



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.
11/561,832	11/20/2006	William M. Reller	P8130US01	8165
11764	7590	12/27/2019	EXAMINER	
Ditthavong & Steiner, P.C. 44 Canal Center Plaza Suite 305 Alexandria, VA 22314			HOAR, COLLEEN A	
			ART UNIT	PAPER NUMBER
			3621	
			NOTIFICATION DATE	DELIVERY MODE
			12/27/2019	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):

Nokia.IPR@nokia.com
doCKET@dcPATENT.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte WILLIAM M. RELLER, SEAN PATRICK NOLAN,
MICHAEL LIBES, and JOHN CRIM

Appeal 2019-001436¹
Application 11/561,832
Technology Center 3600

Before JAMES R. HUGHES, LINZY T. McCARTNEY, and
MICHAEL T. CYGAN, *Administrative Patent Judges*.

McCARTNEY, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant² seeks review under 35 U.S.C. § 134(a) of the Examiner's final rejection of claims 1–16, 18, 20–25, and 66–68. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

¹ This appeal is related to Appeal No. 2019-001435.

² Appellant identifies the real party in interest as HERE Global B.V. Appeal Brief 2, filed September 13, 2017 (“Appeal Br.”).

BACKGROUND

This patent application concerns selecting supplemental content (for example, advertisements) for client devices. *See, e.g.*, Specification ¶ 21, filed November 20, 2006 (“Spec.”). Claim 1 illustrates the claimed subject matter:

1. A computer-implemented method for selecting supplemental content for display at a client computer communicating over a computer network, the method comprising:

[a] receiving a request for a document containing content at a server computer from a requesting client computer, wherein the content of the requested document includes a plurality of words;

[b] determining a relevance score for each keyword in the content of the requested document at the server computer;

[c] valuating each keyword in the content of the requested document based on bids received from each of two or more supplemental content sources, the bids requested in response to the request for the document from the client computer, the bids requested and received automatically without contacting the supplemental content sources, the bids not based on the relevance score for each keyword;

[d] generating a productivity score for each of the supplemental content sources through a content optimizer computer process, wherein the productivity score comprises an expected revenue total for each respective supplemental content source, based on the valuation for each keyword in the content of the requested document and the relevance score for each keyword in the content of the requested document;

[e] selecting the supplemental content from the supplemental content source having the greatest productivity score;

[f] serving the requested document and the selected supplemental content from the selected supplemental content source at the server computer;

[g] delivering the requested document from the server computer to the client computer; and

[h] delivering the selected supplemental content via a pop-up ad from the server computer to the client computer when the requested document has a relevance score and a valuation above a predetermined threshold for each keyword in the content of the requested document.

Appeal Br. 19–20 (bracketed letters added).

REJECTIONS

Claims	35 U.S.C. §	References
1–16, 18, 20–25, 66–68	101	
1–16, 18, 20–25, 66–68	103(a)	Anderson, ³ Ramer, ⁴ Laifer ⁵

DISCUSSION

We have reviewed the Examiner’s rejections and Appellant’s arguments. We disagree with Appellant that the Examiner erred in rejecting claims 1–16, 18, 20–25, and 66–68 under § 101. For this rejection, as consistent with the discussion below, we adopt the Examiner’s reasoning, findings, and conclusions on pages 2–8 and 17–19 of the Final Office Action mailed April 13, 2017 (“Final Act.”) and pages 3–11 of the Examiner’s Answer mailed October 12, 2018 (“Ans.”). But we agree with Appellant the

³ Anderson et al. (US 7,734,624 B2; June 8, 2010).

⁴ Ramer et al. (US 2007/0168354 A1; July 19, 2007).

⁵ Laifer (WO 01/82178 A2; April 20, 2001).

Examiner erred in rejecting claims 1–16, 18, 20–25, and 66–68 under § 103(a). We address these rejections in turn.

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 1–16, 18, 20–25, and 66–68 together for this rejection, so as permitted by 37 C.F.R. § 41.37(c)(1)(iv), we decide the appeal for this rejection based on claim 1.

Abstract Idea

The Revised Guidance explains that the abstract idea exception includes “certain methods of organizing human activity” and “mental processes.” *Revised Guidance*, 84 Fed. Reg. at 52 *see also* USPTO, October 2019 Update: Subject Matter Eligibility at 4–9, https://www.uspto.gov/sites/default/files/documents/peg_oct_2019_update.pdf (“October SME Update”) (providing examples of claims that recite certain methods of organizing human activity and mental processes). The Examiner determined that claim 1 recites subject matter that falls within these categories of abstract ideas. *See, e.g.*, Final Act. 3 (determining that “[t]aken as a whole,

. . . claim [1] is represented as an abstract idea relating to Certain Methods of Organizing Human Activity” (emphasis omitted)), 4 (determining that “[t]aken as an ordered combination, claim elements 1–5 [recited in claim 1] represent An Idea Of Itself” (emphasis omitted)).

We agree that claim 1 recites an abstract idea. Claim 1 recites “[a] computer-implemented method for selecting supplemental content for display at a client computer communicating over a computer network” that includes limitations [a]–[h] reproduced above. These limitations recite a method that uses keywords in a document to select and deliver supplemental content such as advertisements. *See* Appeal Br. 19–20; *see also* Spec. ¶¶ 5 (“The supplemental content can comprise material such as advertising”), 101 (explaining that the disclosed invention can “select supplemental content (i.e., advertising) for inclusion with requested documents”), claim 6 (“[W]herein the supplemental content from the selected supplemental content source comprises advertising content for delivery with the Web page.”). Selecting and delivering advertisements in the manner recited in claim 1 is a commercial interaction that is not meaningfully different from other commercial interactions that courts have determined are abstract ideas. *See, e.g., Bridge & Post, Inc. v. Verizon Commc’ns, Inc.*, 778 F. App’x 882, 887 (Fed. Cir. 2019) (“Targeted marketing is a form of ‘tailoring information based on [provided] data,’ which we have previously held is an abstract idea. The concept is a ‘fundamental practice’ that dates back to newspaper advertisements.” (alteration in original) (citation omitted)); *Affinity Labs of Tex., LLC v. Amazon.com Inc.*, 838 F.3d 1266, 1269 (Fed. Cir. 2016) (“[W]e hold that the concept of delivering user-selected media content to portable devices is an abstract idea”); *Intellectual Ventures I*

LLC v. Capital One Bank (USA), 792 F.3d 1363, 1369 (Fed. Cir. 2015) (“There is no dispute that newspaper inserts had often been tailored based on information known about the customer—for example, a newspaper might advertise based on the customer’s location. Providing this minimal tailoring—e.g., providing different newspaper inserts based upon the location of the individual—is an abstract idea.”); *Ultramerical, Inc. v. Hulu, LLC*, 772 F.3d 709, 714 (Fed. Cir. 2014) (determining that using an advertisement as an exchange or currency is an abstract idea); *Morsa v. Facebook, Inc.*, 77 F. Supp. 3d 1007, 1014 (C.D. Cal. 2014), *aff’d*, 622 F. App’x 915 (Fed. Cir. 2015) (determining that the claims at issue are drawn to the abstract ideas of “targeting advertisements to certain consumers, and using a bidding system to determine when and how advertisements will be displayed,” both of which are “fundamental, long-standing, well-known concepts” that “have ‘no particular concrete or tangible form’ and are therefore abstract”). Claim 1 thus recites certain methods of organizing human activity, one of the abstract idea categories listed in the Revised Guidance. *See* Revised Guidance, 84 Fed. Reg. at 52 (explaining that certain methods of organizing human activity include commercial or legal interactions and fundamental economic principles or practices); *see also* October SME Update 4–6 (explaining that certain methods of organizing human activity include commercial interactions such as advertising).⁶

⁶ Even if limitations [a] and [f]–[h] did not form part of the abstract idea, these limitations would not make claim 1 patent eligible because they recite insignificant extra-solution activities such as receiving a request for a document and serving or delivering requested documents and selected content. *Cf. CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1372 (Fed. Cir. 2011) (“[E]ven if some physical steps are required to obtain

Claim 1 also recites mental processes. Limitations [b]–[e] recite determining relevance scores, valuating keywords, generating productivity scores, and selecting supplemental content. *See* Appeal Br. 19. These limitations generally recite what data these steps include or use but do not otherwise meaningfully limit *how* the claimed method performs these steps. *See* Appeal Br. 19. These steps are so broadly written that they encompass steps that people can perform in their minds or using pen and paper. *See CyberSource*, 654 F.3d at 1373 (determining that a claim limitation “is so broadly worded that it encompasses literally *any* method for” performing the limitation, including “even logical reasoning that can be performed entirely in the human mind”). Indeed, the written description indicates that people can manually perform aspects of the claimed method. *See, e.g.*, Spec. ¶ 3 (disclosing, in the Background section, that an “advertising placement company can read each page on a site and try to select ads to appear with that page that are related to the subject matter of the page”). Because these steps encompass acts that people can perform in their minds or using pen and paper, claim 1 recites mental processes. *See CyberSource*, 654 F.3d at 1372 (determining “that unpatentable mental processes are the subject matter of” a claim when the claim’s “method steps can be performed in the human mind, or by a human using a pen and paper”); October SME Update 9 (explaining that mental processes encompass acts that people can perform in

information from the database (e.g., entering a query via a keyboard, clicking a mouse), such 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 downloading and printing menus “are insignificant post-solution activities”).

their minds or using pen and paper). For this additional reason, claim 1 recites an abstract idea. *See Revised Guidance*, 84 Fed. Reg. at 52 (explaining that the abstract idea exception includes mental processes).

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* October SME Update 12 (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 abstract idea into a practical application. *See* October SME Update 12.

The additional elements recited in claim 1 include “a client computer,” “a computer network,” “a server computer,” and “a requesting client computer.” *See* Appeal Br. 19–20. These elements are generic computer components. *See, e.g.*, Spec. ¶¶ 5 (“The network over which communications between the server and client devices occurs can comprise an extended network, such as the Internet.”), 31 (“[C]lient devices can comprise a variety of processing devices that can communicate with computer networks. These devices can include, for example, laptop computers, desktop computers, smart phones, PDAs, and the like. The network communications can take place over a wireless connection or over fixed connections.”), 107 (“The computer system 1200 is constructed as a conventional computer processor such as a typical desktop or laptop

computer with a network communications module that enables communication over a network, such as a Local Area Network (LAN), the Internet, and the like.”), 108 (“If desired, the system 1200 can operate as an advertising server. . . . If desired, the system can also operate as a Web server, providing the requested documents as well as the selected advertising content.”), 111 (“The operations described above can be performed on a wide variety of computer devices having programmable processors.”).

The claimed method uses these generic computer components to perform the recited abstract idea. *See* Appeal Br. 19–20. Using generic computer components in this way does not integrate an abstract idea into a practical application. *See, e.g., Alice*, 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.’” (second and third alterations in original) (quoting *Mayo*, 566 U.S. at 77)); *Intellectual Ventures I*, 792 F.3d at 1370 (“Steps that do nothing more than spell out what it means to ‘apply it on a computer’ cannot confer patent-eligibility.”). Thus, considering the additional elements along with the recited abstract idea, both individually and as an ordered combination, we determine that claim 1 does not integrate the abstract idea into a practical application.

Appellant’s arguments have not persuaded us otherwise. Appellant argues that claim 1 is patent eligible because the claim “improv[es] . . . computer-related technology by improving placement of advertising and selection of competing advertisers for placement of advertising content in real time using internet communications.” Appeal Br. 7; *see also* Reply Brief 2–3, filed December 6, 2018 (“Reply Br.”) (making similar arguments).

We disagree. Claim 1 is directed to a commercial interaction, not an improvement to computer-related technology. As discussed above, the claim uses generic computer components to implement an abstract idea. Appellant has not shown that the recited computer components operate differently than expected, let alone operate in an improved manner. Claim 1 “thus fit[s] into the familiar class of claims that do not ‘focus . . . on [] an improvement in computers as tools, but on certain independently abstract ideas that use computers as tools.’” *SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1168 (Fed. Cir. 2018) (second and third alterations in original) (quoting *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1354 (Fed. Cir. 2016)).

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). 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.

As discussed above, the additional elements recited in claim 1 include “a client computer,” “a computer network,” “a server computer,” and “a requesting client computer.” *See* Appeal Br. 19–20. Claim 1 recites that these elements receive a request for document, determine relevance scores, evaluate keywords, generate productivity scores, select supplemental content, and serve or deliver requested documents and selected supplemental content.

See Appeal Br. 19–20. Claim 1 does not place meaningful restrictions on how the claimed method performs many of these steps. Indeed, the written description indicates that the steps encompass any “computer methods, computer programs on program carriers . . . that, when run on a computer, implement the method” and explains that “[t]he various embodiments of the invention may be implemented as a sequence of computer implemented steps or program modules organized in any of many possible configurations.” Spec. ¶ 32.

Given the broad scope of these steps, they encompass well-understood, routine, and conventional computer activities. For example, receiving, serving, and delivering data are well-understood, routine, and conventional computer activities. *See, e.g., 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.”). And the written description indicates the recited determination, valuation, and generation steps consist of basic comparisons and mathematical calculations. *See, e.g.,* Spec. ¶¶ 22, 25–27, 33–38, 41–43, 74–79. These steps thus encompass well-understood, routine, and conventional computer activities. *See, e.g., Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1315 (Fed. Cir. 2016) (explaining that determining whether a content identifier matches a characteristic of other identifiers is a generic computer function); *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.”). As

for the recited selection, this is also a well-understood, routine, and conventional computer activity. *See, e.g., OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1363 (Fed. Cir. 2015) (determining that selecting a price is a well-understood, routine, and conventional computer activity).

Whether we consider these additional elements individually or as an ordered combination, these elements do not transform the nature of claim 1 into a patent-eligible application. These elements are largely recited at a high level of generality, and there is no indication that these elements override the conventional use of known features or involve an unconventional arrangement or combination of elements. At bottom, claim 1 recites generic computer components employed in a customary manner, which is not enough to provide an inventive concept. *Alice*, 573 U.S. at 223 (“[T]he mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention.”).

Appellant argues that claim 1 is patent eligible because it is similar to the claims in *BASCOM Global Internet Services, Inc. v. AT&T Mobility LLC*, 827 F.3d 1341 (Fed. Cir. 2016). *See* Appeal Br. 7–8. But other than asserting that claim 1 “pass[es] . . . Step 2B of the test,” Appeal Br. 8, Appellant provides no persuasive reasoning or evidence to support this argument. In any event, claim 1 is distinguishable from the patent-eligible claims in *BASCOM*. In *BASCOM*, the claimed invention “represent[ed] a software-based invention[] that improve[d] the performance of the computer system itself.” *BASCOM*, 827 F.3d at 1351 (second alteration in original) (quotation marks omitted). Moreover, the claim contained an inventive concept “in the non-conventional and non-generic arrangement of known, conventional pieces.” *BASCOM*, 827 F.3d at 1350. Although Appellant

asserts at various points that claim 1 both improves computer-related technology and has an unconventional, non-generic combination of limitations, *see, e.g.*, Reply Br. 2, 4, Appellant does not offer persuasive reasoning or evidence to support these assertions. Asserting that the claim 1 improves computer-related technology and has an unconventional, non-generic combination of limitations does not make it so.

Appellant also contends “the claimed inventive steps for receiving, determining, valuating, generating, selecting serving, and delivering are new and no factual basis has been provided to indicate otherwise.” Reply Br. 5. But these steps recite an abstract idea, and the abstract idea cannot provide the necessary inventive concept no matter how new or groundbreaking the idea is. *See, e.g., Trading Techs. Int’l, Inc. v. IBG LLC*, 921 F.3d 1378, 1385 (Fed. Cir. 2019) (“The abstract idea itself cannot supply the inventive concept, ‘no matter how groundbreaking the advance.’”); *SAP Am.*, 898 F.3d at 1163 (“We may assume that the techniques claimed are ‘[g]roundbreaking, innovative, or even brilliant,’ but that is not enough for eligibility. Nor is it enough for subject-matter eligibility that claimed techniques be novel and nonobvious in light of prior art, passing muster under 35 U.S.C. §§ 102 and 103.” (citations omitted)); *Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1151 (Fed. Cir. 2016) (“But, 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.”). We thus find this argument unpersuasive.

Summary

For at least the reasons discussed above, claim 1 is directed to an abstract idea and lacks an inventive concept. We therefore sustain the Examiner's rejection of claim 1 under § 101.

Section 103 Rejection

Claim 1 recites “generating a productivity score for each of the supplemental content sources through a content optimizer computer process, wherein the productivity score comprises an expected revenue total for each respective supplemental content source, based on the valuation for each keyword in the content of the requested document and the relevance score for each keyword in the content of the requested document.” Appeal Br. 19. Appellant contends that the Examiner has not shown that the combination of Anderson, Ramer, and Laifer teaches or suggests that “the productivity score comprises an expected revenue total for each respective supplemental content source” as recited in this limitation. *See* Appeal Br. 14–15.

We agree with Appellant. Although not entirely clear, the Examiner appears to have found that Ramer's “future value” teaches the recited “expected revenue total.” *See* Final Act. 10–11. But the cited portions of Ramer do not disclose that this future value includes an expected revenue total, *see, e.g.*, Ramer ¶ 306, and the Examiner has not adequately explained why the future value teaches or suggests an expected revenue total. The Examiner also seems to have found that Anderson teaches this limitation, *see* Final Act. 9–10, but has not adequately explained how Anderson does so. Nor has the Examiner explained how the references would be combined to teach or suggest this limitation. Final Act. 11–12. As a result, we do not sustain the Examiner's rejection of claim 1 and its dependent claims under

§ 103(a). Because the Examiner's rejection of independent claims 67 and 68 suffers from the same flaw, we also do not sustain the Examiner's rejection of these claims under § 103(a).

CONCLUSION

Claims Rejected	35 U.S.C. §	References	Affirmed	Reversed
1-16, 18, 20-25, 66- 68	101		1-16, 18, 20-25, 66-68	
1-16, 18, 20-25, 66- 68	103(a)	Anderson, Ramer, Laifer		1-16, 18, 20-25, 66-68
Overall Outcome			1-16, 18, 20-25, 66-68	

Because we affirm at least one ground of rejection for each claim on appeal, we affirm the Examiner's decision. *See* 37 C.F.R. § 41.50(a)(1). No 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