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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte PIERO PATRONE BONISSONE
and NARESH SUNDARAM IYER

Appeal 2017-004017
Application 12/509,703
Technology Center 3600

Before ANTON W. FETTING, NINA L. MEDLOCK, and
MATTHEW S. MEYERS, *Administrative Patent Judges*.

FETTING, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE¹

Piero Patrone Bonissone and Naresh Sundaram Iyer (Appellants²) seek review under 35 U.S.C. § 134 of a final rejection of claims 42, 43, and 47–49, the only claims pending in the application on appeal. We have jurisdiction over the appeal pursuant to 35 U.S.C. § 6(b).

¹ Our decision will make reference to the Appellants’ Appeal Brief (“App. Br.,” filed June 13, 2016) and Reply Brief (“Reply Br.,” filed January 9, 2017), and the Examiner’s Answer (“Ans.,” mailed November 7, 2016), and Final Office Action (“Final Act.,” mailed November 13, 2015).

² “The real party in interest of the present application is Genworth Holdings, Inc. and its parents and subsidiary companies.” App. Br. 1.

The Appellants invented a way of underwriting insurance applications based on dominance classification. Spec. para. 2.

An understanding of the invention can be derived from a reading of exemplary claim 42, which is reproduced below (bracketed matter and some paragraphing added).

42. A computer implemented system that

performs processing to underwrite an insurance application based on a plurality of previous insurance application underwriting decisions and first and second dominated determinations,

the system comprising:

a database that stores a plurality of previous insurance application underwriting decisions;

a computer server comprising a computing device, the computer server coupled to the database and programmed to:

[1] access, by the computing device from the database, the plurality of previous insurance application underwriting decisions, where the plurality of decisions have resulted in the same classification for respective prior applications to which the decisions are associated with, the plurality of decisions each comprise a plurality of features;

[2] receive, via a communication network by the computing device, a request to underwrite an insurance application, where the request includes information about at least one application component;

[3] automatically identify, by the computing device, a first set comprising at least one of the plurality of previous insurance application underwriting decisions that is not dominated by any other of the plurality of previous insurance application underwriting decisions, such that the first set constitutes a first subset, the first subset representing the least risky candidates within a given risk category;

[4] automatically identify, by the computing device, a second set comprising at least one of the plurality of previous insurance

application underwriting decisions that does not dominate any of the other of the plurality of previous insurance application underwriting decisions, such that the second set constitutes a second subset, the second subset representing the most risky candidates within the given risk category, the first set and the second set being constituted by different previous insurance application underwriting decisions;

[5] the first set and the second set associated with respective prior applications;

and

[6] compare, by the computing device, the insurance application to the first set and the second set;

and

[7] wherein the insurance application comprises a plurality of features;

and

where the computer server is further programmed to:

[8] compare the at least one feature to a corresponding feature in the at least one of the plurality of previous insurance application underwriting decisions in the first set;

and

[9] compare the at least one feature to a corresponding feature in the at least one of the plurality of previous insurance application underwriting decisions in the second set;

and

where:

[10] comparing the at least one feature to a corresponding feature in the first set further comprises determining if the at least one feature in the insurance application is dominated by the corresponding feature in the first set to generate a first dominated determination;

and

[11] comparing the at least one feature to a corresponding feature in the second set further comprises determining if the at least one feature in the insurance application is dominated by the corresponding feature in the second set to generate a second dominated determination;

[12] each of the comparings including determining whether each of said feature in the insurance application represents greater or less risk than the corresponding feature in the first set or second set, respectively;

[13] based on the first and second dominated determinations, assessing, by the computing device, whether all the features of the application are dominated by all the corresponding features of the first set, and the assessing including determining whether all the features of the application are dominated by all the corresponding features of the second set;

the computer server is further programmed to:

[14] assign, by the computing device, a risk assessment to the insurance application based on the assessing;

and

[15] output, by the computing device, the risk assessment;

[16] wherein the first subset is determined by the computing device generating a Pareto best subset, such that the first subset constitutes a Pareto best subset;

and

[17] wherein the second subset is determined by the computing device generating a Pareto worst subset, such that the second subset constitutes a Pareto worst subset.

Claims 42, 43, and 47–49 stand rejected under 35 U.S.C. § 101 as directed to a judicial exception without significantly more.³

Claim 42 stands rejected under statutory double patenting as claiming the same subject matter as that of claim 1 of U.S. Patent 7,567,914 B2.

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.

FACTS PERTINENT TO THE ISSUES

The following enumerated Findings of Fact (FF) are believed to be supported by a preponderance of the evidence.

Facts Related to Claim Construction

01. A Pareto-best subset is the best, non-dominated subset for a given risk category that contains all such applications that are not dominated by another application within that risk category. Spec. para. 168.
02. A Pareto-worst subset is the worst, non-dominated subset for a given risk category that contains all such applications that are not

³ A rejection under 35 U.S.C. § 112(a) or 35 U.S.C. § 112 (pre-AIA), first paragraph, as failing to comply with the written description requirement (Final Act. 3) was withdrawn in an Advisory Action (mailed Feb. 25, 2016).

dominated by another application within that risk category. Spec. para. 169.

03. If two insurance applicants A and B are compared where applicants A and B are identical along all features, except that the applicant B has a higher BMI than A, then the risk associated with applicant A cannot be greater than that associated with B. In other words, the premium associated to the rate class assigned to A should not be higher than the one assigned to B. The above reasoning principle is referred to, in decision theory, as the principle of dominance and in the above example applicant A **dominates** applicant B. Spec. para. 148.

ANALYSIS

System claim 42 recites a computer performing a process that includes accessing previous insurance application underwriting decisions, receiving an insurance application underwriting request, identifying and comparing two sets of previous insurance application underwriting decisions that each meet criteria, determining if a feature and then all of the features in the insurance application is/are dominated by features in either set, and assigning a risk assessment to the insurance application. Thus, claim 42 recites retrieving, analyzing, and transmitting data. None of the limitations recites implementation details for any of these steps, but instead recite functional results to be achieved by any and all possible means. Data retrieval, analysis, and transmission are all generic, conventional data processing operations to the point they are themselves concepts awaiting implementation details. The sequence of data

retrieving—analyzing—transmitting is equally generic and conventional. The ordering of the steps is, therefore, ordinary and conventional. The remaining claims merely describe analysis parameters, 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 Intl, 134 S. Ct. 2347, 2355 (2014) (citing *Mayo Collaborative Serv. v. Prometheus Labs., 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 underwriting insurance. Final Act. 6.

Although the Court in *Alice Corp. Pty. Ltd.* 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 42 recites that it is a system that performs processing to underwrite an insurance application based on a plurality of previous insurance application underwriting decisions and first and second

dominated determinations. The steps in claim 42 result in assigning and outputting a risk assessment for an insurance application absent any technological mechanism other than a conventional computer for doing so. The Specification at paragraph 1 recites that the invention relates to underwriting insurance applications based on dominance classification. Thus, all this evidence shows that claim 42 is directed to underwriting insurance applications based on dominance classification, i.e., underwriting insurance. 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*, the concept of underwriting insurance is a fundamental economic practice long prevalent in our system of commerce.⁴ The use of underwriting insurance is also a building block of ingenuity in commercial risk assumption, which is itself an abstract idea. Thus, underwriting insurance, like hedging, is an “abstract idea” beyond the scope of § 101. *See Alice Corp. Pty. Ltd.*, 134 S. Ct. 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 underwriting insurance at issue here. Both are squarely within the realm of

⁴ E.g., Lloyd's of London, Corporate History of 1750 (first underwriting reference) (<https://www.lloyds.com/about-lloyds/history/corporate-history>) (last visited Nov. 13, 2018).

“abstract ideas” as the Court has used that term. *See Alice Corp. Pty. Ltd.*, 134 S. Ct. at 2357.

Further, claims involving data collection, analysis, and display are directed to an abstract idea. *Elec. Power Grp., LLC 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 42, 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 42 is directed to the abstract idea of retrieving, analyzing, and transmitting data.

The remaining claims merely describe analysis parameters. 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.

the mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention. Stating an abstract idea “while adding the words ‘apply it’” is not enough for patent eligibility. Nor is limiting the use of an abstract idea “to a particular technological environment.” Stating an abstract idea while adding the words “apply it with a computer” simply combines those two steps, with the same deficient result. Thus, if a patent’s recitation of a computer amounts to a mere

instruction to “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 (internal 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 for retrieving, analyzing, and transmitting data 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 industry. *See Elec. Power Grp. v. Alstom S.A.*, *supra*. Also see *In re Katz*, 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 Am. Inc. v. InvestPic LLC*, 898 F.3d 1161, 1168 (Fed. Cir. 2018) (internal citation omitted).

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 retrieving—analyzing—transmitting 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' claims simply recite the concept of underwriting insurance as performed by a generic computer. To be sure, the claims recite doing so by advising one to use the observed relationship between features in the instant application and those in two reference sets of policies in making a risk assessment. But this is no more than abstract conceptual advice on the parameters for such underwriting insurance and the generic computer processes necessary to process those parameters, and does not recite any particular implementation.

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

equipment⁵ and parameters that might be applied using this concept and the particular steps such conventional processing would entail based on the concept of underwriting insurance under different scenarios. They do 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 underwriting insurance 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.*, 134 S. Ct. at 2360.

As to the structural claims, they are no different from the [comparable] 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., 134 S. Ct. at 2360 (internal citation omitted).

As to Appellants’ Appeal Brief arguments, we adopt the Examiner’s determinations and analysis from the Final Office Action at pages 3–7 and the Examiner’s Answer at pages 3–13 and reach similar legal conclusions. We now turn to the Reply Brief.

We are not persuaded by Appellants’ argument that “the ordered combination of the claim elements results in significantly more than an

⁵ The Specification describes the computer as a standard computer comprising an input device, an output device, a processor device, and a data storage device. Spec. para. 278.

abstract idea. Notably, the claims are not simply directed to automating a known process.” Reply Br. 3. Appellants then cite each of the steps in the claim. As to whether the process is known or not, “[a] claim for a new abstract idea is still an abstract idea. The search for a § 101 inventive concept is thus distinct from demonstrating § 102 novelty.” *Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1151 (Fed. Cir. 2016). As we determine *supra*, all of the recited steps are conventional data retrievals, comparisons and other forms of data analysis, and transmission. Such claims are directed to an abstract idea. *See Elec. Power Grp. v. Alstom S.A., supra*.

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 (Fed. Cir. 2016)). Reply Br. 3–5. Initially, we remind Appellants that *BASCOM* did not find claims eligible on the substance, 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 have no analogous structural benefit. Appellants point to “processing to underwrite an insurance application based on a plurality of previous insurance application underwriting decisions and

first and second dominated determinations.” Reply Br. 4, *id.* As we determined *supra*, this is no more than conventional data reads, writes, and analysis. At best, this includes a novel algorithm, which is itself an abstraction.

We are not persuaded by Appellants’ argument that the claims would not preempt the idea. Reply Br. 5. “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).

Claim 42 rejected under statutory double patenting as claiming the same subject matter as that of claim 1 of U.S. Patent 7,567,914 B2

We summarily affirm this uncontested rejection.

CONCLUSIONS OF LAW

The rejection of claims 42, 43, and 47–49 under 35 U.S.C. § 101 as directed to a judicial exception without significantly more is proper.

The rejection of claim 42 under statutory double patenting as claiming the same subject matter as that of claim 1 of U.S. Patent 7,567,914 B2 is proper.

DECISION

The rejections of claims 42, 43, and 47–49 are affirmed.

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No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED