



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

Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO.
12/267,078 11/07/2008 Carlton Bartels 01-1055-C1 5410

63710 7590 11/27/2019
INNOVATION DIVISION
CANTOR FITZGERALD, L.P.
110 EAST 59TH STREET (6TH FLOOR)
NEW YORK, NY 10022

EXAMINER

POLLOCK, GREGORY A

ART UNIT PAPER NUMBER

3695

NOTIFICATION DATE DELIVERY MODE

11/27/2019

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):

lkorovich@cantor.com
patentdocketing@cantor.com
phowe@cantor.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte CARLTON BARTELS and ADAM WHITE

Appeal 2018-008660
Application 12/267,078
Technology Center 3600

Before ERIC S. FRAHM, LINZY T. McCARTNEY, and
MICHAEL T. CYGAN, *Administrative Patent Judges*.

McCARTNEY, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant¹ seeks review under 35 U.S.C. § 134(a) of the Examiner's final decision to reject claims 1–6, 8, 10, 11, 13, 17–23, 28, and 29. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

¹ Appellant identifies the real party in interest as CANTORCO2E, LLC. Appeal Brief 2, filed March 2, 2018 (“App. Br.”).

BACKGROUND

This patent application concerns “an electronic trading system for simulating the trading of carbon dioxide equivalent emission reductions and methods of use.” Specification ¶ 2, filed November 7, 2008 (“Spec.”). Claim 1 illustrates the claimed subject matter:

1. A method of displaying on and receiving from an interactive screen of a computer information relating to carbon dioxide equivalent emissions for facilitating electronic simulation and electronic trading of carbon dioxide equivalent emissions in an electronic system, the method, comprising:

[a] receiving by a server from the interactive screen of a computer a representation of a marginal abatement cost curve, wherein the marginal abatement cost curve comprises an indication of an amount of money to produce internal reductions of carbon dioxide equivalent emissions;

[b] receiving by the server from the interactive screen of the computer a selection of an organization to participate in an electronic simulation;

[c] displaying by the server to the interactive screen of the computer a volume of carbon dioxide equivalent emissions of the organization and an amount of available cash of the organization, wherein the available cash of the organization is usable by a user in the simulation to reduce the volume of carbon dioxide equivalent emissions of the organization;

[d] receiving by the server from the interactive screen of the computer input to generate for the selected organization a computer-based representation of a volume of internal reductions of carbon dioxide equivalent emissions;

[e] based on the marginal abatement cost curve, calculating by the server a cost for the generated volume of internal reductions of carbon dioxide equivalent emissions;

[f] based on the cost, decreasing by the server for the organization the amount of available cash;

[g] displaying by the server to the interactive screen of the computer the generated volume of internal reductions of carbon dioxide equivalent emissions, and a difference between the volume of carbon dioxide equivalent emissions of the organization and the generated volume of internal reductions of carbon dioxide equivalent emissions; and

[h] displaying by the server to the interactive screen of the computer the decreased amount of available cash.

App. Br. 18 (bracketed letters added).

REJECTIONS

| Claims | 35 U.S.C. § | References |
|--------------------------------------|--------------------|---|
| 1–6, 8, 10, 11, 13, 17–23, 28, 29 | 101 | |
| 1–6, 8, 10, 11, 13, 17–23, 28, 29 | 103(a) | Innes, ² AIA § 14 ³ |

ANALYSIS

We have reviewed the Examiner’s rejections and Appellant’s arguments, and we disagree with Appellant that the Examiner erroneously rejected claims 1–6, 8, 10, 11, 13, 17–23, 28, and 29 under § 101. For this rejection, as consistent with the discussion below, we adopt the Examiner’s reasoning, findings, and conclusions on pages 2–10 of the Final Office Action mailed October 6, 2017 (“Final Act.”) and pages 3–7 of the Examiner’s Answer mailed July 5, 2018 (“Ans.”). We agree with Appellant that the Examiner erroneously rejected claims 1–6, 8, 10, 11, 13, 17–23, 28, 29 under § 103(a). We address these rejections in turn.

² Innes et al. (US 2002/0198750 A1; Dec. 26, 2002).

³ Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112-29, § 14 125 Stat 284, 327–28 (2011).

Section 101 Rejection

Section 101 of the Patent Act provides that “any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof” is patent eligible. 35 U.S.C. § 101. But the Supreme Court has long recognized an implicit exception to this section: “Laws of nature, natural phenomena, and abstract ideas are not patentable.” *Alice Corp. 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)). To determine whether a claim falls within one of these excluded categories, the Court has set out a two-part framework. The framework requires us first to consider whether the claim is “directed to one of those patent-ineligible concepts.” *Alice*, 573 U.S. at 217. If so, we then examine “the elements of [the] 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.” *Alice*, 573 U.S. at 217 (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 78, 79 (2012)). That is, we examine the claim for an “inventive concept,” “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*, 573 U.S. at 217–18 (alteration in original) (quoting *Mayo*, 566 U.S. at 72–73).

The Patent Office has revised its guidance about this framework. *See* 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (Jan. 7, 2019) (“Revised Guidance”). Under the Revised Guidance, to decide whether a claim is directed to an abstract idea, we evaluate whether the claim (1) recites subject matter that falls within one of the abstract idea

groupings listed in the Revised Guidance and (2) fails to integrate the recited abstract idea into a practical application. *See Revised Guidance*, 84 Fed. Reg. at 51, 54. If the claim is directed to an abstract idea, as noted above, we then determine whether the claim has an inventive concept. The Revised Guidance explains that when making this determination, we should consider whether the additional claim elements add “a specific limitation or combination of limitations that are not well-understood, routine, conventional activity in the field” or “simply append[] well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality.” *Revised Guidance*, 84 Fed. Reg. at 56.

With these principles in mind, we turn to the § 101 rejection. Appellant argues claims 1–6, 8, 10, 11, 13, 17–23, 28, and 29 together for this rejection, so as permitted by 37 C.F.R. § 41.37(c)(1)(iv), we decide the appeal for this ground of rejection based on claim 1.

Abstract Idea

The Revised Guidance explains that the abstract idea exception includes “certain methods of organizing human activity” such as “fundamental economic principles or practices,” “commercial or legal interactions,” and “managing personal behavior or relationships or interactions between people.” *Revised Guidance*, 84 Fed. Reg. at 52. The Examiner determined that claim 1 recites subject matter that falls within this abstract idea grouping, among others. *See, e.g., Final Act*. 3–5.

We agree. Claim 1 recites a method that includes limitations [a]–[h] reproduced above. The method (1) receives a representation of a marginal abatement cost curve and a selection of an organization to participate in an electronic simulation, (2) displays the organization’s volume of carbon

dioxide equivalent (CO₂e) emissions and available cash, and (3) receives input to generate a representation of a volume of internal reductions of CO₂e emissions for the organization. *See* App. Br. 18. The method also (4) calculates a cost for the generated volume of internal reductions of CO₂e emissions based on the marginal abatement cost curve and (5) decreases the organization's amount of available cash based on the cost. *See* App. Br. 18. Finally, the method (6) displays (i) the generated volume of internal reductions of CO₂e emissions, (ii) a difference between the volume of CO₂e emissions of the organization and the generated volume of internal reductions of CO₂e emissions, and (iii) the decreased amount of available cash. *See* App. Br. 18.

As explained by the written description, the claimed method simulates trading CO₂e emission reductions. *See, e.g.*, Spec. ¶ 2 (“The present invention relates to electronic trading and more particularly, to an electronic trading system for simulating the trading of carbon dioxide equivalent emission reductions and methods of use.”). This is an economic practice that is not meaningfully different from other practices that courts have determined are abstract ideas. *See, e.g.*, *Alice*, 573 U.S. at 219 (intermediated settlement); *Trading Techs. Int’l, Inc. v. IBG LLC*, 921 F.3d 1378, 1384 (Fed. Cir. 2019) (providing a trader with additional financial information to facilitate market trades); *Trading Techs. Int’l, Inc. v. IBG LLC*, 921 F.3d 1084, 1092 (Fed. Cir. 2019) (graphing (or displaying) bids and offers to assist a trader to make an order); *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1367 (Fed. Cir. 2015) (tracking financial transactions to determine whether they exceed a pre-set spending limit (i.e., budgeting)). Claim 1 thus recites certain methods of organizing human

activity, one of the abstract idea groupings identified in the Revised Guidance. *See* Revised Guidance, 84 Fed. Reg. at 52 (explaining that certain methods of organizing human activity include fundamental economic principles or practices and commercial or legal interactions).

Because we determine that claim 1 recites an abstract idea, we next consider whether claim 1 integrates the abstract idea into a practical application. *See* Revised Guidance, 84 Fed. Reg. at 51. In doing so, we evaluate the claim as a whole to determine whether the claim “integrate[s] the [abstract idea] into a practical application, using one or more of the considerations laid out by the Supreme Court and the Federal Circuit.” Revised Guidance, 84 Fed. Reg. at 55; *see also* USPTO, October 2019 Update: Subject Matter Eligibility at 12 (Oct. 17, 2019), https://www.uspto.gov/sites/default/files/documents/peg_oct_2019_update.pdf (“October 2019 Update”) (discussing the practical application analysis). That is, we consider any additional elements recited in the claim along with the limitations that recite an abstract idea to determine whether the claim integrates the judicial exception into a practical application. *See* October 2019 Update 12.

Claim 1 does not integrate the recited abstract idea into a practical application. The additional elements recited in claim 1 include “an electronic system,” “an interactive screen of a computer,” and “a server.” App. Br. 18. The written description makes clear that each of these elements encompasses generic computer components. The written description describes an electronic trading system that includes user and administrator computer equipment, a trading server, a computer network, and communication links. *See, e.g.*, Spec. ¶¶ 47–52, Figs. 1, 2. The written description explains that the

user and administrator computer equipment “may include a computer, processor, personal computer, laptop computer, handheld computer, personal digital assistant, computer terminal, *any other suitable computing device, or combination of such devices.*” Spec. ¶ 47 (emphasis added). The written description also states that computer equipment can include a display, which “may be a computer monitor, a handheld computer display, a laptop computer display, a personal digital assistant display, *or any other suitable display equipment.*” Spec. ¶ 49 (emphasis added). Similarly, the written description explains that the trading server, communication links, and computer network in the electronic trading system can include any suitable equipment. *See, e.g.,* Spec. ¶¶ 47 (“A server such as trading server 114 may be *any suitable server, processor, computer, data processing device, or a combination of such devices.* In one example, trading server 114 may be a server powered by eSpeed, Inc.” (emphasis added)), 51 (“Computer network 106 may be *any suitable computer network* including the Internet” (emphasis added)), 52 (“Communications links 104, 110, and 112 may include satellite paths, coaxial cable paths, fiber-optic paths, twisted pair paths, other wire or cable-based links, modems, wireless paths through free space, *any other suitable paths, or a combination of such paths.*” (emphasis added)).

The additional elements recited in claim 1 also perform generic computer functions. Claim 1 recites that a server displays or receives certain information. *See App. Br.* 18. Each of these functions is a generic computer function. *See, e.g., Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1354 (Fed. Cir. 2016) (“And we have recognized that merely presenting the results of abstract processes of collecting and analyzing information, without

more (such as identifying a particular tool for presentation), is abstract as an ancillary part of such collection and analysis.”); *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1355 (Fed. Cir. 2014) (“That a computer receives and sends the information over a network—with no further specification—is not even arguably inventive.”). Claim 1 also recites that the server calculates a particular cost and, based on the cost, decreases the amount of an organization’s available cash. *See* App. Br. 18. These are also generic computer functions. *See, e.g., Alice*, 573 U.S. at 225, 226 (stating that “[u]sing a computer to create and maintain ‘shadow’ accounts amounts to electronic recordkeeping—one of the most basic functions of a computer” and that “[n]early every computer will include a ‘communications controller’ and ‘data storage unit’ capable of performing the basic calculation, storage, and transmission functions required by the method claims.”); *Bancorp Servs., L.L.C. v. Sun Life Assur. Co. of Canada (U.S.)*, 687 F.3d 1266, 1278 (Fed. Cir. 2012) (“The computer required by some of Bancorp’s claims is employed only for its most basic function, the performance of repetitive calculations, and as such does not impose meaningful limits on the scope of those claims.”).

Considering claim 1 as a whole, the claim recites using generic computer components that perform generic computer functions to implement an abstract idea. This does not integrate the abstract idea into a practical application. *See, e.g., Alice*, 573 U.S. at 223–24 (“Given the ubiquity of computers, wholly 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.’” (internal citation omitted) (quoting *Mayo*, 566 U.S. at 77)).

Appellant contends that claim 1 amounts to significantly more than an abstract idea because the claimed subject matter allegedly improves computer-related technology. *See* App. Br. 9–11. According to Appellant, the claimed subject matter

may help improve computer performance by facilitating electronic trading over a network with techniques for improved electronic simulation systems to allow access of electronic simulation and electronic trading of carbon dioxide equivalent emissions in an electronic system which may help reduce the amount of activity or traffic over the network and which may help reduce computer workload including computer resources such as memory resources, processor resources, and network resources such as network bandwidth.

App. Br. 10 (emphasis omitted); *see also* App. Br. 6–7 (making similar arguments).

We disagree. First, Appellant has provided no persuasive evidence that the claimed invention provides the identified benefits. Appellant asserts that the claimed invention “*may* help improve computer performance,” “*may* help reduce the amount of activity or traffic over the network,” and “*may* help reduce computer workload including computer resources such as memory resources, processor resources, and network resources such as network bandwidth.” App. Br. 10 (emphases added). But Appellant has pointed to nothing in the written description that shows that the claimed invention actually provides these benefits, nor has Appellant provided any other cogent evidence that these benefits flow from the claimed invention. Simply saying that the claimed invention *may* provide certain benefits does not establish that is the case.

Second, Appellant contends that the recited *abstract idea* in part improves computer-related technology. Appellant argues that the recited “*techniques* may help improve computer performance,” App. Br. 10 (emphasis added), and points to the receiving and displaying steps in limitations [b], [d], [g], and [h] when contending that claim subject matter is directed to computer-related improvements, *see* App. Br. 6–7. But these aspects of claim 1 form part of the identified abstract idea, and the abstract idea itself cannot integrate the abstract idea into a practical application. *See Trading Techs. Int’l, Inc. v. IBG LLC*, 921 F.3d 1084, 1093 (Fed. Cir. 2019) (“The abstract idea itself cannot supply the inventive concept, ‘no matter how groundbreaking the advance.’” (quoting *SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1170 (Fed. Cir. 2018))).⁴ Although Appellant also points to the recited “interactive screen of a computer” and “electronic system” to show that the claim improves computer-related technology, *see* App. Br. 6–7, as discussed above, these elements are generic computer components that perform generic computer functions. Appellant has offered no persuasive evidence that the claimed method causes these elements to perform differently than generic computer components, let alone improves how the elements function.

⁴ Even if these limitations were not part of the identified abstract idea, these limitations would not make claim 1 patent eligible because they recite insignificant extra-solution activities. *See, e.g., CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1372 (Fed. Cir. 2011) (determining that certain “data-gathering steps cannot alone confer patentability”); *Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1242 (Fed. Cir. 2016) (agreeing with the Board that printing and downloading menus are “are insignificant post-solution activities that do not support the invention having an ‘an inventive concept’”).

Appellant also contends that the Examiner’s comparison of claim 1 to the claims at issue in prior court decisions is flawed because the Examiner “oversimplified” the claim and “fail[ed] to consider” aspects of the claim such as the allegedly improved electronic simulation systems and interface. App. Br. 6–7. Appellant also argues that the Examiner did not cite court decisions that are “reasonably tied to the facts of the case” and instead relied “upon language taken out of context.” App. Br. 7 (emphases omitted).

We see no merit to these arguments. The Examiner reproduced the limitations recited in claim 1, explained why the limitations recite abstract ideas, and explained why the claimed subject matter does not amount to significantly more than the recited abstract ideas. *See* Final Act. 3–7; *see also* Ans. 4–7. Appellant has provided no persuasive evidence or reasoning to support the assertion that the Examiner “oversimplified” claim 1 or “fail[ed] to consider” aspects of the claim. *See* App. Br. 7. Similarly, Appellant does not persuasively explain why the cases cited by the Examiner are not “reasonably tied to the facts of the case.” *See* App. Br. 7. Nor does Appellant identify the language that the Examiner allegedly took out of context, much less adequately explain how the Examiner took that language out of context. *See* App. Br. 7. We thus find these inadequately supported arguments unpersuasive.

Inventive Concept

Finally, we consider whether claim 1 has an inventive concept, that is, whether the claim has additional elements that “transform the nature of the claim’ into a patent-eligible application.” *Alice*, 573 U.S. at 217 (quoting *Mayo*, 566 U.S. at 78, 79). As noted above, this requires us to evaluate whether the additional claim elements add “a specific limitation or

combination of limitations that are not well-understood, routine, conventional activity in the field” or “simply append[] well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality.” Revised Guidance, 84 Fed. Reg. at 56.

The Examiner determined that the additional elements recited in claim 1 perform well-understood, routine, and conventional activities. *See* Final Act. 6. We agree. As discussed above, the additional elements recited in claim 1 include “an electronic system,” “an interactive screen of a computer,” and “a server.” App. Br. 18. The written description indicates that these elements encompass conventional components. *See, e.g.,* Spec. ¶¶ 47–52, Figs. 1, 2. Claim 1 recites that the server displays or receives certain information, calculates a particular cost, and decreases the amount of an organization’s available cash based on the calculated cost. *See* App. Br. 18. These are conventional computer functions. *See, e.g.,* *Alice*, 573 U.S. at 225, 226; *Elec. Power Grp.*, 830 F.3d at 1354; *buySAFE*, 765 F.3d at 1355; *Bancorp*, 687 F.3d at 1278.

Appellant contends that claim 1 recites “specific computer operations that allow the computer to perform a function that conventional computers cannot perform.” App. Br. 7 (emphases omitted); *see also* Reply Brief 3, filed September 5, 2018 (asserting that the techniques recited in claim 1 are not well-understood, routine, or conventional). Appellant has provided no persuasive support for this contention, and the portions of the written description cited above indicate otherwise. We therefore find this argument unpersuasive.

Summary

For the above reasons, we determine that claim 1 is directed to an abstract idea and does not have an inventive concept. We thus sustain the Examiner's rejection of claim 1 under § 101.

Section 103 Rejection

The Examiner rejected claim 1–6, 8, 10, 11, 13, 17–23, 28, and 29 under § 103(a) over a combination of Innes and Section 14 of the AIA. *See* Final Act. 7–8. The Examiner relied on Innes primarily for subject matter recited in the preambles of these claims and certain electronic components. *See* Final Act. 7. The Examiner found the remaining limitations “all directed toward carbon dioxide or greenhouse credits and/or trading which are interpreted as a form of tax strategy in the United States and/or other countries” and determined that Appellant could not rely on these limitations to distinguish the prior art under § 14 of the AIA. Final Act. 7–8.

Appellant contends that the subject matter recited in the rejected claims is “not directed to a ‘tax strategy for reducing, avoiding or deferring a tax liability’” and therefore § 14 of the AIA is inapplicable. App. Br. 14. Appellant contends that even if we consider the claimed subject matter to be a “tax strategy for reducing, avoiding or deferring a tax liability,” the claimed subject matter falls under the financial management exception of § 14 of the AIA. *See* App. Br. 14–15.

We agree with Appellant. Under § 14(a) of the AIA, “any strategy for reducing, avoiding, or deferring tax liability, whether known or unknown at the time of the invention or application for patent, shall be deemed insufficient to differentiate a claimed invention from the prior art.” The

Examiner has not adequately explained why the claimed method and apparatus for simulating trading of CO₂e emissions is a “tax strategy” under § 14 of the AIA. The Examiner found that the Kyoto Protocol uses carbon credits and stated that this fact “forms the basis of the rejection [of] which the examiner is maintaining.” *See* Ans. 8. That the Kyoto Protocol uses carbon credits, without more, does not establish that the claimed method and apparatus for simulating trading of CO₂e emissions form a “tax strategy” under § 14 of the AIA. Nor does this fact show that the alleged “tax strategy” is a strategy “for reducing, avoiding, or deferring tax liability” as required by § 14 of the AIA. In addition, § 14(c)(2) of the AIA excludes any “method, apparatus, technology, computer program product, or system used solely for financial management, to the extent that it is severable from any tax strategy or does not limit the use of any tax strategy by any taxpayer or tax advisor.” Appellant explicitly argued that this exception applies to the rejected claims, *see* App. Br. 14–15, and the Examiner did not address this argument.

For the above reasons, we do not sustain the Examiner’s rejection of claims 1–6, 8, 10, 11, 13, 17–23, 28, and 29 under § 103(a).

CONCLUSION

| Claims | 35 U.S.C § | References | Affirmed | Reversed |
|---|-------------------|--------------------|--|--|
| 1-6, 8, 10, 11, 13, 17-23, 28, 29 | 101 | | 1-6, 8, 10, 11, 13, 17- 23, 28, 29 | |
| 1-6, 8, 10, 11, 13, 17-23, 28, 29 | 103(a) | Innes, AIA § 14 | | 1-6, 8, 10, 11, 13, 17- 23, 28, 29 |
| Overall Outcome | | | 1-6, 8, 10, 11, 13, 17- 23, 28, 29 | |

No period for taking any 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