



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/782,653	03/01/2013	Kuo-Hsien Hsu	Y08683US00	2100
150131	7590	09/26/2019	EXAMINER	
Cooper Legal Group LLC 6505 Rockside Road Suite 330 Independence, OH 44131			THAI, HANH B	
			ART UNIT	PAPER NUMBER
			2163	
			NOTIFICATION DATE	DELIVERY MODE
			09/26/2019	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docteting@cooperlegalgroup.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte KUO-HSIEN HSU and FANG-FEI KUO

Appeal 2018-007803
Application 13/782,653
Technology Center 2100

Before MAHSHID D. SAADAT, JOHN A. EVANS, and
JASON J. CHUNG, *Administrative Patent Judges*.

EVANS, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant¹ seeks our review under 35 U.S.C. § 134(a) of the Examiner's Non-Final rejection of Claims 1, 5, 9, 10, 14, and 18–32, all pending claims. App. Br. 1. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM-IN-PART.²

¹ We refer to the inventors collectively as Appellant. Appellant states the real party in interest is Excalibur IP, LLC. App. Br. 3.

² Rather than reiterate the arguments of Appellant and the Examiner, we refer to the Appeal Brief (filed August 28, 2017, "App. Br."), the Reply Brief (filed February 1, 2018, "Reply Br."), the Examiner's Answer (mailed

STATEMENT OF THE CASE

The claims relate to a system and method for generating search results. *See* Abstract.

Invention

Claims 1, 10, and 19 are independent. An understanding of the invention can be derived from a reading of Claim 1, which is reproduced below with some formatting added:

1. A method of presenting search results in response to search query submitted by users and including a search term, the method comprising:

using a processor device performing steps of:

for respective search results that are identified by the search term, determining a popularity among users of the search result for respective time ranges within a day, wherein a first popularity of the search result for the search term during a first time range is higher than a second popularity of the search result during a second time range; and

responsive to receiving from a user a search query including the search term:

identifying a search results set comprising the search results that are identified by the search term;

identifying a time range of the day within which the user submitted the search query;

for respective search results of the search result set, identifying the popularity of the search result during the query time range of the day;

December 1, 2017, “Ans.”), the Non-Final Action (mailed October 20, 2016, “Non-Final Act.”), and the Specification (filed March 1, 2013, “Spec.”) for their respective details.

ordering the search results set according to the popularity of the respective search results during the selected time range of the day, wherein a first search result is presented before a second result having a lower popularity for the search term during the query time range of the day than the first search result; and

presenting the search results set to the user to fulfill the search query.

*References and Rejections*³

Kraft et al.	US 7,856,441 B1	Jan. 10, 2005
Dong et al.	US 2011/0093459 A1	Oct. 15, 2009
Inagaki et al.	US 2011/0231390 A1	Mar. 16, 2010
Jockish et al.	US 2011/0010367 A1	June 11, 2010
Riley et al.	US 8,909,619 B1	Feb. 3, 2011

1. Claims 1, 5, 9, 10, 14, and 18–32 stand rejected under a NEW GROUND OF REJECTION under 35 U.S.C. § 101 as being directed to a judicial exception without more. Ans. 2–6.
2. Claims 1, 5, 9, 10, 14, 18–26, 28, 30, and 31 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kraft, Dong, Inagaki, and Riley. Non-Final Act. 4–10.
3. Claims 27, 29, and 32 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kraft, Dong, Inagaki, Riley, and Jockish. Non-Final Act. 10–12.

³ The Examiner has withdrawn the rejection of Claims 19, 20, and 30 under 35 U.S.C. § 101 as directed to non-statutory subject matter in view of the recitation “computer readable storage medium.” Ans. 6.

ANALYSIS

CLAIMS 1, 5, 9, 10, 14, AND 18–32:

OBVIOUSNESS OVER KRAFT, DONG, INAGAKI, RILEY, AND JOCKISH.

We have reviewed the rejection of Claims 1, 5, 9, 10, 14, 18–26, 28, and 30–31 in light of Appellant’s arguments that the Examiner’s rejection fails to satisfy the requirements of 35 U.S.C. § 103(a). We find Appellant’s arguments persuasive.

Non-recited claim elements.

Appellant contends each of independent Claims 1, 10, and 19 recite, *inter alia*, the following claim elements:

1. “determining a popularity among users of the search result for respective time ranges within a day”;
2. “identifying the popularity of the search result during the query time range of the day”; and
3. “ordering the search results set according to the popularity of the respective search results during the selected time range of the day, wherein a first search result is presented before a second result having lower popularity for the search term during the query time range of the day than the first search result.”

App. Br. 28; Reply Br. 16 (underlining and capitalization omitted).

Appellant argues the Examiner’s *prima facie* case fails to map these recitations onto the prior art, but rather, maps the art to such non-claimed elements such as:

- “Time-sensitive query,”
- “Popularity of search results based on the time range,”
- “Query intent for a time sensitive ambiguous query,”
- “At a particular time of day,” [and]
- “The query intent of the user is determined according to the popularity of the search results during the selected time range of the day.”

Id.

The Examiner finds “[i]n response to appellant’s argument . . . , a prima facie case of obviousness is established when the teachings from the prior art itself would appear to have suggested the claimed subject matter to a person of ordinary skill in the art. Once such a case is established, it is incumbent upon appellant to go forward with objective evidence of unobviousness.” Ans. 7 (citing *In re Fielder*, 471 F.2d 640 (CCPA 1973)). The Examiner further finds that during “patent examination, the pending claims must be ‘given the broadest reasonable interpretation consistent with the specification.’” *Id.*

The Answer fails to respond to Appellant’s contention that the Examiner does not address the specific recitations of the claims. The Examiner is of course correct that during examination, claims are given their broadest, reasonable interpretation consistent with the Specification. However, the Examiner makes no showing that the interpretations, advanced by the Examiner, bear any relationship to the claim recitations as enlightened by the Specification. The recitations “time-sensitive query” and “query intent for a time sensitive ambiguous query” which the Examiner maps to the prior art (Non-Final Act. 4–5), were present in the claims, as

originally filed, but do not appear in the claims under appeal. The recitation “the query intent of the user is determined according to the popularity of the search results during the selected time range of the day” which the Examiner maps to the prior art (*id.* at 6) appears in neither the original claims, nor the version under appeal.

The Examiner fails to compare the art to the specific recitations of the claims.

In view of the foregoing, we decline to sustain the rejection of Claims 1, 5, 9, 10, 14, and 18–32 under 35 U.S.C. § 103.

CLAIMS 1, 5, 9, 10, 14, AND 18–32: INELIGIBLE SUBJECT MATTER.

Appellant argues all claims as a group in view of the limitations of Claim 1. Reply Br. 3. Therefore, we decide the appeal of the 35 U.S.C. § 101 rejections with reference to Claim 1, and refer to the rejected claims collectively herein as “the claims.” *See* 37 C.F.R. § 41.37(c)(1)(iv); *see also In re King*, 801 F.2d 1324, 1325 (Fed. Cir. 1986).

Ineligible Subject Matter.

We have reviewed the rejections of Claims 1, 5, 9, 10, 14, and 18–32 in light of Appellant’s arguments. The rejection of the claims under 35 U.S.C. § 101 as being directed to an abstract idea is introduced in the Examiner’s Answer. Ans. 2–6. We have considered in this decision only those arguments Appellant actually raised in the Reply Brief. Any other arguments which Appellant could have made but chose not to make in the Briefs are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(iv). We adopt

as our own the findings and reasons set forth in the rejection from which this appeal is taken in the Examiner's Answer, to the extent consistent with our analysis below. We provide the following explanation to highlight and address specific arguments and findings primarily for emphasis. We consider Appellant's arguments *seriatim*, as they are presented in the Reply Brief, pages 3–14.

Based upon our *de novo* review of the record in light of recent Director Policy Guidance with respect to patent-eligible subject matter rejections under 35 U.S.C. § 101, we affirm the rejection of Claims 1, 5, 9, 10, 14, and 18–32. “Whether a claim is drawn to patent-eligible subject matter is an issue of law that we review *de novo*.” *SiRF Tech., Inc. v. Int'l Trade Comm'n*, 601 F.3d 1319, 1331 (Fed. Cir. 2010).

As part of the Examiner's Answer, the Examiner includes a “New Grounds of Rejection” section, in which Claims 1, 5, 9, 10, 14, and 18–32 are rejected under 35 U.S.C. § 101 as being directed to an abstract idea. Ans. 3–6. The Examiner asserts that independent Claims 1, 10, and 19 fall into the abstract idea category of “an Idea of Itself,” and cites *Electric Power Group v. Alstom*⁴ as being the most similar to Appellant's invention, because it discloses “collecting information, determining analyzing it [sic], and displaying certain results of the collection and analysis.” Ans. 3, 4, 5. In drawing a comparison between *Electric Power Group* and the independent claims, the Examiner states that “collecting information” is equivalent to the step of receiving the user's search query, the “analyzing” is the same as the

⁴ *Electric Power Group, LLC v. Alstom, S.A.*, 830 F.3d 1350 (Fed. Cir. 2016).

three-step process of determining popularity and the two identifying steps, and the “displaying” is equivalent to the steps of ordering and presenting the search results set. Ans. 3, 4, 5. In conclusion, the Examiner alleges that the claims do not recite “significantly more than the abstract idea” and that dependent Claims 5, 9, 14, 18, and 20–32 are also drawn to the same ineligible subject matter without “significantly more.” Ans. 5–6.

Appellant’s initial response to the Examiner’s rejection is presented in view of the December 16, 2014 *USPTO Examination Guidelines on Subject Matter Eligibility*, and includes a list of case law from pages 13–15 of the guidance. Reply Br. 4. In response to Supreme Court and Federal Circuit opinions, the USPTO has issued updated guidance. We review this appeal within the framework of the Revised Guidance 2019⁵ which specifies and particularizes the *Mayo/Alice* framework, and conduct a full analysis, including each step.

Appellant asserts that the Examiner has failed to capture any “significant technical aspect” of the claimed invention, and has produced a “wanton ‘overgeneralization’” of independent Claim 10, which would result in rejection of any invention involving “collecting information, determining [or] analyzing it, and displaying certain results.” Reply Br. 5–6. Appellant then submits a list of patent-eligible case law to show the inadequacy of the rejection, including *Enfish v. Microsoft*,⁶ *Amdocs v. Openet Telecom*,⁷

⁵ USPTO, 2019 Revised Patent Subject Matter Eligibility Guidance, 84(4) Fed. Reg. 50–57 (January 7, 2019) (“Revised Guidance,” “Rev. Guid.”).

⁶ *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327 (Fed. Cir. 2016).

⁷ *Amdocs (Israel) Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288 (Fed. Cir. 2016).

BASCOM v. AT&T,⁸ and *McRO v. Activision*,⁹ and conclude that the Examiner's Answer has not characterized the claims as amounting to "an 'idea of itself.'" Reply Br. 7. The next section of the brief explains that the search engine technology being claimed amounts to an improvement in search engine technology, by inferring the user's intent and providing results that are more consistent with the user's intent in formulating an ambiguous query. Reply Br. 8–9. Appellant next asserts the rejection fails to identify a court case with similar subject matter to the claimed invention, rejecting the Examiner's choice of *Electric Power Group v. Alstom*, which Appellant contends involves "visualizing data representing an electric power grid," which is information of a "specified content," and bears no "meaningful resemblance" to the instant invention. Reply Br. 10–12 (underlining omitted). Appellant notes that the rejection addresses elements of independent Claims 1, 10, and 19, but ignores dependent Claims 5, 9, 14, 18, and 20–32 and fails to acknowledge that the dependent claims differ in any significant way from the independent claims. Reply Br. 13. In conclusion, Appellant contends that the "significantly more" prong of the analysis is "100% boilerplate" does not explain the reasons the claims fail to amount to significantly more" than the abstract idea. Reply Br. 14 (emphasis omitted).

⁸ *BASCOM Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341 (Fed. Cir. 2016).

⁹ It is not clear which case is being referenced, since no citation is provided.

PRINCIPLES OF LAW

A. 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.”¹⁰ 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, 72–78 (2012) (citing *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 Corp. 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.”); *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 interactions

¹⁰ This threshold analysis of whether a claim is directed to one of the four statutory categories of invention, *i.e.*, process, machine, manufacture, or composition of matter, is referred to as “*Step I*” in the patent-eligibility inquiry under 35 U.S.C. § 101.

such as a fundamental economic practices (*Alice*, 573 U.S. at 219–20; *see also 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” (*Diehr*, 450 U.S. at 191); “tanning, dyeing, making waterproof cloth, vulcanizing India rubber, smelting ores” (*id.* at 182 n.7 (quoting *Corning v. Burden*, 56 U.S. 252, 267–68 (1853))); 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 “[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.* (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.”).

Abstract ideas may include, but are not limited to, fundamental economic practices, methods of organizing human activities, and

mathematical formulas or relationships. *Alice*, 573 U.S. at 217–21. Under this guidance, we must therefore ensure at step one that we articulate what the claims are directed to with enough specificity to ensure the step one inquiry is meaningful. *Id.* at 217 (“[W]e tread carefully in construing this exclusionary principle lest it swallow all of patent law.”).

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.* (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.*

B. USPTO Revised Guidance¹¹

The PTO recently published revised guidance in the Federal Register concerning the application of § 101.

Under the Revised 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

¹¹ 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (January 7, 2019) (hereinafter “Revised Guidance,” or “Rev. Guid.”) (<https://www.govinfo.gov/content/pkg/FR-2019-01-07/pdf/2018-28282.pdf>).

organizing human activity such as a fundamental economic practice, or mental processes)¹²; and

(2) additional elements that integrate the judicial exception into a practical application (*see* Manual for Patent Examining Procedure (“MPEP”) §§ 2106.05(a)-(c), (e)-(h)).¹³

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 are 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.¹⁴

See Revised Guidance.

Step 2A(i): Does the Claim Recite a Judicial Exception?

Informed by our judicial precedent, the Revised Guidance extracts and synthesizes key concepts identified by the courts as abstract ideas to explain

¹² Referred to as “*Revised Step 2A, Prong 1*” in the Revised Guidance (hereinafter “*Step 2A(i)*”).

¹³ Referred to as “*Revised Step 2A, Prong 2*” in the Revised Guidance (hereinafter “*Step 2A(ii)*”).

¹⁴ 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*.

that the abstract idea exception includes the following groupings of subject matter, when recited as such in a claim limitation:

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

Rev. Guid., 84 Fed. Reg. at 52. Under the Revised Guidance, if the claim does not recite a judicial exception (a law of nature, natural phenomenon, or subject matter within the enumerated groupings of abstract ideas above), then the claim is patent-eligible at *Step 2A(i)*. This determination concludes the eligibility analysis, except in rare situations identified in the Revised Guidance.¹⁵ However, if the claim recites a judicial exception (i.e., an abstract idea enumerated above, a law of nature, or a natural phenomenon), the claim requires further analysis for a practical application of the judicial exception in *Step 2A(ii)*.

¹⁵ In the rare circumstance in which an Examiner believes a claim limitation that does not fall within the enumerated groupings of abstract ideas should nonetheless be treated as reciting an abstract idea, the procedure described in the Guidance for analyzing the claim should be followed. *See* Guidance, Section 111.C.

The Examiner finds Claim 1 is directed to abstract idea of generating search results. Ans. 3. The Examiner finds the various steps of the claimed method simply collect and analyze information and display the results of that analysis analogously to the case of *Electric Power Group*. *Id.* The Examiner finds there are no further limitations that would tend to render the claims patent-eligible. *Id.* at 4.

Appellant contends the claims are directed to improvements in search-engine technology. Reply Br. 4. Appellant argues users often submit queries with a search-term that may have several meanings, but such an ambiguous term may more likely intend a particular meaning where the inquiry is submitted at a particular time of day. *Id.* Appellant argues the claims improve search-engine technology by permitting more accurate interpretation of search queries by accounting for the time of day that a query was submitted. *Id.*

The preamble of Claim 1 recites a “method of presenting search results in response to search query submitted by users and including a search term, the method comprising.” Table I compares the remaining limitations of Claim 1 to the categories of abstract ideas set forth in the Revised Guidance.

Claim 1	Revised Guidance p. 52
[a] ¹⁶ using a processor device performing steps of:	A hardware limitation to which the Guidance is not applicable.
[b] for respective search results that are identified by the search term,	Mental processes—concepts performed in the human mind

¹⁶ Step designators, e.g., “[a]” were added to facilitate discussion.

determining a popularity among users of the search result for respective time ranges within a day,	(including an observation, evaluation, judgment, opinion).
[c] wherein a first popularity of the search result for the search term during a first time range is higher than a second popularity of the search result during a second time range; and	Mathematical Concepts (mathematical relationships).
[d] responsive to receiving from a user a search query including the search term:	“Mere data gathering.” Additional element adds insignificant extra-resolution activity to the judicial exception. Rev. Guid., 84 Fed. Reg. at 55 & n.31.
[e] identifying a search results set comprising the search results that are identified by the search term;	Mental processes—concepts performed in the human mind (including an observation, evaluation, judgment, opinion).
[f] identifying a time range of the day within which the user submitted the search query;	Mental processes—concepts performed in the human mind (including an observation, evaluation, judgment, opinion).
[g] for respective search results of the search result set, identifying the popularity of the search result during the query time range of the day;	Mental processes—concepts performed in the human mind (including an observation, evaluation, judgment, opinion).
[h] ordering the search results set according to the popularity of the respective search results during the selected time range of the day,	Mental processes—concepts performed in the human mind (including an observation, evaluation, judgment, opinion).

[i] wherein a first search result is presented before a second result having a lower popularity for the search term during the query time range of the day than the first search result; and	Insignificant extra-solution activity. Rev. Guid., 84 Fed. Reg. at 55 & n.31.
[j] presenting the search results set to the user to fulfill the search query.	Insignificant extra-solution activity. Rev. Guid., 84 Fed. Reg. at 55 & n.31.

Under Step 2A(i) and based on the analysis in Table I, we determine that limitations [b], [c], and [e]–[h] recite judicial exceptions.

Step 2A(ii) – Practical Application

Where, as here, we determine at Step 2A(i) the claims recite a judicial exception, we look to determine the presence of additional elements that integrate the judicial exception into a practical application. The Revised Guidance is “designed to more accurately and consistently identify claims that recite a practical application of a judicial exception []and thus are not ‘directed to’ a judicial exception.” Rev. Guid., 84 Fed. Reg. at 53. The claims recite a practical application where an additional element reflects an improvement in the functioning of a computer, or an improvement to other technology or technical field.¹⁷ *Id.* at 55.

¹⁷ The Revised Guidance also finds integration into a practical application where the judicial exception is used in medical treatment or to transform an article to a different state. Rev. Guid., 84 Fed. Reg. at 55. Such considerations are not before us.

For the reasons which follow, we conclude that Appellant's claims do not integrate the judicial exception into a practical application. *See* MPEP §§ 2106.05(a)–(c), (e)–(h). We address these “practical application” MPEP sections *seriatim*:

MPEP § 2106.05(a) “Improvements to the Functioning of a Computer or To Any Other Technology or Technical Field.”

“In determining patent eligibility, examiners should consider whether the claim ‘purport(s) to improve the functioning of the computer itself’” or “‘any other technology or technical field.’” MPEP § 2106.05(a).

Appellant contends:

users often submit queries with a term that may have several meanings, but users may be more likely to intend a particular meaning of the term in queries that are submitted at a particular time of day. It may therefore be possible to interpret search queries more accurately by taking into account the time of day in which the query is submitted.

Reply Br. 4.

Claims 9, 18, and 20 contain recitations relating to determining a Jaccard Distance and a Kullback-Leibler divergence score for various web queries. Appellant discloses disambiguation of queries based on Jaccard distances. Spec., ¶ 37. Appellant further discloses “the time sensitivity of an ambiguous query q is quantified based on symmetrized Kullback-Leibler divergence.” Spec., ¶ 43. Moreover, Appellant discloses solutions of formulae related to the symmetrized Kullback-Leibler divergence. *Id.* ¶¶ 44, 45.

In *McRO*, the Federal Circuit found “[a]s the specification confirms, the claimed improvement here is allowing computers to produce ‘accurate and realistic lip synchronization and facial expressions in animated characters’ that previously could only be produced by human animators.” *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1313 (Fed. Cir. 2016). We find, similar to *McRO*, the process of Claims 9, 18, and 20 “uses a combined order of specific rules that renders information into a specific format that is then used and applied to create desired results.” *Id.* at 1315. Thus, we find at Step 2A(ii), Claims 9, 18, and 20 improve web query technology, and therefore, are patent-eligible.

The remaining claims fail to recite the Jaccard Distance or Kullback-Leibler divergence limitations which we find render Claims 9, 18, and 20 eligible. We decline to analyze the claims as though such limitations were present. Limitations may not be imported into the claims from the Specification. *See SuperGuide Corp. v. DirecTV Enters., Inc.*, 358 F.3d 870, 875 (Fed. Cir. 2004). We find the claims, as generically recited, fail to transform a patent ineligible concept into an eligible one.

In view of the foregoing, we sustain the rejection of Claims 1, 5, 10, 14, 19, and 21–32 under 35 U.S.C. § 101.

DECISION

The rejection of Claims 1, 5, 9, 10, 14, and 18–32 under 35 U.S.C. § 103 is REVERSED.

The rejection of Claims 9, 18, and 20 under 35 U.S.C. § 101 is REVERSED.

Appeal 2018-007803
Application 13/782,653

The rejection of Claims 1, 5, 10, 14, 19, and 21–32 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). *See* 37 C.F.R. § 41.50(f).

AFFIRMED-IN-PART