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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte NATHAN PIETER DEN HERDER, HAMILTON FOUT,
STEVEN L. PIERCE, ERIC ROSENBLATT, and JOHN D. TREADWELL

Appeal 2018-000082
Application 13/162,819
Technology Center 3600

Before ROBERT E. NAPPI, ST. JOHN COURTENAY III, and
LARRY J. HUME, *Administrative Patent Judges*.

COURTENAY, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134(a) from a final rejection of claims 1–3, 6, 13–15, 18, 23–27, and 29–42, which are all the claims pending in this application.¹ Claims 4, 5, 7–12, 16, 17, 19–22, and 28 are canceled. We have jurisdiction over the pending claims under 35 U.S.C. § 6(b). An oral hearing was conducted on September 19, 2019.

We affirm.

¹ The real party in interest is *Fannie Mae*, Assignee of the application. App. Br. 2 (emphasis added).

STATEMENT OF THE CASE ²

Introduction

Appellants' claimed invention "relates generally to property valuation, more particularly to valuation of properties proximate to specified geographic features, and still more particularly to predicting values of properties that border specified geographic features using a geographic information system (GIS) and an automated valuation model (AVM)." Spec. ¶ 1.

Rejections

- A. Claims 1–3, 6, 13–15, 18, 23–27, and 29–42 are rejected under 35 U.S.C. § 101, as being directed to a judicial exception, without significantly more. Final Act. 2.
- B. Claims 1, 13, 23–25, and 30 are rejected under pre-AIA 35 U.S.C. § 103(a) as being obvious over the teachings and suggestions of Stinson (US 8,046,306 B2; October 25, 2011), hereinafter "Stinson," in view of "Value of Ocean Proximity on Barrier Island Houses," Appraisal Journal, Published April 1, 2000, hereinafter "Ocean Proximity."
- C. Claims 2, 3, 6, 14, 15, 18, 26, 27, 29, 31–33, 35–37, and 39–41 are rejected under pre-AIA 35 U.S.C. § 103(a) as being obvious over the teachings and suggestions of Stinson, "Ocean Proximity," in view of Hartz, Jr. et al. (US 6,636,803 B1; Oct. 21, 2003), hereinafter "Hartz."

² We herein refer to the Final Office Action, mailed January 13, 2017 ("Final Act."); Appeal Brief, filed June 7, 2017 ("App. Br."); Examiner's Answer, mailed August 1, 2017 ("Ans."), and the Reply Brief, filed Sept. 29, 2017 ("Reply Br.").

- D. Claims 34, 38, and 42 are rejected under pre-AIA 35 U.S.C. § 103(a) as being obvious over the teachings and suggestions of Stinson, “Ocean Proximity,” in view of Humphries et al. (US 8,140,421 B1; Mar. 20, 2012), hereinafter “Humphries.”

Issues on Appeal

1. Did the Examiner err in concluding that claims 1–3, 6, 13–15, 18, 23–27, and 29–42 are directed to a judicial exception, without significantly more, under 35 U.S.C. § 101?
2. Did the Examiner err in concluding that claims 1–3, 6, 13–15, 18, 23–27, and 29–42 are obvious over the cited combinations of references under pre-AIA 35 U.S.C. § 103(a)?

ANALYSIS

We reproduce representative independent claim 1 in Table One, *infra*. We have considered all of Appellants’ arguments and any evidence presented. To the extent Appellants have not advanced separate, substantive arguments for particular claims, or other issues, such arguments are waived. *See* 37 C.F.R. § 41.37(c)(1)(iv).

*Rejection under 35 U.S.C. § 101 of
Claims 1–3, 6, 13–15, 18, 23–27, and 29–42*

Issue: Under 35 U.S.C. § 101, did the Examiner err by rejecting claims 1–3, 6, 13–15, 18, 23–27, and 29–42, as being directed to a judicial exception, without significantly more?

Principles of Law — 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. 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.” *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 70 (2012) (quoting *Diamond v. Diehr*, 450 U.S. 175, 185 (1981)).

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 Corp. Pty. Ltd. v. CLS Bank Int’l*, 573 U.S. 208, 217–18 (2014) (citing *Mayo*, 566 U.S. at 75–77). 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.” (emphasis omitted)); *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 of rubber products” (*Diehr*, 450 U.S. at 193); “tanning, dyeing, making water-proof cloth, vulcanizing India rubber, smelting ores”

(*id.* at 182 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 187; *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.* (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 (citation 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.*

Subject Matter Eligibility — 2019 Revised Guidance

The USPTO recently published revised guidance on the application of 35 U.S.C. § 101. *See* 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (Jan. 7, 2019) (“2019 Revised Guidance”). *This new guidance is applied in this Opinion.* Under the 2019 Revised Guidance, we first look to whether the claim recites:

- (1) any judicial exceptions, including certain groupings of abstract ideas (i.e., mathematical concepts, mental processes, or certain methods of organizing human activity such as a fundamental economic practice or managing personal behavior or relationships or interactions between people);³ 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)).^{4, 5}

See 2019 Revised Guidance, 84 Fed. Reg. at 51–52, 55.

A claim that integrates a judicial exception into a practical application applies, relies on, or uses the judicial exception in a manner that imposes a meaningful limit on the judicial exception, such that the claim is more than a drafting effort designed to monopolize the judicial exception. *See* 2019

³ Referred to as “*Step 2A, Prong One*” in the Revised Guidance (hereinafter “*Step 2A, prong 1*”).

⁴ Referred to as “*Step 2A, Prong Two*” in the Revised Guidance (hereinafter “*Step 2A, prong 2*”).

⁵ All references to the MPEP are to the Ninth Edition, Revision 08.2017 (rev. Jan. 2018).

Revised Guidance, 84 Fed. Reg. at 54. When the judicial exception is so integrated, then the claim is not directed to a judicial exception and is patent eligible under 35 U.S.C. § 101. *Id.*

Only if a claim: (1) recites a judicial exception and (2) does not integrate that exception into a practical application, do we then evaluate whether the claim provides an inventive concept. *See* 2019 Revised Guidance, 84 Fed. Reg. at 56; *Alice*, 573 U.S. at 217–18.

For example, we 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, and conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception.⁶

See 2019 Revised Guidance, 84 Fed. Reg. at 56.

Because there is no single definition of an “abstract idea” under *Alice* step 1, the PTO has recently synthesized, for purposes of clarity, predictability, and consistency, key concepts identified by the courts as abstract ideas to explain that the “abstract idea” exception includes the following three groupings:

1. Mathematical concepts—mathematical relationships, mathematical formulas or equations, mathematical calculations;
2. Mental processes— concepts performed in the human mind (including an observation, evaluation, judgment, opinion); and
3. Certain methods of organizing human activity—fundamental economic principles or practices (including hedging,

⁶ Items (3) and (4) continue to be collectively referred to as “*Step 2B*” of the Supreme Court’s two-step framework, described in *Mayo* and *Alice*.

insurance, mitigating risk); commercial or legal interactions (including agreements in the form of contracts; legal obligations; advertising, marketing or sales activities or behaviors; business relations); managing personal behavior or relationships or interactions between people (including social activities, teaching, and following rules or instructions).

See 2019 Revised Guidance, 84 Fed. Reg. at 52.

According to the 2019 Revised Guidance, “[c]laims that do not recite [subject] matter that falls within these enumerated groupings of abstract ideas should not be treated as reciting abstract ideas,” except in rare circumstances. Even if the claims recite any one of these three groupings of abstract ideas, these claims are still not “directed to” a judicial exception (abstract idea), and thus are patent eligible, if “the claim as a whole integrates the recited judicial exception into a practical application of that exception.” *See* 2019 Revised Guidance, 84 Fed. Reg. at 53.

For example, limitations that **are** indicative of *integration into a practical application* include:

1. Improvements to the functioning of a computer, or to any other technology or technical field — *see* MPEP § 2106.05(a);
2. Applying the judicial exception with, or by use of, a particular machine — *see* MPEP § 2106.05(b);
3. Effecting a transformation or reduction of a particular article to a different state or thing — *see* MPEP § 2106.05(c); and
4. Applying or using the judicial exception in some other meaningful way beyond generally linking the use of the judicial exception to a particular technological environment, such that the claim as a whole is more than a drafting effort designed to monopolize the exception — *see* MPEP § 2106.05(e).

In contrast, limitations that are **not** indicative of *integration into a practical application* include:

1. Adding the words “apply it” (or an equivalent) with the judicial exception, or merely include instructions to implement an abstract idea on a computer, or merely uses a computer as a tool to perform an abstract idea — *see* MPEP § 2106.05(f);
2. Adding insignificant extra-solution activity to the judicial exception — *see* MPEP § 2106.05(g); and
3. Generally linking the use of the judicial exception to a particular technological environment or field of use — *see* MPEP 2106.05(h).

See 2019 Revised Guidance, 84 Fed. Reg. at 54–55 (“Prong Two”).

2019 Revised Guidance, Step 2A, Prong One⁷
The Judicial Exception

Under the 2019 Revised Guidance, we begin our analysis by first considering whether the claims recite any judicial exceptions, including certain groupings of abstract ideas, in particular: (a) mathematical concepts, (b) mental steps, and (c) certain methods of organizing human activities.

We note the Examiner concludes all claims 1–3, 6, 13–15, 18, 23–27, and 29–42 recite an abstract idea, i.e., estimating property value, including collecting and comparing known information, comparing new and stored information, and using rules to identify options,. Final Act. 4.

⁷ Throughout this opinion, we give the claim limitations the broadest reasonable interpretation consistent with the Specification. *See In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997).

TABLE ONE

In the table below, we identify in *italics* the specific claim limitations that we conclude recite an abstract idea. We additionally identify in **bold** the additional (non-abstract) claim limitations that are generic computer components:

Independent Claim 1	Revised 2019 Guidance
[a] A method for estimating property value, the method comprising:	A process (method) is a statutory subject matter class. <i>See</i> 35 U.S.C. § 101 (“Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.”).
[b] <i>accessing</i> , by a processing unit , property data describing a plurality of properties in a geographic area;, comprising:	accessing information is insignificant extra-solution activity. 2019 Revised Guidance, 55 n.31; <i>see also</i> MPEP § 2106.05(g).
[c] <i>identifying</i> , by the processing unit , two or more geographic features within the geographic area;	Abstract idea, i.e., “identifying” could be performed alternatively as a mental process. <i>See</i> 2019 Rev. Guid. 52.
[d] <i>comparing</i> each location of each property of the plurality of properties to each location of the two or more geographic features to automatically determine two or more distances and	Abstract idea, i.e., “comparing” could be performed alternatively as a mental process. <i>See</i> 2019 Rev. Guid. 52.

Independent Claim 1	Revised 2019 Guidance
<p>whether the each property of the plurality of properties borders the two or more geographic features;</p>	
<p>[e] <i>assigning</i> a first categorical value to the each property of the plurality of properties that borders the two or more geographic features;</p>	<p>Abstract idea, i.e., “assigning” could be performed alternatively as a mental process. <i>See</i> 2019 Rev. Guid. 52.</p>
<p>[f] <i>assigning</i> a second categorical value to the each property of the plurality of properties that does not border the two or more geographic features;</p>	<p>Abstract idea, i.e., “assigning” could be performed alternatively as a mental process. <i>See</i> 2019 Rev. Guid. 52.</p>
<p>[g] <i>performing</i>, by the processing unit, a hedonic regression based upon the property data, wherein the hedonic regression models a relationship between a price and explanatory variables including a first explanatory variable and a second explanatory variable, where:</p>	<p>Abstract idea, i.e., “performing” could be done as a mental process. <i>See</i> 2019 Rev. Guid. 52.</p> <p>We additionally note “a hedonic regression” is a mathematical concept — also a type of abstract idea.</p>
<p>[h] the first explanatory variable is a binary variable that includes only the first categorical value or the second categorical value for the each property of the plurality of properties based on whether the first</p>	<p>Insignificant extra-solution activity. <i>See</i> 2019 Revised Guidance, 55 n.31; <i>see also</i> MPEP § 2106.05(g).</p>

Independent Claim 1	Revised 2019 Guidance
categorical value or the second categorical value is assigned to the each property of the plurality of properties, and	
[i] the second explanatory variable is a distance proximity variable that identifies a proximity to the two or more geographic features for the each property of the plurality of properties based on the two or more distances determined for the each property of the plurality of properties;	Insignificant extra-solution activity. <i>See</i> 2019 Revised Guidance, 55 n.31; <i>see also</i> MPEP § 2106.05(g).
[j] <i>identifying</i> a subject property;	Abstract idea, i.e., “identifying” could be performed alternatively as a mental process. <i>See</i> 2019 Rev. Guid. 52.
[k] automatically ⁸ <i>determining</i> , by the	Abstract idea, i.e., “determining” could be performed alternatively as a

⁸ “Automation” or any increase in processing speed in the claimed method (as compared to without using computers) comes from the capabilities of the generic computer components, and not the recited process itself. *See FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1095 (Fed. Cir. 2016) (citing *Bancorp Servs., LLC v. Sun Life Assurance Co.*, 687 F.3d 1266, 1278 (Fed. Cir. 2012) (“[T]he fact that the required calculations could be performed more efficiently via a computer does not materially alter the patent eligibility of the claimed subject matter.”)); *see also Intellectual Ventures I LLC v. Erie Indemnity Co.*, 711 F. App’x 1012, 1017 (Fed. Cir. 2017) (unpublished) (“Though the claims purport to accelerate the process of finding errant files and to reduce error, we have held that speed and accuracy increases stemming from the ordinary capabilities of a general-

Independent Claim 1	Revised 2019 Guidance
<p>processing unit, a set of value adjustments based upon the hedonic regression and differences in the explanatory variables between the subject property and each property of a plurality of comparable properties, the set of value adjustments including</p>	<p>mental process. <i>See</i> 2019 Rev. Guid. 52.</p>
<p>[l] a <i>first adjustment</i> depending upon whether the subject property and the plurality of comparable properties border the two or more geographic features, and</p>	<p>Abstract idea, i.e., “the first adjustment” could be performed alternatively as a mental process. <i>See</i> 2019 Rev. Guid. 52.</p>
<p>[m] a <i>second adjustment</i> depending upon distances that the subject property and the plurality of comparable properties are from the two or more geographic features; and</p>	<p>Abstract idea, i.e., “the second adjustment” could be performed alternatively as a mental process. <i>See</i> 2019 Rev. Guid. 52.</p>
<p>[n] <i>estimating</i>, by the processing unit, a value of the subject property using the set of value adjustments.</p>	<p>Abstract idea, i.e., “estimating a value of the subject property” could be performed alternatively as a mental process. <i>See</i> 2019 Rev. Guid. 52.</p>

purpose computer ‘do[] not materially alter the patent eligibility of the claimed subject matter.’”).

Abstract Ideas — Mental Processes

We conclude the *italicized* abstract idea steps identified above in Table One could be performed alternatively as mental processes under the Revised Guidance. *See* Claim 1. *See* 2019 Revised Guidance, 84 Fed. Reg. at 52. Remaining independent claims 13 and 25 recite similar language of commensurate scope that we conclude also falls into the same abstract idea category of mental processes, as mapped above for independent claim 1. *See supra* Table One.

If a method can be performed by human thought alone, or by a human using pen and paper, it is merely an abstract idea and is not patent eligible under § 101. *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1372–73 (Fed. Cir. 2011); “That purely mental processes can be unpatentable, even when performed by a computer, was precisely the holding of the Supreme Court in *Gottschalk v. Benson*.” *CyberSource*, 654 F.3d at 1375. *See also Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1146–47 (Fed. Cir. 2016).

Moreover, “[u]sing a computer to accelerate an ineligible mental process does not make that process patent-eligible.” *Bancorp*, 687 F.3d at 1279; *see also OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1363 (Fed. Cir. 2015) (“relying on a computer to perform routine tasks more quickly or more accurately is insufficient to render a claim patent eligible.”).

Appellants urged during the Oral Hearing that the “processor” or “processing unit” limitations precluded the claims on appeal from being performed alternatively as a mental process. However, it is well settled, that whether a recited device is a tangible system or, in 35 U.S.C. § 101 terms, a “machine,” is not dispositive. *ChargePoint, Inc. v. SemaConnect, Inc.*, 920

F.3d 759, 770 (Fed. Cir. 2019) (quoting *In re TLI Commc'ns*, 823 F.3d 607, 611 (Fed. Cir. 2016) (“[N]ot every claim that recites concrete, tangible components escapes the reach of the abstract-idea inquiry.”). For a machine to impose a meaningful limit on the claimed invention, it must play a significant part in permitting a claimed method to be performed, rather than function solely as an obvious mechanism for permitting a solution to be achieved more quickly. *Versata Dev. Grp. v. SAP America, Inc.*, 793 F.3d 1306, 1335 (Fed. Cir. 2015); *see also* MPEP § 2106.05(b)(II) (citing *Versata*).

Additional Limitations

As emphasized in **bold** *supra*, we note the additional non-abstract limitations of generic computer components. The “processing unit” is the additional non-abstract limitation recited in independent claim 1. Similarly, independent claim 13 recites “an electronic processor,” and independent claim 25 recites “an apparatus” comprising, *inter alia*, “a processor” and “a memory.”

See 2019 Revised Guidance, 84 Fed. Reg. at 52. We also note the supporting description of generic computer and network components in the Specification, for example:

The present invention can be embodied in various forms, including business processes, computer implemented methods, computer program products, computer systems and networks, user interfaces, application programming interfaces, and the like.

Spec. ¶ 10.

We emphasize that *McRO, Inc. v. Bandai Namco Games America Inc.*, (837 F.3d 1299 (Fed. Cir. 2016)), guides: “[t]he abstract idea exception prevents patenting a *result* where ‘it matters not by what process or machinery the result is accomplished.’” 837 F.3d at 1312 (quoting *O’Reilly v. Morse*, 56 U.S. 62, 113 (1854)) (emphasis added).

Because we conclude all claims on appeal recite an abstract idea, as identified above, under *Step 2A, Prong One*, we proceed to *Step 2A, Prong Two*.

2019 Revised Guidance, Step 2A, Prong Two

Integration of the Judicial Exception into a Practical Application

Pursuant to the 2019 Revised Guidance, we consider whether there are additional elements set forth in the claims that integrate the judicial exception into a practical application. *See* 2019 Revised Guidance, 84 Fed. Reg. at 54–55.

MPEP § 2106.05(a)

*Improvements to the Functioning of a Computer or
to Any Other Technology or Technical Field*

McRO

In view of *McRO*, Appellants contend “the pending claims are not directed to an abstract idea, and satisfy the first prong of the *Alice* test because the pending claims are limited to a specific process or a specific structure for estimating property value using particular information and techniques.” App. Br. 29. In support, Appellants analogize particular claim elements in *McRO* to limitations in the claims on appeal (in brackets), as follows:

the claims at issue in [*McRO*], are “a combined order of specific rules that renders information [e.g., property data describing a plurality of properties in a geographic area] into a specific format [e.g., a set of value adjustments] that is then used and applied to create desired results [e.g., estimating a value of a subject property].”

App. Br. 33.

We find Appellants’ arguments based upon *McRO* are unavailing because we conclude Appellants’ claims are unlike the subject claim(s) considered by the court in *McRO*.⁹ The patent at issue in *McRO* describes that prior character animation and lip synchronization were accomplished by human animators, with the assistance of a computer, which involved the use of a so-called “keyframe” approach in which animators set appropriate parameters, i.e., morph weights, at certain important times, i.e., in order to produce accurate and realistic lip synchronization and facial expressions. *McRO*, 837 F.3d at 1305. Animators knew what phoneme a character pronounced at a given time from a time-aligned phonetic transcription (a “timed transcript”). *Id.*

In accordance with the prior technique, animators, using a computer, thus, manually determined the appropriate morph weight sets for each keyframe based on the phoneme timings in the timed transcript. *Id.* See also *SAP Am. v. InvestPic, LLC*, 898 F.3d 1161, 1167 (Fed. Cir. 2018) (distinguishing *McRO*):

The claims in *McRO* were directed to the creation of something physical—namely, the display of “lip synchronization and facial expressions” of animated characters on screens for viewing by human eyes. *Id.* at 1313. *The claimed improvement was to how the physical display operated (to produce better*

⁹ Appellants are referring to *McRO*, 837 F.3d 1299.

quality images), unlike (what is present here) a claimed improvement in a mathematical technique with no improved display mechanism. The claims in *McRO* thus were not abstract in the sense that is dispositive here. And those claims also avoided being “abstract” in another sense reflected repeatedly in our cases (based on a contrast not with “physical” but with “concrete”): they had the specificity required to transform a claim from one claiming only a result to one claiming a way of achieving it.

SAP, 898 F.3d at 1167 (emphasis added).

In contrast to the claimed invention in *McRO* that *improved how a physical display operated to produce better quality images (id.)*, claim 1 merely uses a generic “processing unit” to perform the recited steps that result in the final step of “estimating, by the processing unit, a value of the subject property using the set of value adjustments.”

Dependent claim 34 depends directly from claim 1 and further recites “responsive to estimating the value of the subject property using the set of value adjustments, *displaying* a map image and a property data grid on *a display screen* wherein the map image includes the subject property and the plurality of comparable properties.” (emphasis added).

However, it is our view that “merely displaying a map image and a property data grid on a display screen” (claim 34), without more, does not *improve the operation of a physical display*, as was the case in *McRO*, nor the operation of any other computer component, such as the generic “processing unit” recited in claim 1. *See SAP*, 898 F.3d at 1167. Moreover, we conclude Appellants’ generic computer “processing unit” implementation in method claim 1 performs steps that can be performed alternatively as mental processes, as discussed above.

We see nothing in Appellants' claims that specifically improves the efficiency of the "processing unit" (i.e., computer), display screen, or another technology or technical field, because Appellants' claims, at best, merely improve the abstract idea of "automatically determining, by the processing unit, a set of value adjustments based upon the hedonic regression and differences in the explanatory variables between the subject property and each property of a plurality of comparable properties" as part of a method of "estimating, by the processing unit, a value of the subject property using the set of value adjustments." Claim 1.

Accordingly, on this record, we conclude representative claim 1 does not recite an improvement to the functionality of a computer or other technology or technical field. *See* MPEP § 2106.05(a).

MPEP §§ 2106.05(b) and (c)
The Bilski Machine-or-Transformation test ("MoT")
as applied to method claims 41 and 42

At the outset, we note the Supreme Court cautions that the *MoT* test is not the sole test, but may provide a useful clue:

This Court's precedents establish that the machine-or-transformation test is a useful and important clue, an investigative tool, for determining whether some claimed inventions are processes under § 101. The machine-or-transformation test **is not the sole test** for deciding whether an invention is a patent-eligible "process."

Bilski, 561 U.S. at 604 (emphasis added).

Because a generic "processing unit" is recited in method claim 1, we conclude method claims 1–3, 6, 23, and 31–34 do not define or rely upon a "particular machine." *See* MPEP § 2106.05(b). Further, we conclude

method claims 1–3, 6, 23, and 31–34 do not transform an article to a different state or thing. *See* MPEP § 2106.05(c).

To the extent that Appellants argued during the Oral Hearing that the method claims on appeal provide a patentable *transformation of data*, we disagree.

The “[t]ransformation and reduction of an article ‘to a different state or thing’ is the clue to the patentability of a process claim that does not include particular machines.” *Gottschalk v. Benson*, 409 U.S. at 70.

“The mere manipulation or reorganization of data, however, does not satisfy the transformation prong.” *CyberSource*, 654 F.3d at 1375.

Therefore, we conclude method claim 1 fails to satisfy the transformation prong of the machine-or-transformation test. Thus, without more, we conclude method claims 1–3, 6, 23, and 31–34 do not use a “particular machine” to apply the judicial exception (*see* MPEP § 2106.05(b)), or perform a transformation of an article to a different state or thing (*see* MPEP § 2106.05(c)).

*MPEP § 2106.05(e) — Meaningful Claim Limitations*¹⁰

The Examiner finds the claims on appeal:

do not offer “significantly more” than the abstract idea itself because the claims do not recite an improvement to another technology or technical field, an improvement to the functioning of any computer itself, or provide *meaningful*

¹⁰ MPEP § 2106.05(e): “Applying or using the judicial exception in some other *meaningful* way beyond generally linking the use of the judicial exception to a particular technological environment, such that the claim as a whole is more than a drafting effort designed to monopolize the exception.” (emphasis added).

limitations beyond generally linking an abstract idea (estimating property value) to a particular technological environment (a general purpose computer).

Final Act. 6 (emphasis added).

Appellants do not advance substantive arguments to any particular “meaningful” claim limitations, such as those of the types addressed under MPEP § 2106.05(e). Accordingly, on this record, we conclude independent method claim 1 has no other argued meaningful limitations, as considered under section 2106.05(e) of the MPEP, under the 2019 Revised Guidance.

MPEP § 2106.05(f)
*Merely including instructions to implement
an abstract idea on a computer, or
Merely using a computer as a tool
to perform an abstract idea*

As mapped in the right column of Table One, *supra*, we note claim 1 recites the additional non-abstract limitation of a generic “processing unit.” Similarly, independent claim 13 recites “an electronic processor,” and independent claim 25 recites “an apparatus” comprising, inter alia, “a processor” and “a memory.”

Without more, we agree with the Examiner that Appellants’ claimed invention merely implements the abstract idea(s) using generic computer components, as depicted in **bold** type in Table One, *supra*. See Claim 1; Final Act. 7. Therefore, we are of the view that Appellants’ claims merely use a generic computer as a tool to perform an abstract idea.

MPEP § 2106.05(g)
Adding insignificant extra-solution activity
to the judicial exception

As mapped in the right column of Table One, *supra*, we conclude claim 1 recites extra or post-solution activities that courts have determined to be insufficient to transform judicially excepted subject matter into a patent-eligible application. *See* MPEP § 2106.05(g); 84 Fed. Reg. at 55 n.31.

MPEP § 2106.05(h)
Generally linking the use of the judicial exception to a particular
technological environment or field of use

The Supreme Court guides: “the prohibition against patenting abstract ideas ‘cannot be circumvented by attempting to limit the use of the formula to a particular technological environment’ or [by] adding ‘insignificant post solution activity.’” *Bilski v. Kappos*, 130 S. Ct. 3218 (2010), (quoting *Diamond v. Diehr*, 450 U.S. 175, 191–92 (1981)).

Appellants contend: “the pending claims are limited to a specific process or a specific structure for estimating property value using particular information and techniques, and the pending claims do not **preempt** approaches for estimating property value that use a different structure or different techniques.” App. Br. 29 (emphasis added).

In response, we note that preemption is not the sole test for patent eligibility. As our reviewing court has explained, “questions on preemption are inherent in and resolved by the § 101 analysis,” and, although “preemption may signal patent ineligible subject matter, the absence of complete preemption does not demonstrate patent eligibility.” *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015);

cf. OIP Techs, 788 F.3d at 1362–63 (“[T]hat 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.”).

Nor do claims 1–3, 6, 13–15, 18, 23–27, and 29–42 on appeal present any other issues as set forth in the 2019 Revised Guidance regarding a determination of whether the additional generic elements integrate the judicial exception into a practical application. *See* Revised Guidance, 84 Fed. Reg. at 55.

Thus, under *Step 2A, Prong Two* (MPEP §§ 2106.05(a)–(c) and (e)–(h)), we conclude claims 1–3, 6, 13–15, 18, 23–27, and 29–42 **do not integrate the judicial exception into a practical application**. Therefore, we proceed to *Step 2B, The Inventive Concept*.

The Inventive Concept – Step 2B

Under the 2019 Revised Guidance, 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 adds a specific limitation beyond the judicial exception that is not “well-understood, routine, conventional” in the field (*see* MPEP § 2106.05(d)); **or**, simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception.

We note the Examiner finds:

the claimed invention is directed towards the abstract idea of estimating property value and merely utilizing generic computing devices (see applicant[s’] specification at Page 15, paragraph [0084] which explicitly states that the invention is carried out on any conventional computing device) in order to

perform the *well-understood, routine, and conventional activities* known in the field of estimating property value.

Final Act. 42 (emphasis added).

We emphasize the Examiner’s finding is supported by a citation to the Specification, paragraph 84, as evidence. We additionally note Appellants have not traversed the Examiner’s specific finding (*id.*) in the Appeal Brief or the Reply Brief. Nor did Appellants substantively and persuasively traverse the Examiner’s findings regarding paragraph 84 of the Specification during the Oral Hearing, when this issue was discussed.

*BASCOM*¹¹

Appellants cite to *BASCOM* in support, and urge:

even assuming, in arguendo, that the pending claims are directed to an abstract idea, which the Examiner has yet to properly identify, Appellant submits that, similar to *Bascom*, the pending claims have an inventive concept that can be found in the ordered combination of claim limitations that transforms the abstract idea into a particular, practical application of that abstract idea.

App. Br. 33.

We find Appellants’ analogy to *BASCOM* unavailing. *Id.* The Federal Circuit held in *BASCOM* that the claimed Internet content filtering, which featured an implementation “versatile enough that it could be adapted to many different users’ preferences while also installed remotely in a single location,” expressed an inventive concept in “the non-conventional and non-generic arrangement of known, conventional pieces.” *BASCOM*, 827 F.3d at 1350.

¹¹ See *BASCOM Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341 (Fed. Cir. 2016).

Here, Appellants have not shown a non-conventional, non-generic *arrangement* regarding the non-abstract limitations of generic computer components. *See* independent claim 1. *See* 2019 Revised Guidance, 84 Fed. Reg. at 52.

Therefore, it is our view that Appellants' claims do not involve any improvements to another technology, technical field, or improvements to the functioning of the computer or network, as was seen by the court in *BASCOM*. Instead, we conclude Appellants' claims merely invoke generic computer components as a tool in which the instructions executing on the computer apply the judicial exception.

Further, regarding the use of the recited generic "processing unit" identified above in Table One, the Supreme Court has held "the mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention." *Alice*, 573 U.S. at 223. Our reviewing court provides additional guidance: *See FairWarning*, 839 F.3d at 1096 ("[T]he use of generic computer elements like a microprocessor or user interface do not alone transform an otherwise abstract idea into patent-eligible subject matter."); *OIP Techs*, 788 F.3d at 1363 (claims reciting, *inter alia*, sending messages over a network, gathering statistics, using a computerized system to automatically determine an estimated outcome, and presenting offers to potential customers found to merely recite "'well-understood, routine conventional activit[ies],' either by requiring conventional computer activities or routine data-gathering steps" (alteration in original)).

This reasoning is applicable here. Therefore, on the record before us, Appellants have not shown that the claims on appeal add a specific

limitation beyond the judicial exception that is not “well-understood, routine, and conventional” in the field (*see* MPEP § 2106.05(d)).

In light of the foregoing, we conclude, under the 2019 Revised Guidance, that each of Appellants’ claims, considered as a whole, is *directed to a patent-ineligible abstract idea that is not integrated into a practical application, and does not include an inventive concept.*

Accordingly, for the reasons discussed above, we sustain the Examiner’s Rejection under 35 U.S.C. § 101 of claims 1–3, 6, 13–15, 18, 23–27, and 29–42.¹²

*Rejection B
of Claims 1, 13, 23–25, and 30
under 35 U.S.C. § 103(a)*

Regarding Rejection B, the Examiner finds the combination of Stinson and “Ocean Proximity” teaches or suggests all limitations of claims 1, 13, 23–25, and 30. *See* Final Act. 8–17.

Combinability of the Cited References under 35 U.S.C. § 103(a)

As a threshold combinability issue, Appellants urge that the Examiner has not established a rational underpinning to modify Stinson with the teachings and suggestions of “Ocean Proximity.” In support, Appellants cite to *In re Hedges* (783 F.2d 1038 (Fed. Cir. 1986)) and contend:

Contrary to the Examiner's reasoning, a person having ordinary skill in the art at the time of the invention would not find it

¹² To the extent Appellants have not advanced separate, substantive arguments for particular claims, or other issues, such arguments are waived. *See* 37 C.F.R. § 41.37(c)(1)(iv).

obvious to “[a]dd an additional variable to an already established and well-known regression” because proceeding contrary to accepted wisdom in the art is evidence of nonobviousness. (Emphasis added). Therefore, the reasoning provided by the Examiner lacks rational underpinning because the evidence is of nonobviousness, and represents a clear error.

App. Br. 11.

We find Appellants’ argument unavailing, because we find the addition of an additional variable would have produce nothing more than a predictable result. *See KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 401 (2007) (“[A] combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.”).

In further support of the argument that the Examiner has not provided a rational underpinning to combine the references, Appellants argue the Examiner has relied upon impermissible hindsight. *Id.*

However, Appellants do not provide any evidence sufficient to demonstrate that combining the teachings of the cited references in the manner proffered by the Examiner (Final Act. 7–27), would have been “uniquely challenging or difficult for one of ordinary skill in the art,” *Leapfrog Enters., Inc. v. Fisher-Price, Inc.*, 485 F.3d 1157, 1162 (Fed. Cir. 2007), nor have Appellants provided any objective evidence of secondary considerations, which our reviewing court guides “operates as a beneficial check on hindsight,” *Cheese Sys., Inc. v. Tetra Pak Cheese and Powder Sys., Inc.*, 725 F.3d 1341, 1352 (Fed. Cir. 2013).

The Examiner sets forth a reason explaining why an artisan would have modified Stinson with the teachings and suggestions of “Ocean Proximity:”

[I]t would have been obvious to modify the method of Stinson to include the above-mentioned limitations of OceanProximity because, as stated above, the purpose of Stinson is to provide an accurate alternate method for valuation of a property based on specific variables, and Ocean Proximity, as supported by Page 2, paragraph [0001] is also providing an alternate method for valuation. The only difference in the two references is that Stinson deals with variables such as condition, quality, and location, whereas OceanProximity deals with the variable of proximity to the beach and ocean. Both serve the same purpose of providing an alternate method for valuation for given properties, and it would be beneficial to add proximity to the ocean as a variable and a variable indicating whether the property actually bordered the ocean to Stinson because it would broaden the application of Stinson to houses on beach fronts.

This way, as stated on Page 2, paragraph [0001] of OceanProximity, the appraisal system of Stinson can be beneficial to real estate agents, bank appraisers, and tax assessors that are evaluating the value of beachfront properties. As a point of clarification, OceanProximity is analogous art because it deals with providing a regression analysis modeling the relationship between price and explanatory variables.

Therefore, it would have been obvious to person having ordinary skill in the art at the time of the invention to modify the method of Stinson to include the above-mentioned limitations of OceanProximity because it will expand the potential use of the appraisal system of Stinson to real estate agents, bank appraisers, and tax assessors that are evaluating the value of beachfront properties.

Final Act. 15–16.

We find the Examiner has set forth sufficient “articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006). *See also* 35 U.S.C. § 132(a). Moreover, our reviewing court guides that the reason(s) or

motivation(s) to combine the references may often suggest what the inventor has done, but for a different purpose or to solve a different problem. It is not necessary that the prior art suggest the combination to achieve the same advantage or result discovered by Appellant. *See In re Kahn*, 441 F.3d 977, 987 (Fed. Cir. 2006) (motivation question arises in the context of the general problem confronting the inventor rather than the specific problem solved by the invention); *Cross Med. Prods., Inc. v. Medtronic Sofamor Danek, Inc.*, 424 F.3d 1293, 1323 (Fed. Cir. 2005) (“One of ordinary skill in the art need not see the identical problem addressed in a prior art reference to be motivated to apply its teachings.”).

Accordingly, on this record, we do not agree with Appellants that the Examiner has not provided sufficient “articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *Kahn*, 441 F.3d at 988.

Contested Limitations under 35 U.S.C. § 103(a)

Rejection B of Independent claims 1, 13, and 25

Regarding independent claims 1, 13, and 25, rejected under § 103 Rejections B, Appellants merely recite the claim language, and alleges such language is not taught or suggested by the combinations of prior art cited by the Examiner. *See Generally* App. Br. 8–16.

However, Appellants fail to advance persuasive, substantive arguments which compare and distinguish the disputed claim limitations from the combined teachings and suggestions of the cited references, as found by the Examiner. *See* 37 C.F.R. § 41.37(c)(1)(iv) (“A statement

which merely points out what a claim recites will not be considered an argument for separate patentability of the claim.”).

We are not persuaded of Examiner error based on Appellants’ other arguments because Appellants do not provide persuasive argument or evidence to support the assertions. It is well settled that mere attorney arguments and conclusory statements, which are unsupported by factual evidence, are entitled to little probative value. *In re Geisler*, 116 F.3d 1465, 1470 (Fed. Cir. 1997); *see also In re Pearson*, 494 F.2d 1399, 1405 (CCPA 1974) (attorney argument is not evidence).

To the extent that Appellants argue: “identifying two or more geographic features within the geographic area” and “comparing each location of each property of the plurality of properties to each location of the two or more geographic features to automatically determine two or more distances and whether the each property of the plurality of properties borders the two or more geographic features” (as recited in each independent claim) are not taught by the combination of Stinson and “Ocean Proximity, we note Appellants support this limitation argument only by arguing: (1) “Modification of an established and well-known regression is evidence of nonobviousness,” and (2) “The Examiner’s modification of an established and well-known regression uses impermissible hindsight.” We have fully addressed these arguments *supra*.

Therefore, on this record, we find a preponderance of the evidence supports the Examiner’s underlying factual findings and ultimate legal conclusion of obviousness for Rejection B of independent claims 1, 13, and 25, and we sustain the rejection.

*Rejection B of Claims 23, 24, and 30
under 35 U.S.C. § 103(a)*

Further regarding Rejection B, Appellants argue dependent claims 23, 24, and 30 together as a group. Using our authority under 37 C.F.R. § 41.37(c)(1)(iv), we select claim 23 as being representative of this group.

Appellants argue:

In particular, the combination of Stinson and Ocean Proximity is devoid of any disclosure or suggestion of “identifying two or more geographic features within the geographic area [and] comparing each location of each property of the plurality of properties to each location of the two or more geographic features to automatically determine two or more distances and whether the each property of the plurality of properties borders the two or more geographic features,” as claimed by Appellant.

App. Br. 17 (emphasis added).

We note that these argued limitations are recited in independent claims 1, 13, and 25, and not in claims 23, 24, and 30, which depend directly from claims 1, 13, and 25, respectively. The Examiner finds the combination of Stinson, “Ocean Proximity” and Hartz teaches or suggests all limitations of claims 23, 24, and 30. For claims 23, 24, and 30, the Examiner focuses on “Ocean Proximity” as evidence in support of the rejection:

Regarding claims 23, 24, and 30, the combination of Stinson and OceanProximity make obvious the method, computer program product, and apparatus of claims 1, 13, and 25. OceanProximity further teaches wherein the distance proximity variable is distance in miles from the two or more geographic features (Page 7, paragraph [0003] teaches that prior studies using hedonic regressions measured distance in miles, as opposed to feet, as used in OceanProximity. Further note that

the rejection for claims 1, 13, and 25 discuss why it would be obvious to modify the combination of references to include two or more geographic features).

See Final Act. 17.

Appellants respond:

The Examiner asserted that page 7, paragraph [0003] of Stinson teaches that prior studies using hedonic regressions measured distance in miles, as opposed to feet, as used in Ocean Proximity, and referred to the legal conclusion of obviousness of claims 1, 13, and 25. (see Office Action pg. 17).

Appellant disagrees because the Examiner has failed to provide any articulated reasoning with rational underpinning to support the legal conclusion of obviousness. Indeed, the Examiner merely summarizes the opposition between Stinson and Ocean Proximity and further notes the erroneous reasoning to modify the combination of references to include two or more geographic features.

However, the opposition between Stinson and Ocean Proximity weighs in the favor of nonobviousness. Indeed, the use of feet as a measurement in Ocean Proximity supports the interpretation of proximity to a single geographic feature, i.e., proximity to an ocean. (Emphasis added.)

App. Br. 18.

Turning to the evidence, “Ocean Proximity” describes:

The results here add to the literature on hedonic regressions for single-family residential real estate. Prior studies included scenic views and distance to the beach from inland locations. **The latter was measured in miles.** This study looks at the effect of price on identical residences, one of which is one house closer to the beach. The difference is substantial. While beach frontage is obviously important, the more subtle proximity amenity should not be ignored on **hedonic regressions** for barrier island property. To the extent that the assessed value of a house follows the market value, homeowners are being assessed at a higher value for the

proximity to the beach and the ocean. Assigning proper value for beach community residential property is important for tax purposes, particularly with regard to local contributions for beach maintenance.

“Ocean Proximity” page 7, paragraph 3.

We have addressed Appellants’ arguments *supra* regarding the Examiner’s proffered rationales for combining the references. To the extent Appellants are advancing a “teaching away” argument (App. Br. 18), our reviewing court guides that “[a] finding that the prior art as a whole suggests the desirability of a particular combination need not be supported by a finding that the prior art suggests that the combination claimed by the patent applicant is the preferred, or most desirable, combination.” *In re Fulton*, 391 F.3d 1195, 1200 (Fed. Cir. 2004). Teaching an alternative or equivalent method, however, does not teach away from the use of a claimed method. *In re Dunn*, 349 F.2d 433, 438 (CCPA 1965).

We note there is no requirement in an obviousness analysis for the prior art to “contain a description of the subject matter of the appealed claim in *ipsisssimis verbis*.” *In re May*, 574 F.2d 1082, 1090 (CCPA 1978) (emphasis added). Moreover, “the question under 35 USC 103 is not merely what the references expressly teach but what they would have *suggested* to one of ordinary skill in the art at the time the invention was made.” *Merck & Co., Inc. v. Biocraft Labs., Inc.*, 874 F.2d 804, 807 (Fed. Cir. 1989) (quoting *In re Lamberti*, 545 F.2d 747, 750 (CCPA 1976) (emphasis added)); *see also* MPEP § 2123.

This reasoning is applicable here. Therefore, based upon a preponderance of the evidence, we are not persuaded the Examiner erred regarding the legal conclusion of obviousness for grouped dependent claims

23, 24, and 30. Accordingly, we sustain the Examiner's Rejection B of representative claim 23, and claims 24, and 30 which fall with claim 23. *See* 37 C.F.R. § 41.37(c)(1)(iv).

Rejection C
of Claims 2, 3, 6, 14, 15, 18, 26, 27, 29, 31–33, 35–37, and 39–41
under 35 U.S.C. § 103(a)

Regarding Rejection C, the Examiner finds the combination of Stinson, "Ocean Proximity" and Hartz teaches or suggests all limitations of claims 2, 3, 6, 14, 15, 18, 26, 27, 29, 31–33, 35–37, and 39–41. *See* Final Act. 17–26.

Appellants focus their arguments on dependent claim 31, which we consider to be illustrative of all the claims rejected under Rejection C, because claims 2, 14, 26, 35, and 39 each recite similar limitations as claim 31, having commensurate scope. The remaining claims which were rejected under Rejection C (claims 3, 6, 15, 18, 27, 29, 32, 33, 36, 37, 40, and 41) each depend from one of claims 2, 14, 26, 31, 35, or 39.

Specifically, Appellants contend the following limitations of claim 31 are not taught or suggested by the Examiner's proffered combination of Stinson, "Ocean Proximity" and Hartz:

determining shapes from map data that correspond to at least in part to boundaries of the two or more geographic features; . . .
expanding the shapes by a predetermined amount; and

determining whether the each property of the plurality of properties borders the two or more geographic features based on whether one or more of the shapes overlaps a parcel of the each property of the plurality of properties.

Claim 31, *see* specific limitations contested on page 22 of the Appeal Brief.

In support, Appellants argue:

The Examiner again asserted that Hartz discloses “a search and retrieval system which displays icons representing properties in a given real-estate market on a digital map” and teaches the above-noted features at col. 7, lines 1-15 and 45-60. (see Office Action pg. 22). Appellant disagrees. Contrary to the assertions of the Examiner, at col. 7, lines 1-15 and 45-60, Hartz states the following:

[(Appellants reproduce portions of Hartz col. 7 on pages 22–23 of the Appeal Brief)].

At best, Hartz describes a Zoom Out and a Zoom In function. However, there is no disclosure of "determining shapes from map data that correspond at least in part to boundaries of the two or more geographic features . . . expanding the shapes by a predetermined amount, and determining whether the each property of the plurality of properties borders the two or more geographic features based on whether one or more of the shapes overlaps a parcel of the each property of the plurality of properties," as recited by claim 31. Merely making reference to a Zoom Out and a Zoom In function is not sufficient to adequately and reasonably disclose the features of claim 31.

App. Br. 22.

The Examiner disagrees with Appellants, and further explains the basis for the rejection:

Col. 7, lines 1-15 teach that the processor searches for properties located in a given area of a map. This area is a shape and the ten properties are presented on the map by using ten house symbols within the shape. Appellant has not provided any explanation for the rationale for the assertion that the shapes on the map of Hartz are not actually shapes.

Ans. 5.

Turning to the evidence, we note Hartz (col. 7, ll. 1–2) describes, in pertinent part: “The location of each *icon on the map* is derived, for example, from the MLS information produced from the storage unit as a result of the search.” (emphasis added).

Hartz (col. 7, ll. 45–49) also describes a *zoom* feature: “In another step of the method, a user may expand or otherwise alter the search by expanding or reducing the coverage area of the map using, for example, the ‘Zoom In’ and ‘Zoom Out’ selection areas 180 and 185.”

Thus, the Examiner appears to be reading the claimed determined “shapes from map data that correspond at least in part to boundaries of the two or more geographic features” on the Hartz icons 110, which are depicted in Figure 3 as a house structure. Claim 31.

The Examiner also appears to be reading the claimed “expanding the shapes by a predetermined amount” on Hartz’s *zoom* feature. *See* Col. 7, ll. 45–49.

Both of these portions of Hartz describe Figure 3, which “includes the *overlaying* of icons 110 on the map, where each icon represents the location of a property available in the region covered.” Hartz, col. 6, ll. 59–61.

However, in reviewing the record, we find a preponderance of the evidence supports Appellants’ contention that the Examiner has failed to fully develop the record to show and explain how the proffered combination of Stinson, “Ocean Proximity,” and Hartz teaches or suggests at least the disputed claim language:

determining whether the each property of the plurality of properties borders the two or more geographic features based on whether one or more of the shapes overlaps a parcel of the each property of the plurality of properties.

Claim 31; *see also* similar language recited in claims 2, 14, 26, 35, and 39.

Although Hartz describes the “*overlaying* of icons 110 on the 60 map, where each icon represents the location of a property available in the region covered” (col. 6, l. 59–61), we find this is not the same (or suggestive) of the aforementioned claim 31 step of “determining . . . based on whether one or more of the shapes *overlaps a parcel of the each property of the plurality of properties*” (claim 31, emphasis added), even when considered in combination with the “Ocean Proximity” teaching of the two geographic features identified by the Examiner: (1) beach, and (2) an inland location, which are separated by a distance that is measured in miles. “Ocean Proximity” p.7, ¶ 3. *See* Final Act. 12.

Therefore, based upon a preponderance of the evidence, Appellants have shown the Examiner erred regarding all claims which are rejected under §103 Rejection C. Accordingly, we are constrained on this record reverse the Examiner’s Rejection C of claims 2, 3, 6, 14, 15, 18, 26, 27, 29, 31–33, 35–37, and 39–41.

*Rejection D
of Claims 34, 38, and 42
under 35 U.S.C. § 103(a)*

Regarding Rejection D, the Examiner finds the combination of Stinson, “Ocean Proximity” and Hartz teaches or suggests all limitations of dependent claims 34, 38, and 42. *See* Final Act.

Appellants contend: “Similar to the above discussions, the combination of Stinson and Ocean Proximity fails to yield all of the features of Appellant's claims 1, 13, and 25, which is incorporated by dependent

claims 34, 38, and 42, respectively. Moreover, Humphries fails to overcome these deficiencies of Stinson and Ocean Proximity.” App. Br. 24.

However, we find no deficiencies with the Examiner’s base combination with Stinson and Ocean Proximity, for the reasons discussed above regarding Rejection B. We note that claims 34, 38, and 42, depend directly from independent claims 1, 13, and 25, respectively.

Therefore, based upon a preponderance of the evidence, we are not persuaded the Examiner erred regarding the legal conclusion of obviousness for grouped dependent claims 34, 38, and 42. Accordingly, we sustain the Examiner’s rejection of representative claim 34, and claims 38, and 42 which fall with claim 34. *See* 37 C.F.R. § 41.37(c)(1)(iv).

CONCLUSIONS

The Examiner did not err in rejecting claims 1–3, 6, 13–15, 18, 23–27, and 29–42 under 35 U.S.C. § 101, as being directed to a judicial exception, without significantly more.

The Examiner erred in rejecting claims 2, 3, 6, 14, 15, 18, 26, 27, 29, 31–33, 35–37, and 39–41 under pre-AIA 35 U.S.C. § 103(a).

The Examiner did not err in rejecting claims 1, 13, 23–25, 30, 34, 38, and 42 under pre-AIA 35 U.S.C. § 103(a).

DECISION

We affirm the Examiner's decision rejecting claims 1–3, 6, 13–15, 18, 23–27, and 29–42 under 35 U.S.C. § 101.

We affirm the Examiner's decision rejecting claims 1, 13, 23–25, 30, 34, 38, and 42 under pre-AIA 35 U.S.C. § 103(a).

We reverse the Examiner's decision rejecting claims 2, 3, 6, 14, 15, 18, 26, 27, 29, 31–33, 35–37, and 39–41 under pre-AIA 35 U.S.C. § 103(a).

Because we have affirmed at least one ground of rejection with respect to each claim on appeal, the Examiner's decision is affirmed. *See* 37 C.F.R. § 41.50(a)(1).

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). *See* 37 C.F.R. § 41.50(f).

AFFIRMED