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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte PETER F. CIPRINO, RICHARD G. SHOMO, and
DAVID R. SCOTT

Appeal 2017-007420
Application 12/971,631¹
Technology Center 3600

Before MURRIEL E. CRAWFORD, ANTON W. FETTING, and
JOSEPH A. FISCHETTI, *Administrative Patent Judges*.

FISCHETTI, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants seek our review under 35 U.S.C. § 134 of the Examiner's final rejection of claims 1, 3, and 5–14. We have jurisdiction under 35 U.S.C. § 6(b).

¹ Appellants identify International Business Machines Corporation as the real party in interest. Br. 1.

SUMMARY OF DECISION

We AFFIRM.

THE INVENTION

Appellants' claims relate to assessment of workflows, and particularly to the assessment of inputs according to predefined criteria. Spec. 1, ¶ 1.

Claim 1 reproduced below, is representative of the subject matter on appeal.

1. A computer program product for estimating and using a remaining amount of time to consistently schedule completion of development of a program code at reduced development and customer cost, the computer program product comprising: one or more computer-readable hardware storage devices and program instructions stored on at least one of the one or more storage devices, the stored program instructions comprising;

program instructions to present to a user through a user interface, for each category of performance of a plurality of categories of performance required to be completed in order to complete the development of the program code, a plurality of questions associated with each category, wherein the development of the program code includes a readiness of the program code to be used, and wherein each category has an associated weight;

program instructions to receive a score from the user to each presented question for each category;

program instructions to compute a weighted score for each question for each category by multiplying the received score for each question by the weight of the category that each question is associated with;

program instructions to compute a weighted score for each category by averaging the weighted scores for the questions associated with each category;

program instructions to transform the weighted score for each category to a resulting percent score for each category;

program instructions to receive input data comprising for each

Appeal 2017-007420
Application 12/971,631

category, an associated plurality of contiguous percent ranges collectively encompassing a range of zero percent to one hundred percent;

program instructions to calculate a remaining time for completion for each percent range in the input data, wherein the calculated remaining time for completion for each percent range is specific to the category to which each percent range is associated;

program instructions to ascertain, from the input data, for each category: (i) a first percent range of the plurality of contiguous percent ranges, subject to the first percent range comprising the resulting percent score and (ii) the calculated remaining time for completion that is specific to the category to which the ascertained first percent range is associated;

program instructions to compute a summation, over the categories, of the calculated remaining time for completion pertaining to the ascertained percent range for each category; and

program instructions to determine and display on a monitor a total remaining time to complete development of the program code, wherein the total remaining time incorporates the computed summation, and wherein the display of the total remaining time to complete development of the program code identifies a current state of a workflow of the development of the program code to: (i) reduce a development and customer cost of the program code and (ii) consistently schedule completion of the development of the program code.

THE REJECTION

The Examiner relies upon the following as evidence of unpatentability:

No Prior Art Listed

The following rejection is before us for review.

Claims 1, 3, and 5–14 are rejected under 35 U.S.C. § 101.

ANALYSIS

35 U.S.C. § 101 REJECTION

We will sustain the rejection of claims 1, 3, and 5–14 under 35 U.S.C. § 101.

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 Int’l, 134 S. Ct. 2347, 2355 (2014) (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 72–73 (2012)) (internal citations omitted).

To perform this test, we must first determine whether the claims at issue are directed to a patent-ineligible concept.

Although the Court in *Alice* made a direct finding as to what the claims were directed to, we determine that the plain language of the claims and the Specification provide enough information to inform one as to what they are directed to.

The steps in representative claim 1 are:²

determine and display on a monitor a total remaining time to complete development of the program code, wherein the total remaining time incorporates the computed summation, and wherein the display of the total remaining time to complete development of the program code identifies a current state of a workflow of the development of the program code to: (i) reduce a development and customer cost of the program code and (ii) consistently schedule completion of the development of the program code.

App. Br. 26.

The Examiner found that claims 1 and 3 are directed to “a computer program product and computer system for estimating a remaining amount of time to complete development of program code.” (Final Act. 5). The Examiner further found,

entering user data, performing mathematical computations, and maintaining persistent organization of data within a data structure within computer systems or applications are all routine,

² Our analysis is made based on considering the claims as a whole, but for purposes of this discussion, we note the result phrase of the independent claim to point to what the claims are directed to.

well-known and conventional computer functions. Generic computer components performing recited as performing generic computer functions that are well understood, routine and conventional activities amount to no more than implementing the abstract idea with a computerized system.

(*Id.* at 6.).

The Specification states:

Organizations involved with the delivery of workflows have a need to properly evaluate existing open source automation packages in order to reduce development and customer cost. Currently developers or system engineers would need to use a process of best guesses or non repeatable methods to estimate the completeness of workflows. Workflows are also a new entry into the open source paradigm and unfortunately few, if any, persons have the past experience to evaluate the readiness and cost of re-using open source workflows.

Spec. ¶ 3. We thus find that the claims are directed to assessing workflows based on predefined criteria and sizing of results for the evaluation of workflows. *See* Spec. ¶ 1. This is consistent with the Examiner’s findings. It follows from prior Supreme Court cases, and *Gottschalk v. Benson*, 409 U.S. 63 (1972), in particular, that the claims at issue here are directed to an abstract idea. Assessing workflows based on predefined criteria and sizing of results for the evaluation of workflows represents a method of organizing human behavior because the Specification states that the claimed process overcomes “a process of best guesses.” *Id.* at ¶ 3. The patent-ineligible end

Appeal 2017-007420
Application 12/971,631

of the spectrum includes methods of organizing human behavior, *Alice*, 134 S. Ct. at 2355–56. Also, we find the steps of:

- i. present ... a plurality of questions associated with each category;
- ii. receive a score from the user,
- iii. compute a weighted score for each question;
- iv. compute a weighted score for each category by averaging the weighted scores for the questions;
- v. transform the weighted score for each category to a resulting percent score;
- vi. receive input data...associated [with a] plurality of contiguous percent ranges collectively encompassing a range of zero percent to one hundred percent;
- vii. calculate a remaining time for completion for each percent range in the input data,

constitute “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.” *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1354 (Fed. Cir. 2016); *see also buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1355 (Fed. Cir. 2014) (claims directed to certain arrangements involving contractual relations are directed to abstract ideas). Thus, assessing workflows based on predefined criteria and sizing of

Appeal 2017-007420
Application 12/971,631

results for the evaluation of workflows is an “abstract idea” beyond the scope of § 101.

As in *Alice*, we need not labor to delimit the precise contours of the “abstract ideas” category in this case. It is enough to recognize that there is no meaningful distinction in the level of abstraction between the concept of an intermediated settlement, as discussed in *Alice*, and the concept of assessing workflows based on predefined criteria and sizing of results for the evaluation of workflows, at issue here. Both are squarely within the realm of “abstract ideas” as the Court has used that term. That the claims do not preempt all forms of the abstraction or may be limited to program code development, do not make them any less abstract. *See OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1362 (Fed. Cir. 2015) (citations omitted) (“And that the claims do not preempt all price optimization or may be limited to price optimization in the e-commerce setting do not make them any less abstract.”).

Claims 1 and 3, unlike the claims found non-abstract in prior cases, use generic computer technology to perform data reception, transmission, and linkage and do not recite an improvement to a particular computer technology. *See, e.g., McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1314 (Fed. Cir. 2016) (finding claims not abstract because they “focused on a specific asserted improvement in computer animation.”).

The introduction of a computer into the claims does not alter the analysis at *Alice* step two.

[T]he 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 “implemen[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 featur[e]” that provides any “practical assurance that the process is more than a drafting effort designed to monopolize the [abstract idea] itself.”

Alice, 134 S. Ct. at 2358 (alterations in original) (internal citations omitted).

Instead, “the relevant question is whether the claims here do more than simply instruct the practitioner to implement the abstract idea . . . on a generic computer.” *Id.* at 2359. 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 to retrieve, select, and apply decision criteria to data and modify

Appeal 2017-007420
Application 12/971,631

the data as a result amounts to electronic data query and retrieval—one of the most basic functions of a computer. All of these computer functions are well-understood, routine, conventional activities previously known to the trading industry. *See Elec. Power Grp.*, 830 F.3d 1354; *see also In re Katz Interactive Call Processing Patent Litig*, 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”). In short, each step does no more than require a generic computer to perform generic computer functions.

Considered as an ordered combination, the computer components of Appellants’ claims add nothing that is not already present when the steps are considered separately. The sequence of data reception-analysis-access/display is equally generic and conventional or otherwise held to be abstract. *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) (holding that sequence of data retrieval, analysis, modification, generation, display, and transmission was abstract), *Two-Way Media Ltd. v. Comcast Cable Commc’ns, LLC*, 874 F.3d 1329, 1339 (Fed. Cir. 2017) (holding sequence of processing, routing, controlling, and monitoring was abstract). The ordering of the steps is, therefore, ordinary and conventional.

The claims do not, for example, purport to improve the functioning of the computer itself. Nor do they effect an improvement in any other technology or technical field. The Specification spells out different generic equipment and parameters that might be applied using this concept and the particular steps such conventional processing would entail based on the concept of information access under different scenarios. *See, e.g.*, Spec. ¶ 39. Thus, the claims at issue amount to nothing significantly more than instructions to apply the abstract idea of information access using some unspecified, generic computer. Under our precedents, that is not enough to transform an abstract idea into a patent-eligible invention. *See Alice*, 134 S. Ct. at 2360.

We have reviewed all the arguments (Appeal Br. 8–23; Reply Br. 2–7) Appellants have submitted concerning the patent eligibility of the claims before us that stand rejected under 35 U.S.C. § 101. We find that our analysis above substantially covers the substance of all the arguments, which have been made. But, for purposes of completeness, we will address various arguments in order to make individual rebuttals of same.

Appellants assert that “independent claims 1 and 30-31 [sic.] as a whole **are directed to** “estimating and using a remaining amount of time to consistently schedule completion of development of a program code at reduced development and customer cost.” (Appeal Br. 10–11).

The difficulty here is that the claims have been drafted so that as a whole they provide a result-oriented solution, but without the computer-

Appeal 2017-007420
Application 12/971,631

centric details for accomplishing it. The Appellants argue over such details, such as to “(i) reduce a development and customer cost of the program code and (ii) “consistently schedule completion of the development of the program code” (App. Br. 11) in an effort to show the claimed subject matter is “rooted in computer technology.” But, the claims do not reflect any more than their result oriented details. *Cf. Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d 1332, 1342 (Fed. Cir. 2017) (explaining that “[o]ur law demands more” than claim language that “provides only a result-oriented solution, with insufficient detail for how a computer accomplishes it”) and *Elec. Power Grp.*, 830 F.3d at 1354 (explaining that claims are directed to an abstract idea where they do not recite “any particular assertedly inventive technology for performing [conventional] functions”).

Appellants also argue, the “key step in claims 1 and 3 pertaining to what claims 1 and 3 are directed to the ‘displaying’ step.” (Appeal Br. 13).

We disagree with Appellants because we find that the displaying step is limited to insignificant extra solution activity not covered under 35 U.S.C. § 101. *See, In re Schrader*, 22 F.3d 290, 294 (Fed. Cir. 1994) (recording step of the claimed process is incapable of imparting patent-eligibility under 35 U.S.C. § 101).

Applicants assert that independent claims 1 and 3 improve the technology of workflow assessment in the field of scheduling software development, based on at least the following limitation in independent claims 1 and 3: ‘program instructions to determine and display on a monitor

Appeal 2017-007420
Application 12/971,631

a total remaining time to complete development of the program code, ... wherein the display of the total remaining time to complete development of the program code identifies a current state of a workflow of the development of the program code to: (i) reduce a development and customer cost of the program code and (ii) consistently schedule completion of the development of the program code’.

(Appeal Br. 15).

We disagree with Appellants. Nothing in claims purports to improve computer functioning or “effect an improvement in any other technology or technical field.” *Alice*, 134 S. Ct. at 2359. Nor do claims solve a problem unique to the Internet. *See DDR Holdings, LLC v. Hotels.com, L.P.* 773 F.3d 1245, 1255. The question here is whether the claims as a whole “focus on a specific means or method that improves the relevant technology” or are “directed to a result or effect that itself is the abstract idea and merely invoke generic processes and machinery.” *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1314 (Fed. Cir. 2016). In this case, the claims, as a whole, are focused on satisfying certain contingencies to determine “remaining time to complete development of ...program code.” Claim 1. We find this limitation to be a result or an affect, and not an improvement in the technology of how a processor, memory, and program works. Thus, we find no improvement in device technology here, but rather only the idea of assessing workflows using a known device.

Appeal 2017-007420
Application 12/971,631

Appellants argue, “Since the Examiner has not attempted to demonstrate that the steps of independent claims 1 and 3 can be performed *entirely* in the human mind, the Examiner's citation of *Cybersource* is not persuasive.” (Appeal Br. 13).

We disagree with Appellants’ characterization of *Cybersource* because its reference to steps being performed “entirely in the human mind” was stated in immediate contrast to the holding in *Research Corp. Techs. v. Microsoft Corp.*, 627 F.3d 859 (Fed. Cir. 2010). *See CyberSource Corp v. Retail Dec., Inc.* 654 F.3d 1366, 1376 (Fed. Cir. 2011). That is, the *Cybersource* holding was clear to show how the claims in *Research Corp. Techs* were directed to the technical improvement of, “manipulation of computer data structures (e.g., the pixels of a digital image and a two-dimensional array known as a mask). . . .” *Id.*

Appellants further argue, “No method or system currently exists to properly evaluate the cost and readiness for an automation package containing workflows for the provisioning of servers and network devices like routers and load balancers.” (Appeal Br. 15).

We are not persuaded by Appellants’ arguments because “the addition of merely novel or non-routine components to the claimed idea [does not] necessarily turn[] an abstraction into something concrete.” *Ultramercial, Inc. v. Hula, LLC*, 772 F.3d 709, 715 (Fed. Cir. 2014).

Citing to *McRO*, Appellants argue, the “rules in claims 1 and 3 enable implementation of the improvement (in the technology of workflow

assessment in the field of scheduling software development) realized via the claimed limitations.” (Appeal Br. 18).

We disagree with Appellants. The question is whether the claims as a whole “focus on a specific means or method that improves the relevant technology” or are “directed to a result or effect that itself is the abstract idea and merely invoke generic processes and machinery.” *McRO* at 1314. Here, we find the focus of workflow assessment is an effect and not a specific means or method that improves the relevant technology.

Appellants further argue, “[i]ndependent claims 1 and 3 recite the following specific limitations that are not well understood, routine and conventional for scheduling software development. . . .” (Appeal Br. 21).

We understand the Examiner, through citations relying on prior court decisions (*See* Final Act. 5–6) found that certain computer functions are well-understood, routine, and conventional functions. These prior court decisions adequately support this finding to satisfy the requirement to set forth a *prima facie* case of unpatentability under 35 U.S.C. § 101.

For the reasons identified above, we determine there are no deficiencies in the Examiner’s *prima facie* case of patent ineligibility of the rejected claims based on the record before us.

CONCLUSION OF LAW

We conclude the Examiner did not err in rejecting claims 1, 3, and 5–14 under 35 U.S.C. § 101.

Appeal 2017-007420
Application 12/971,631

DECISION

The decision of the Examiner to reject claims 1, 3, and 5–14 is affirmed.

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