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BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte GREGORY J. BOSS,
JAMES R. DORAN,
RICK A. HAMILTON II,
and ANNE R. SAND

Appeal 2017–001690
Application 12/203,399
Technology Center 3600

Before ANTON W. FETTING, BRUCE T. WIEDER, and KENNETH G. SCHOPFER, *Administrative Patent Judges.*

FETTING, *Administrative Patent Judge.*

DECISION ON APPEAL

STATEMENT OF THE CASE[1]

Gregory J. Boss, James R. Doran, Rick A. Hamilton II, and Anne R. Sand (Appellants) seek review under 35 U.S.C. § 134 of a final rejection of

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[1] Our decision will make reference to the Appellants' Appeal Brief ("App. Br.," filed October 28, 2015) and Reply Brief ("Reply Br.," filed November 7, 2016), and the Examiner's Answer ("Ans.," mailed September 8, 2016), and Final Action ("Final Act.," mailed June 30, 2015).

claims 1–5, 8–12, 14–18, the only claims pending in the application on appeal.[2] We have jurisdiction over the appeal pursuant to 35 U.S.C. § 6(b).

The Appellants invented a way to request a customer to re-allocate all or part of a computational workload. Specification para. 1.

An understanding of the invention can be derived from a reading of exemplary claim 1, which is reproduced below (bracketed matter and some paragraphing added).

> 1. A computer–implemented method for a power provider to employ a re-allocation of a computational workload for a customer, the method comprising executing on a processor the steps of:
>
> [1] detecting a service situation having a potential adverse impact on a future quality of service to be offered by a power provider to a first customer for a pre-registered work job of a computational workload of the first customer,
>
> wherein the pre-registered work job is within a portion of the computational workload of the first customer that is pre-registered with the power provider for re-allocation;
>
> [2] determining whether timing of the work job is flexible;
>
> [3] in response to determining that the timing of the work job is flexible,
>
> moving the work job from a current time frame scheduled for running the work job to a different time frame;
>
> [4] in response to determining that the timing of the work job is not flexible,

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[2] Claims 19–25 were cancelled in an amendment filed October 28, 2015.

determining whether a different geographical location is available;

[5] in response to determining that the different geographical location is available,

moving the work job from an original geographical location to the different geographical location;

[6] in response to determining that the different geographical location is not available,

determining whether another power provider is available;

and

[7] in response to determining that the another power provider is available,

moving the work job from the power provider to the another available power provider.

Claims 1–5, 8–12, 14–18 stand rejected under 35 U.S.C. § 101 as directed to non–statutory subject matter.[3]

ISSUES

The issues of eligible subject matter turn primarily on whether the claims recite more than abstract conceptual advice of what a computer is to provide without implementation details.

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[3] A rejection under 35 U.S.C. § 112, second paragraph, is withdrawn. Ans. 2.

ANALYSIS

Method claim 1 recites detecting a situation and making a number of determinations, and allocating work according to those determinations. Thus, claim 1 recites data input, analysis, and output. None of the limitations recite implementation details for any of these steps, but instead recite functional results to be achieved by any and all possible means. The recited "moving the work job" in particular has no implementation detail, and so textual instruction to an operator to move the job is within the scope of the claims. It is the job identifying the work rather than the work itself that is moved. Data reception, analysis and output are all generic, conventional data processing operations to the point they are themselves concepts awaiting implementation details. The sequence of data reception-analysis-output is equally generic and conventional. The ordering of the steps is therefore ordinary and conventional. The remaining claims merely describe parameters for the allocation process, with no implementation details.

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 Services v. Prometheus Laboratories, Inc.*, 566 U.S. 66 (2012)).

To perform this test, we must first determine whether the claims at issue are directed to a patent-ineligible concept. The Examiner finds the claims directed to allocating work. Final Act. 8.

Although the Court in *Alice* made a determination as to what the claims were directed to, we find that this case's claims themselves and the Specification provide enough information to inform one as to what they are directed to.

The preamble to claim 1 recites that it is a method for a power provider to employ a re-allocation of a computational workload for a customer. The steps in claim 1 result in rescheduling or re-allocating work. The Specification at paragraph 1 recites that the invention relates to requesting a customer to re-allocate all or part of a computational workload. Thus, all this evidence shows that claim 1 is directed to re-allocating or rescheduling work, i.e. work allocation. This is consistent with the Examiner's finding.

It follows from prior Supreme Court cases, and *Bilski* (*Bilski v. Kappos*, 561 U.S. 593 (2010)) in particular, that the claims at issue here are directed to an abstract idea. Like the risk hedging in *Bilski*, we find that the concept of work allocation is a fundamental business practice long prevalent in our system of commerce. The use of work allocation is also a building block of ingenuity in production scheduling. Thus, work allocation, like hedging, is

an "abstract idea" beyond the scope of §101. *See Alice Corp. Pty. Ltd.* at 2356.

As in *Alice Corp. Pty. Ltd.*, 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 risk hedging in *Bilski* and the concept of work allocation at issue here. Both are squarely within the realm of "abstract ideas" as the Court has used that term. *See Alice Corp. Pty. Ltd.* at 2357.

Further, claims involving data collection, analysis, and display are directed to an abstract idea. *Elec. Power Grp. v. Alstom S.A.,* 830 F.3d 1350, 1353 (Fed. Cir. 2016) (holding that "collecting information, analyzing it, and displaying certain results of the collection and analysis" are "a familiar class of claims 'directed to' a patent ineligible concept"); *see also In re TLI Commc'ns LLC Patent Litig.,* 823 F.3d 607, 611 (Fed. Cir. 2016); *FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1093–94 (Fed. Cir. 2016). Claim 1, unlike the claims found non-abstract in prior cases, uses generic computer technology to perform data retrieval, analysis, and transmission and does not recite an improvement to a particular computer technology. *See, e.g., McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1314–15 (Fed. Cir. 2016) (finding claims not abstract because they "focused on a specific asserted improvement in computer animation"). As such, claim 1 is directed to the abstract idea of receiving, analyzing, and transmitting data.

The remaining claims merely describe parameters for the allocation process. We conclude that the claims at issue are directed to a patent-ineligible concept.

The introduction of a computer into the claims does not alter the analysis at Mayo 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 Corp. Pty. Ltd., 134 S.Ct. at 2358 (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 Corp. Pty. Ltd.,* 134 S.Ct. 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 input, analyze, and output data amounts to electronic data query

and retrieval—one of the most basic functions of a computer. The recited "moving the work job" has no implementation detail, and so textual instruction to an operator to move the job is within the scope of the claims. It is the job identifying the work, rather than the work itself, that is moved. All of these computer functions are well-understood, routine, conventional activities previously known to the industry. *See Elec. Power Grp. v. Alstom S.A., supra. 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"). 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 Appellants' method add nothing that is not already present when the steps are considered separately. The sequence of data reception-analysis-output 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) (sequence of data retrieval, analysis, modification, generation, display, and

transmission), *Two-Way Media Ltd. v. Comcast Cable Commc'ns, 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.

Viewed as a whole, Appellants' method claims simply recite the concept of work allocation as performed by a generic computer. To be sure, the claims recite doing so by advising one to check availability of resources and let one know when resources are available. But this is no more than abstract conceptual advice on the parameters for such work allocation and the generic computer processes necessary to process those parameters, and do not recite any particular implementation.

The method 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. Further, the Specification only discloses 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 work allocation under different scenarios. The Specification does not describe any particular improvement in the manner a computer functions. Instead, the claims at issue amount to nothing significantly more than an instruction to apply the abstract idea of work allocation using some unspecified, generic computer. Under our precedents, that is not enough to transform an abstract idea into a patent-eligible invention. *See Alice Corp. Pty. Ltd.* at 2360.

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 Corp. Pty. Ltd. at 2360.

As to Appellants' Appeal Brief arguments, we adopt the Examiner's determinations and analysis from Final Action 8 and Answer 3–15 and reach similar legal conclusions. We now turn to the Reply Brief arguments.

We are not persuaded by Appellants' argument that the claims are analogous to those in *Enfish*, 822 F.3d 1327 (Fed. Cir. 2016). Reply Br. 2. The claims differ from those found patent eligible in *Enfish*, where the claims were "specifically directed to a *self-referential* table for a computer database." *Id.* at 1337. The claims thus were "directed to a specific improvement to the way computers operate" rather than an abstract idea implemented on a computer. *Id.* at 1336. Here, by contrast, the claims are not directed to an improvement in the way computers operate. Though the claims purport to accelerate the process of shifting workload allocation, our reviewing court has held that speed and accuracy increases stemming from the ordinary capabilities of a general purpose computer "do[] not materially alter the patent eligibility of the claimed subject matter." *Bancorp Servs., L.L.C. v. Sun Life Assurance Co. of Can. (U.S.)*, 687 F.3d 1266, 1278 (Fed. Cir. 2012). Instead, the claims are more analogous to those in *FairWarning,* wherein claims reciting "a few

possible rules to analyze audit log data" were found directed to an abstract idea because they asked "the same questions (though perhaps phrased with different words) that humans in analogous situations detecting fraud have asked for decades." *FairWarning*, 839 F.3d at 1095. Humans have reallocated workloads to meet constraints for centuries, as it is the nature of work to operate under constraints.

We are not persuaded by Appellants' argument that claim 1 is analogous to those involved in *McRO, Inc. v. Bandai Namco Games America Inc.*, 837 F.3d 1299 (Fed. Cir. 2016), wherein the Court found claims of software patents were not directed to abstract ideas under *Alice* step one. Reply Br. 2.

> The claims in *McRO* were not directed to "a specific asserted improvement in computer animation, i.e., the automatic use of rules of a particular type." We explained that "the claimed improvement [was] allowing computers to produce 'accurate and realistic lip synchronization and facial expressions in animated characters' that previously could only be produced by human animators." The claimed rules in *McRO* transformed a traditionally subjective process performed by human artists into a mathematically automated process executed on computers.

FairWarning, 839 F.3d at 1094 (differentiating the claims at issue from those in *McRO*).

In *McRO*, "it was the incorporation of the claimed rules for the process of creating animation, not the use of the computer, that improved the existing technology process," because the prior process performed by humans "was driven by subjective determinations rather than specific, limited mathematical rules." 837 F.3d at 1314 (internal quotation marks, citation, and alterations omitted). In contrast, the claims of the instant application merely direct workload job transfers based on constraints and are

not directed to a technological operation such as animation, for which another technological solution in the form of mathematical rules unobstructed by human intervention to interpolate the animation sequences is employed. In particular, the claims recite nothing about how the jobs are actually executed and the workload jobs are not computer animation.

We are not persuaded by Appellants' argument that the claims contain an inventive concept that is also found in the specific ordered combination of the limitations, similar to the Federal Circuit's findings in *BASCOM* (*Bascom Global Internet v. AT&T Mobility LLC*, 827 F.3d 1341, 1350 (Fed. Cir. 2016)). Reply Br. 2. Initially, we remind Appellants that *Bascom* did not find claims eligible, but rather that the Appellees did not provide sufficient evidence to support a 12(b)(6) motion to dismiss in which facts are presumed in the non-movant's favor. The key fact in *Bascom* was the presence of a structural change in "installation of a filtering tool at a specific location, remote from the end-users, with customizable filtering features specific to each end user. This design gives the filtering tool both the benefits of a filter on a local computer and the benefits of a filter on the ISP server." *Bascom*, 827 F.3d at 1350. The instant claims, in contrast, perform the routine sequence of obtaining constraint data and shifting job data accordingly.

We are not persuaded by Appellants' argument that the claims present specific rules and do not preempt all "approaches that use rules of a different structure or different techniques. Reply Br. 8. "Where a patent's claims are deemed only to disclose patent ineligible subject matter under the *Mayo* [*/Alice*] framework, as they are in this case, preemption concerns are fully

addressed and made moot." *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015).

We are not persuaded by Appellants' argument that the "*specifically claimed limitation combination* recites a specific way to efficiently automate and thereby autonomously effect decisions as to *whether* and *where* to re-allocate computational workloads, via non-conventional routines that are unknown in the prior art." Reply Br. 5. The limitation is specific only in the sense it uses words to specify it. Claim 1 presents a query for the presence of three very general constraints, viz. time, place, and provider, and reallocates jobs accordingly. Far from being non-conventional, this is routine practice for manufacturers operating under constraint. To the extent Appellants would argue that this is a different context than manufacturing, "The Supreme Court and this court have repeatedly made clear that merely limiting the field of use of the abstract idea to a particular existing technological environment does not render the claims any less abstract." *Affinity Labs of Texas, LLC v. DIRECTV, LLC,* 838 F.3d 1253, 1258 (Fed. Cir. 2016).

We are not persuaded by Appellants' argument that the claims would not preempt the idea. Reply Br. 7. "Where a patent's claims are deemed only to disclose patent ineligible subject matter under the *Mayo* [*/Alice*] framework, as they are in this case, preemption concerns are fully addressed and made

moot." *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015).

CONCLUSIONS OF LAW

The rejection of claims 1–5, 8–12, 14–18 under 35 U.S.C. § 101 as directed to non–statutory subject matter is proper.

DECISION

The rejection of claims 1–5, 8–12, 14–18 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) (2011).

AFFIRMED