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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte GEORGE A. CASTINEIRAS and CHRISTINE C. MARCKS

Appeal 2018-006341
Application 12/268,296
Technology Center 3600

Before JOHN A. JEFFERY, JOHNNY A. KUMAR, and
MATTHEW J. McNEILL, *Administrative Patent Judges*.

McNEILL, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant¹ appeals under 35 U.S.C. § 134(a) from the Examiner's rejection of claims 1–9, 11–14, 16, 17, 19–27, 29–32, 34, 35, and 57–60, which are all the claims pending in this application. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

¹ We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies the real party in interest as The Prudential Insurance Company. Appeal Br. 2.

STATEMENT OF THE CASE

Introduction

Appellant's application relates to a system and method for providing a secure financial plan. Spec. 1:4–6. In one embodiment, Appellant describes adjusting the allocation of a financial account having a plurality of investments to balance the expected risk and return over time. Spec. 4:1–5:2. Claim 1 is illustrative of the appealed subject matter and reads as follows with bracketed numbers added for reference:

1. A financial plan management system, comprising:

one or more memory modules; and

one or more processors communicatively coupled to the one or more memory modules, operable to:

[1] store, in the one or more memory modules, identifying information for an account holder participating in a financial plan, the financial plan comprising a guarantee that a beneficiary will receive an income amount on a periodic basis;

[2] allocate all or a portion of a financial contribution to a financial account having a plurality of financial investments, the plurality of financial investments comprising at least one variable return investment from a first investment category and at least one investment from a second investment category, wherein an expected rate of return of the combination of investments in the first investment category exceeds an expected rate of return of the combination of investments in the second investment category and a risk of the combination of investments in the first investment category exceeds a risk of the combination of investments in the second investment category;

[3] periodically distribute a balance of the financial account such that a first portion of the balance of the financial account is invested in one or more variable return investments from the first investment category and a second portion of the balance of the financial account is invested in one or more investments from the second investment category, wherein a ratio of the first portion to the second portion decreases over time;

[4] determine that the account holder has reached a particular age;

[5] in response to the determination that the account holder has reached the particular age:

[6] determine a base value, the base value being equal to the balance of the financial account at the time the base value is determined;

[7] determine that the account holder is electing to make a withdrawal from the financial account; and

[8] send an electronic notification to the account holder that notifies the account holder that the ratio will stop decreasing;

[9] in response to the determination that the account holder is electing to make a withdrawal from the financial account:

[10] calculate a protected value, wherein the protected value is at least equal to the base value; and

[11] calculate the income amount as a percentage of the protected value, wherein the income amount is paid to the beneficiary even if the balance of the financial account is depleted.

The Examiner's Rejections

Claims 1–9, 11–14, 16, 17, 19–27, 29–32, 34, 35, and 57–60 stand rejected under 35 U.S.C. § 101 as being directed to patent-ineligible subject matter. Final Act. 2–4.

Claims 1–9, 11–14, 16, 17, 19–27, 29–32, 34, 35, and 57–60 stand rejected under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over Wald (US 2008/0168003 A1; July 10, 2008) and Hill (US 2005/0060209 A1; Mar. 17, 2005). Final Act. 5–14.

ANALYSIS

Patent-Ineligible Subject Matter

An invention is patent eligible if it claims a “new and useful process, machine, manufacture, or composition of matter.” 35 U.S.C. § 101. However, the Supreme Court has long interpreted 35 U.S.C. § 101 to include implicit exceptions: “[l]aws of nature, natural phenomena, and abstract ideas” are not patentable. *E.g.*, *Alice Corp. v. CLS Bank Int’l*, 573 U.S. 208, 216 (2014).

In determining whether a claim falls within an excluded category, we are guided by the Supreme Court’s two-step framework, described in *Mayo* and *Alice*. *Alice*, 573 U. S. at 217–18 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 75–77 (2012)). In accordance with that framework, we first determine what concept the claim is “directed to.” *See Alice*, 573 U.S. at 219 (“On their face, the claims before us are drawn to the concept of intermediated settlement, *i.e.*, the use of a third party to mitigate settlement risk.”); *see also Bilski v. Kappos*, 561 U.S. 593, 611 (2010)

(“Claims 1 and 4 in petitioners’ application explain the basic concept of hedging, or protecting against risk.”).

Concepts determined to be abstract ideas, and thus patent ineligible, include certain methods of organizing human activity, such as fundamental economic practices (*Alice*, 573 U.S. at 219–20; *Bilski*, 561 U.S. at 611); mathematical formulas (*Parker v. Flook*, 437 U.S. 584, 594–95 (1978)); and mental processes (*Gottschalk v. Benson*, 409 U.S. 63, 69 (1972)). Concepts determined to be patent eligible include physical and chemical processes, such as “molding rubber products” (*Diamond v. Diehr*, 450 U.S. 175, 191 (1981)); “tanning, dyeing, making water-proof cloth, vulcanizing India rubber, smelting ores” (*id.* at 183 n.7 (quoting *Corning v. Burden*, 56 U.S. (15 How.) 252, 267–68 (1854))); and manufacturing flour (*Benson*, 409 U.S. at 69 (citing *Cochrane v. Deener*, 94 U.S. 780, 785 (1876))).

In *Diehr*, the claim at issue recited a mathematical formula, but the Supreme Court held that “[a] claim drawn to subject matter otherwise statutory does not become nonstatutory simply because it uses a mathematical formula.” *Diehr*, 450 U.S. at 176; *see also id.* at 191 (“We view respondents’ claims as nothing more than a process for molding rubber products and not as an attempt to patent a mathematical formula.”). Having said that, the Supreme Court also indicated that a claim “seeking patent protection for that formula in the abstract . . . is not accorded the protection of our patent laws, . . . and this principle cannot be circumvented by attempting to limit the use of the formula to a particular technological environment.” *Id.* (citation omitted) (citing *Benson* and *Flook*); *see, e.g., id.* at 187 (“It is now commonplace that an *application* of a law of nature or

mathematical formula to a known structure or process may well be deserving of patent protection.”).

If the claim is “directed to” an abstract idea, we turn to the second step of the *Alice* and *Mayo* framework, where “we must examine the elements of the claim to determine whether it contains an ‘inventive concept’ sufficient to ‘transform’ the claimed abstract idea into a patent-eligible application.” *Alice*, 573 U.S. at 221 (quotation marks omitted). “A claim that recites an abstract idea must include ‘additional features’ to ensure ‘that the [claim] is more than a drafting effort designed to monopolize the [abstract idea].’” *Id.* (alterations in original) (quoting *Mayo*, 566 U.S. at 77). “[M]erely requir[ing] generic computer implementation[] fail[s] to transform that abstract idea into a patent-eligible invention.” *Id.*

The PTO recently published revised guidance on the application of § 101. USPTO’s January 7, 2019 Memorandum, *2019 Revised Patent Subject Matter Eligibility Guidance* 84 Fed. Reg. 50 (“Revised Guidance”). Under that guidance, we first look to whether the claim recites:

- (1) any judicial exceptions, including certain groupings of abstract ideas (i.e., mathematical concepts, certain methods of organizing human activity such as a fundamental economic practice, or mental processes); and
- (2) additional elements that integrate the judicial exception into a practical application (*see* Manual of Patent Examining Procedure (“MPEP”) §§ 2106.05(a)–(c), (e)–(h)).

Only if a claim (1) recites a judicial exception and (2) does not integrate that exception into a practical application, do we then look to whether the claim:

(3) adds a specific limitation beyond the judicial exception that is not “well-understood, routine, conventional” in the field (*see* MPEP § 2106.05(d)); or

(4) simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception.

See Revised Guidance.

Revised Guidance Step 1

Step 1 of the Revised Guidance asks whether the claimed subject matter falls within the four statutory categories of patentable subject matter identified by 35 U.S.C. § 101: process, machine, manufacture, or composition of matter. *See* Revised Guidance. Claim 1 recites “[a] financial plan management system.” Appellant does not argue the Examiner erred in concluding claim 1 falls within the four statutory categories of patentable subject matter. We agree with the Examiner’s conclusion because claim 1 falls within the machine or manufacture category.

Revised Guidance Step 2A, Prong 1

Under Step 2A, Prong 1 of the Revised Guidance, we determine whether the claims recite any judicial exceptions, including certain groupings of abstract ideas (i.e., mathematical concepts, certain methods of organizing human activity such as a fundamental economic practice, or mental processes). *See* Revised Guidance.

The Examiner concludes claim 1 is directed to a financial plan guaranteeing income for a beneficiary. Final Act. 2–3; Ans. 4. The Examiner concludes claim 1 is, therefore, directed to a fundamental economic

principle, which is one of certain methods of organizing human activity identified as an abstract idea in the Revised Guidance. *See* Ans. 4.

Appellant argues the Examiner erred in concluding claim 1 is directed to an abstract idea. *See* Appeal Br. 14–17; Reply Br. 4–5. In particular, Appellant argues claim 1 is not directed to a financial plan guaranteeing income for a beneficiary, but instead is directed to unique and unconventional systems and methods that manage a financial plan. Appeal Br. 14–15. According to Appellant, claim 1 recites a financial plan wherein some or all of a financial contribution is allocated to at least one variable return investment from each of a first and second category, where each category is associated with specific risks and rates of return. *Id.* at 15. Appellant argues the method further includes determining an income amount paid to a beneficiary even if the balance of the account is depleted. *Id.* at 15. Appellant argues the claims, therefore, recite a particular manner of managing a financial plan that poses no risk of preemption. *Id.* at 15–16.

Appellant further argues claim 1 is not directed to a fundamental economic practice because if it were, the Examiner would have rejected the claims as anticipated by a single reference. *Id.* at 16–17.

Claim 1 recites “[a] financial plan management system” that includes one or more processors operable to perform the steps numbered one through eleven above. We agree with the Examiner that these limitations, under their broadest reasonable interpretation, recite a financial plan guaranteeing income for a beneficiary. For example, the “store” step recited in limitation (1) characterizes storing information related to a financial plan that guarantees income to a beneficiary. The “allocate” and “periodically distribute” steps recited in limitations (2) and (3) characterize allocating

funds to investments in categories based on the expected rate of return and expected risk of the categories, where the ratio of risk to return changes over time. The “calculate” steps recited in limitations (10) and (11) characterize calculating the amount of income to pay to a beneficiary even if an account is depleted, where this calculation is based on information gathered or determined in steps (4) through (8). At a high level, these steps collectively recite a financial plan guaranteeing income for a beneficiary.

Appellant’s argument that the claims pose no risk of preemption is not persuasive of Examiner error. Preemption is the concern that drives the exclusionary principle of judicial exceptions to patent-eligible subject matter. *Alice*, 134 S. Ct. at 2354. However, preemption is not a separate test of patent-eligibility, but is inherently addressed within the *Alice* framework. *See Ariosa Diagnostics, Inc., v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015) (“While preemption may signal patent ineligible subject matter, the absence of complete preemption does not demonstrate patent eligibility.”). Thus, concerns regarding preemption are addressed by evaluating the claims under the framework set forth in the Revised Guidance.

Appellant’s argument that claim 1 recites a unique, unconventional financial plan that was not rejected as anticipated by a single reference is unpersuasive because anticipation and obviousness are separate tests from patent eligibility. Indeed, a novel and nonobvious claim directed to a purely abstract idea is, nonetheless, patent-ineligible. *See Mayo*, 566 U.S. at 77.

Thus, under the broadest reasonable interpretation, claim 1 recites guaranteeing an income amount to a beneficiary of a financial plan, based on calculated amounts in investment accounts managed according to risk and

reward profiles that change over time according to specified rules. We, therefore, conclude claim 1 recites a fundamental economic practice, which falls within the certain methods of organizing human activity category of abstract ideas identified in the Revised Guidance.

Revised Guidance Step 2A, Prong 2

Under Step 2A, Prong 2 of the Revised Guidance, we next determine whether the claims recite additional elements that integrate the judicial exception into a practical application (*see* MPEP §§ 2106.05(a)–(c), (e)–(h)).

The “additional elements” recited in claim 1 include “one or more memory modules” and “one or more processors.” None of these additional elements constitute “additional elements that integrate the exception into a practical application.” *See id.* To integrate the exception into a practical application, the additional claim elements must, for example, improve the functioning of a computer or any other technology or technical field (*see* MPEP § 2106.05(a)), apply the judicial exception with a particular machine (*see* MPEP § 2106.05(b)), affect a transformation or reduction of a particular article to a different state or thing (*see* MPEP § 2106.05(c)), or apply or use the judicial exception in some other meaningful way beyond generally linking the use of the judicial exception to a particular technological environment (*see* MPEP § 2106.05(e)). *See* Revised Guidance.

Appellant argue claim 1 recites a unique method and system of managing a financial plan and that conventional methods of managing a financial plan may make plan sponsors more susceptible to lawsuits. *See* Appeal Br. 17–18. Appellant identifies several “technical advantages” of the claimed subject matter to support this argument. *See id.* (citing Spec. 5:25–[7:]5).

Appellant has not persuaded us of Examiner error. The “technical advantages” identified by Appellant are advantages achieved by the abstract idea itself, not any improvement to technology or a technical field. For example, Appellant argues “certain embodiments may allow an account holder to participate in a secure retirement fund that automatically accumulates contributions and guarantees income distribution for life.” *See id.* This purported advantage relates to the manner in which the financial plan is managed, not any improvement to technology or a technical field. Thus, this advantage, like the others identified by Appellant (*see id.* at 17–18), relates to an improvement to the abstract idea itself.

Thus, the nature of claim 1 as a whole is not to define a specific technological improvement, which may constitute integrating the claims into a practical application. Instead, claim 1 merely recites the steps necessary to perform the abstract idea itself. Our reviewing court has “made clear that mere automation of manual processes using generic computers does not constitute a patentable improvement in computer technology.” *Credit Acceptance Corp. v. Westlake Servs.*, 859 F.3d 1044, 1055 (Fed. Cir. 2017). Like the claims in *Credit Acceptance*, the focus of claim 1 is on the business practice of performing the claimed calculations to manage the financial plan, “and the recited generic computer elements ‘are invoked merely as a tool.’” *Id.* (citing *Enfish*, 822 F.3d 1327); *see also Versata Dev. Grp., Inc. v. SAP Am., Inc.*, 793 F.3d 1306, 1334 (Fed. Cir. 2015) (collecting cases).

Specifically, the claimed “one or more memory modules” and “one or more processors,” used to achieve the claimed results and are not focused on “a specific means or method that improves the relevant technology.” *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1314 (Fed. Cir.

2016). Appellant’s Specification confirms the generic, conventional nature of the claimed memory modules and processors. *See* Spec. 54:10–55:21.

Thus, Appellant has not persuaded us of Examiner error with respect to Step 2A, Prong 2 of the Revised Guidance. We, therefore, conclude the judicial exception is not integrated into a practical application under the Revised Guidance.

Revised Guidance Step 2B

Under Step 2B of the Revised Guidance, we next determine whether the claims recite an “inventive concept” that “must be significantly more than the abstract idea itself, and cannot simply be an instruction to implement or apply the abstract idea on a computer.” *Bascom Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1349 (Fed. Cir. 2016). There must be more than “computer functions [that] are ‘well-understood, routine, conventional activit[ies]’ previously known to the industry.” *Alice*, 573 U.S. at 225 (second alteration in original) (quoting *Mayo*, 566 U.S. at 73).

Appellant argues claim 1 recites significantly more than merely describing and applying the abstract idea. *See* Appeal Br. 17–18; Reply Br. 5–6. In particular, Appellant argues the Examiner erred in concluding limitations (3), (9), (10), and (11) are insignificant extra-solution activity because these elements are integral to the claimed invention. *See* Reply Br. 5. Appellant also argues that to the extent the Examiner finds these limitations recite activities that are well-understood, routine, or conventional, the Examiner has not satisfied its burden in this regard. *Id.* (citing *Berkheimer v. HP Inc.*, 881 F.3d 1360 (Fed. Cir. 2018)).

Appellant has not persuaded us of Examiner error. Appellant's argument mischaracterizes the Examiner's findings regarding limitations (3), (9), (10), and (11). With regard to the "periodically distributing" step in limitation (3), the Examiner concludes this is a fundamental economic practice and, therefore, does not recite significantly more than the abstract idea itself. *See* Ans. 6–7. Regarding the "in response," and "calculate" steps in limitations (9)–(11), the Examiner also concludes these steps are part of the fundamental economic practice. *See id.* at 8.

As discussed above, we agree with the Examiner that these steps, among others, are part of the abstract idea of a financial plan guaranteeing income for a beneficiary. Appellant has not argued that the additional elements discussed above with respect to Prong 2A, Step 2, are not well-understood, routine, or conventional. *See* Reply Br. 5–6. Even if such an argument had been made, the Specification confirms the generic, conventional nature of these components. *See* Spec. 54:10–55:21.

For these reasons, we agree with the Examiner that the claims do not recite an "inventive concept" sufficient to transform the claims from an abstract idea to a patent eligible application. We, therefore, sustain the patent-ineligible subject matter rejection of claim 1. We also sustain the rejection of independent claims 19, 59, and 60, which Appellant argues is patent-eligible for the same reasons. *See* Appeal Br. 13–18; Reply Br. 4–6. We also sustain the rejection of dependent claims 2–9, 11–14, 16, 17, 20–27, 29–32, 34, 35, 57, and 58, for which Appellant rely on the same arguments. *See id.*

Obviousness

We have reviewed the Examiner's obviousness rejections in consideration of Appellant's contentions and the evidence of record. Appellant persuades us the Examiner fails to establish that the claims are unpatentable over the cited references.

The Examiner finds the combination of Wald and Hill teaches or suggests "calculate the income amount as a percentage of the protected value," as recited in claim 1. Final Act. 7 (citing Wald ¶¶ 41, 42, 53); Ans. 13–14 (citing Wald ¶¶ 26, 41, 42, 53; Hill ¶¶ 74–75). In particular, the Examiner finds Wald teaches the claimed "calculate" step and Hill teaches paying the income amount to the beneficiary even if the balance of the financial account is depleted. *See id.*

Appellant argues the Examiner erred because neither Wald nor Hill teaches or suggests the claimed calculation. *See* Appeal Br. 10–11; Reply Br. 3–4. In particular, Appellant argues the Examiner finds Wald's "protected value" corresponds to the "guaranteed principal" recited in claim 1. Appeal Br. 10 (citing Final Act. 7). According to Appellant, Wald does not teach calculating an income amount as a percentage of the guaranteed principal, as required by the claim. *Id.*

Appellant has persuaded us of Examiner error. Claim 1 recites, in relevant part, "in response to the determination that the account holder has reached the particular age: determine a base value, the base value being equal to the balance of the financial account at the time the base value is determined;" "calculate a protected value, wherein the protected value is at least equal to the base value;" and "calculate the income amount as a percentage of the protected value, wherein the income amount is paid to the

beneficiary even if the balance of the financial account is depleted.” Thus, the income amount is a percentage of the protected value, where the protected value is at least equal to the base value, where the base value is equal to the balance of the financial account at the time the account holder reaches a particular age. In finding Wald teaches the claimed calculation, the Examiner finds Wald discloses guaranteeing principal protection (protected value) along with capital appreciation (income). Ans. 14. The Examiner concludes it would have been obvious to calculate the appreciated account value as a percentage of the total account value or as a percentage of guaranteed principal. *Id.* However, the Examiner does not support these findings and conclusions with citations to the teachings of Wald, Hill, or any other reference. Instead, the Examiner makes conclusory findings that do not directly address the limitations as issue. Accordingly, we are constrained by the record to agree with Appellant that the Examiner has not sufficiently established the combination of Wald and Hill teaches or suggests, “calculate[ing] the income amount as a percentage of the protected value.” We, therefore, do not sustain the Examiner’s rejection of independent claim 1 as unpatentable over Wald and Hill.² We also do not sustain the obviousness rejection of independent claims 19, 59, and 60, which recite commensurate subject matter, and dependent claims 2–9, 11–14, 16, 17, 20–27, 29–32, 34, 35, 57, and 58.

² Because we agree with at least one of the dispositive arguments advanced by Appellant with respect to the obviousness rejections, we need not reach the merits of Appellant’s other arguments regarding claim 1.

CONCLUSION

Claims Rejected	35 U.S.C. §	Basis	Affirmed	Reversed
1-9, 11-14, 16, 17, 19-27, 29-32, 34, 35, 57-60	101	Eligibility	1-9, 11-14, 16, 17, 19-27, 29-32, 34, 35, 57-60	
1-9, 11-14, 16, 17, 19-27, 29-32, 34, 35, 57-60	103	Wald, Hill		1-9, 11-14, 16, 17, 19-27, 29-32, 34, 35, 57-60
Overall Outcome			1-9, 11-14, 16, 17, 19-27, 29-32, 34, 35, 57-60	

DECISION

We affirm the rejection of claims 1-9, 11-14, 16, 17, 19-27, 29-32, 34, 35, and 57-60 under 35 U.S.C. § 101.

We reverse the Examiner's decision rejecting claims 1-9, 11-14, 16, 17, 19-27, 29-32, 34, 35, and 57-60 under pre-AIA 35 U.S.C. § 103(a).

Because we have sustained at least one ground of rejection with respect to each claim on appeal, we affirm the decision of the Examiner rejecting claims 1-18. *See* 37 C.F.R. § 41.50(a)(1).

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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. § 41.50(f).

AFFIRMED