power Grp. v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016). Also see *In re Katz Interactive Call Processing Patent Litigation*, 639 F.3d 1303, 1316 (Fed. Cir. 2011) (“Absent a possible narrower construction of the terms ‘processing,’ ‘receiving,’ and ‘storing,’ . . . those functions can be achieved by any general purpose computer without special programming”). None of these activities are used in some unconventional manner nor do any produce some unexpected result. Appellant does not contend they invented any of these activities. In short, each step does no more than require a generic computer to perform generic computer functions. As to the data operated upon, “even if a process of collecting and analyzing information is ‘limited to particular content’ or a particular ‘source,’ that limitation does not make the collection and analysis other than abstract.” *SAP America, Inc. v. InvestPic LLC*, 898 F.3d 1161, 1168 (Fed. Cir. 2018).

Considered as an ordered combination, the computer components of Appellant’s claim 13 add nothing that is not already present when the steps are considered separately. The sequence of data reception-generation-transmission-analysis is equally generic and conventional. *See Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 715 (Fed. Cir. 2014) (sequence of receiving, selecting, offering for exchange, display, allowing access, and receiving payment recited an abstraction), *Inventor Holdings, LLC v. Bed Bath & Beyond, Inc.*, 876 F.3d 1372, 1378 (Fed. Cir. 2017) (sequence of data retrieval, analysis, modification, generation, display, and transmission), *Two-Way Media Ltd. v. Comcast Cable Communications*,

LLC, 874 F.3d 1329, 1339 (Fed. Cir. 2017) (sequence of processing, routing, controlling, and monitoring). The ordering of the steps is therefore ordinary and conventional.

We conclude that claim 13 does not provide an inventive concept because the additional elements recited in the claim do not provide significantly more than the recited judicial exception.

REMAINING CLAIMS

Claim 13 is representative. The remaining method claims merely describe process parameters. We conclude that the method claims at issue are directed to a patent-ineligible concept itself, and not to the practical application of that concept.

As to the structural claims, they:

are no different from the method claims in substance. The method claims recite the abstract idea implemented on a generic computer; the system claims recite a handful of generic computer components configured to implement the same idea. This Court has long “warn[ed] ... against” interpreting § 101 “in ways that make patent eligibility ‘depend simply on the draftsman’s art.’”

Alice, 573 U.S. at 226. As a corollary, the claims are not directed to any particular machine.

LEGAL CONCLUSION

From these determinations we further determine that the claims do not recite an improvement to the functioning of the computer itself or to any other technology or technical field, a particular machine, a particular transformation, or other meaningful limitations. From this we conclude the claims are directed to the judicial exception of the abstract idea of certain methods of organizing human activity as exemplified by the commercial and

legal interaction of judging whether an agent can be trusted by advising one to verify and relate whether two codes received from different devices correspond, without significantly more.

APPELLANT'S ARGUMENTS

As to Appellant's Appeal Brief arguments, we adopt the Examiner's determinations and analysis from Final Action 6–9 and Answer 9–14 and reach similar legal conclusions. We now turn to the Reply Brief.

We are not persuaded by Appellant's argument that:

in conventional approaches to the technological field of security when using telecommunications devices, the customer must register with a registry (see *Gasparini*). However, claim 1 does not require such a registration because of the generation of this secure code for the agent-initiated interaction. Such an unconventional element not only makes the system more efficient, but also limits circumvention of the system by devious parties that may exploit a conventional system using a registry, thus improving the technological field of security when using telecommunications devices.

Reply Br. 3. First, an approach is a conceptual idea, not a technological process. Conceptual ideas devoid of technological details are not patent eligible. “The purely functional nature of the claim confirms that it is directed to an abstract idea, not to a concrete embodiment of that idea.” *Affinity Labs of Texas, LLC v. Amazon.com Inc.*, 838 F.3d 1266, 1269 (2016). Appellant argues that generation of a code is inventive. But generation of data is entirely conventional. That it may be useful is insufficient. The issue is not that of utility. “That the automation can ‘result in life altering consequences,’ is laudable, but it does not render it any less abstract.” *Univ. of Florida Research Found., Inc. v. Gen. Elec. Co.*, 916 F.3d 1363, 1369 (Fed. Cir. 2019).

We are not persuaded by Appellant’s argument that:

[t]he Examiner has been wholly unable to find any reference or combination of references showing a system for authenticating an agent without a registry as claimed is well-understood, routine, or conventional in the relevant industry. Nor has the Examiner provided any other evidence to support the allegation that the appellant’s claims are routine or conventional.

Reply Br. 3. The issue of whether the prior art describes the claims is separate. “A claim for a new abstract idea is still an abstract idea. The search for a § 101 inventive concept is thus distinct from demonstrating § 102 novelty.” *Synopsys, Inc. v. Mentor Graphics Corporation*, 839 F.3d 1138, 1151 (Fed. Cir. 2016). Support for determinations that the claims recite conventional computer operation is provided supra under Step 2A-Prong 2 and Step 2B.

Claims 1–9 and 13–20 rejected under 35 U.S.C. § 112(a) as lacking a supporting written description within the original disclosure

The Examiner rejects the claims because the phrase “independently of a registry” in limitation 5 is not supported by the Specification. Final Act. 3–4. Appellant argues that the example in the Specification does not use such a registry. App. Br. 17. But absence of evidence is not evidence of absence. Absence of an element in one example does not demonstrate an entire genus of deliberate omission. Appellant next argues that the whole point of the invention is to avoid such registry. App. Br. 19. But Appellant does not show where this is stated. Instead Appellant argues this is intrinsic without evidence. *Id.* As to the remaining arguments, we adopt the Examiner’s determinations from Answer 4–6 and reach the same legal conclusions. Appellant does not rebut these in the Reply Brief.

Claims 1–9 and 13–20 rejected under 35 U.S.C. § 112(b) as failing to particularly point out and distinctly claim the invention

We are persuaded by Appellant’s argument that one of ordinary skill would understand the limitations. App. Br. 23–26.

CONCLUSIONS OF LAW

The rejection of claims 1–9 and 13–20 under 35 U.S.C. § 101 as directed to a judicial exception without significantly more is proper.

The rejection of claims 1–9 and 13–20 under 35 U.S.C. § 112(a) as lacking a supporting written description within the original disclosure is proper.

The rejection of claims 1–9 and 13–20 under 35 U.S.C. § 112(b) as failing to particularly point out and distinctly claim the invention is improper.

CONCLUSION

The rejection of claims 1–9 and 13–20 is affirmed.

In summary:

Claims Rejected	35 U.S.C. §	Basis	Affirmed	Reversed
1–9,13–20	101	Eligibility	1–9,13–20	
1–9,13–20	112(a)	Written Description	1–9,13–20	
1–9,13–20	112(b)	Indefiniteness		1–9,13–20
Overall Outcome			1–9,13–20	

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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) (2011).

AFFIRMED