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### UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte STEPHEN J. DEVANEY, ANDREY LYALKO, STEVEN A. FEINSCHREIBER, KLARA B. ISKOZ, and ROBERT L. MACDONALD

Appeal 2016-006516<sup>1</sup> Application 13/312,399<sup>2</sup> Technology Center 3600

Before MURRIEL E. CRAWFORD, NINA L. MEDLOCK, and PHILIP J. HOFFMANN, *Administrative Patent Judges*.

MEDLOCK, Administrative Patent Judge.

### **DECISION ON APPEAL**

#### STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's final rejection of claims 1–8 and 10–14. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

<sup>&</sup>lt;sup>1</sup> Our decision references Appellants' Appeal Brief ("Br.," filed October 27, 2015) and the Examiner's Answer ("Ans.," mailed April 11, 2016) and Final Office Action ("Final Act.," mailed March 2, 2015).

<sup>&</sup>lt;sup>2</sup> Appellants identify FMR LLC as the real party in interest. Br. 2.

## **CLAIMED INVENTION**

Appellants' claimed invention "relates generally to methods and systems, including computer program products, for developing retirement income plans, and more particularly to an income product selector that calculates portfolios of income-generating financial products to help meet the retiree's income needs throughout retirement" (Spec. ¶ 1).

Claims 1, 11, and 13 are the independent claims on appeal. Claim 1, reproduced below with bracketed notations added, is illustrative of the claimed subject matter:

# 1. A method comprising:

- [(a)] determining, by a computing device, a first income need to meet essential expenses for a user during retirement;
- [(b)] determining, by the computing device, a second income need to meet discretionary expenses for the user during retirement;
- [(c)] calculating, by the computing device, income coverage percentages of the first income need and the second income need to be covered by a portfolio of different classes of income generating products;
- [(d)] calculating, by the computing device, based on the income coverage percentages a default target income mix expressed as a set of weights representing an initial distribution of assets for investing in the portfolio of the different classes of income generating products that results in representative incomes covering the first income need and the second income need, the representative incomes being determined from representative product quotes of the different classes of income generating products;
- [(e)] quantifying, by the computing device, qualitative user investment preferences into predetermined quantified user investment preferences;

- [(f)] converting, by the computing device, the quantified user investment preferences into overall weight adjustment values for the different classes of income generating products of the default targeted income mix, wherein the converting step further comprises for each of the different classes of income generating products:
  - (i) for each of the quantified user investment preferences, generating a maximum weight adjustment value derived from the respective user investment preference;
  - (ii) for each of the quantified user investment preferences, generating a calculated value that is representative of a relationship between select attributes for that class and the respective user investment preference, the calculated value being expressed as a weighted sum of predetermined scores corresponding to the select attributes for that class relative to the quantified user investment preference, each of the select attribute scores being weighted by a percentage value that reflects its applicability to the quantified user investment preference;
  - (iii) for each of the quantified user investment preferences, generating an individual weight adjustment value expressed as the product of the calculated value generated for that class and the maximum weight adjustment value associated with the respective user investment preference;
  - (iv) generating an overall weight adjustment value corresponding to that class by summing each of the individual weight adjustment values;
- [(g)] adjusting, by the computing device, the set of weights of the default target income mix based on the overall weight adjustment values generated for the different classes of income generating products to form an adjusted target income mix expressed as a second set of weights in the portfolio of the different classes of income generating products.

## REJECTION

Claims 1–8 and 10–14 are rejected under 35 U.S.C. § 101 as directed to non-statutory subject matter.

### **ANALYSIS**

Under 35 U.S.C. § 101, an invention is patent-eligible if it claims a "new and useful process, machine, manufacture, or composition of matter." 35 U.S.C. § 101. The Supreme Court, however, has long interpreted § 101 to include an implicit exception: "[1]aws of nature, natural phenomena, and abstract ideas" are not patentable. *See, e.g., Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 134 S. Ct. 2347, 2354 (2014).

The Supreme Court, in *Alice*, reiterated the two-step framework previously set forth in *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 566 U.S. 66 (2012), "for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts." *Alice Corp.*, 134 S. Ct. at 2355. The first step in that analysis is to "determine whether the claims at issue are directed to one of those patent-ineligible concepts." *Id.* If the claims are not directed to a patent-ineligible concept, e.g., an abstract idea, the inquiry ends. Otherwise, the inquiry proceeds to the second step where the elements of the claims are considered "individually and 'as an ordered combination" to determine whether there are additional elements that "transform the nature of the claim' into a patent-eligible application." *Alice Corp.*, 134 S. Ct. at 2355 (quoting *Mayo*, 566 U.S. at 79, 78).

The Court acknowledged in *Mayo*, that "all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas." *Mayo*, 566 U.S. at 71. We, therefore, look to whether the

claims focus on a specific means or method that improves the relevant technology or are instead directed to a result or effect that itself is the abstract idea and merely invoke generic processes and machinery.

See Enfish, LLC v. Microsoft Corp., 822 F.3d 1327, 1336 (Fed. Cir. 2016).

In rejecting the pending claims under 35 U.S.C. § 101, the Examiner determines that the claims are directed to "purchasing investment products to cover projected future income needs," i.e., to a fundamental economic practice, and, therefore, to an abstract idea; and that the claims do not include additional elements or a combination of elements that are sufficient to amount to significantly more than the abstract idea because

[t]he additional element(s) or combination of elements in the claim(s)... amount(s) to no more than: (i) mere instructions to implement the idea on a computer, and/or (ii) recitation of generic computer structure that serves to perform generic computer functions that are well-understood, routine, and conventional activities previously known to the pertinent industry

(Final Act. 2–3).

Addressing step one of the *Mayo/Alice* framework, Appellants argue that the claims are not directed to an abstract idea because the claims do not threaten to monopolize or preempt the idea of "purchasing investment products to cover projected future income needs" (Br. 11–12). Instead, according to Appellants, the claims "explicitly recite a specific target income mix structure that is mapped to predefined, specific product models in order to generate a detailed product purchase amount schedule" (*id.* at 12).

There is no dispute that the Supreme Court has described "the concern that drives [the exclusion of abstract ideas from patent eligible subject matter] as one of pre-emption." *Alice Corp.*, 134 S. Ct. at 2354. But,

characterizing pre-emption as a driving concern for patent eligibility is not the same as characterizing pre-emption as the sole test for patent eligibility. "The Supreme Court has made clear that the principle of preemption is the basis for the judicial exceptions to patentability" and "[f]or this reason, questions on preemption are inherent in and resolved by the § 101 analysis." *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015) (citing *Alice*, 134 S. Ct. at 2354). "[P]reemption may signal patent ineligible subject matter, [but] the absence of complete preemption does not demonstrate patent eligibility." *Id*.

Turning to the second step of the Mayo/Alice framework, Appellants argue that even if the claims are directed to an abstract idea, the claims are nonetheless patent-eligible because each of independent claims 1, 11, and 13 recites limitations that "amount to an inventive concept that is 'significantly more' than the abstract idea of 'purchasing investment products to cover projected future income needs" (Br. 12–13). Quoting limitations (c) through (g), as recited in claim 1, Appellants assert that each of these limitations goes beyond generally linking the abstract idea, i.e., "'purchasing investment products to cover projected future income needs," to a particular technological environment at least because "the operations include analyzing a specific target income mix structure that is mapped to predefined, specific product models in order to generate a detailed product purchase amount schedule" (id. at 13–14). Yet, rather than constituting "significantly more," analyzing a specific target income mix structure to generate a product purchase schedule is merely part of the abstract idea itself. The only claim element beyond the abstract idea is the "computing device," i.e., a generic computer component (see, e.g., Spec. ¶ 244 ("The computing device can

include, for example, a computer, a computer with a browser device, a telephone, an IP phone, a mobile device (e.g., cellular phone, personal digital assistant (PDA) device, laptop computer, electronic mail device), and/or other communication devices")), on which the claimed method is performed — which is not enough to make an otherwise ineligible claim patent-eligible. *See*, *e.g.*, *DDR Holdings*, *LLC v. Hotels.com*, *L.P.*, 773 F.3d 1245, 1256 (Fed. Cir. 2014) ("[A]fter *Alice*, there can remain no doubt: recitation of generic computer limitations does not make an otherwise ineligible claim patent-eligible. The bare fact that a computer exists in the physical rather than purely conceptual realm is beside the point." (internal citations and quotation marks omitted)).

We also are not persuaded of Examiner error by Appellants' argument that the claims recite a patent-eligible inventive concept and add specific limitations that are not "well-understood, routine, and conventional" activities in the field of online retirement planning tools because the claims have been deemed novel and non-obvious over the cited references (Br. 15–16). A finding of novelty or non-obviousness does not automatically lead to the conclusion that claimed subject matter is patent-eligible. Although the second step in the *Mayo/Alice* framework is termed a search for an "inventive concept," the analysis is not an evaluation of novelty or non-obviousness, but rather, a search for "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.*, 134 S. Ct. at 2355 (citation omitted). "Groundbreaking, innovative, or even brilliant discovery does not by itself satisfy the § 101 inquiry." *Ass'n. for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S.

576, 591 (2013). A novel and non-obvious claim directed to a purely abstract idea is, nonetheless, patent-ineligible. *See Mayo*, 566 U.S. at 90; *see also Diamond v. Diehr*, 450 U.S. 175, 188–89 (1981) ("The 'novelty' of any element or steps in a process, or even of the process itself, is of no relevance in determining whether the subject matter of a claim falls within the § 101 categories of possibly patentable subject matter.").

We are not persuaded, for the reasons set forth above, that the Examiner erred in rejecting claims 1–8 and 10–14 under 35 U.S.C. § 101. Therefore, we sustain the Examiner's rejection.

## **DECISION**

The Examiner's rejection of claims 1–8 and 10–14 under 35 U.S.C. § 101 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)(1)(iv).

# **AFFIRMED**