

**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE**

S.I.SV.EL. SOCIETA ITALIANA )  
PER LO SVILUPPO DELL' )  
ELETTRONICA S.P.A., )

Plaintiff, )

v. )

Civil Action No. 18-69-MN-CJB

RHAPSODY INTERNATIONAL INC., )

Defendant. )

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S.I.SV.EL. SOCIETA ITALIANA )  
PER LO SVILUPPO DELL' )  
ELETTRONICA S.P.A., )

Plaintiff, )

v. )

Civil Action No. 18-70-MN-CJB

SPOTIFY USA INC, )

Defendant. )

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**MEMORANDUM OPINION**

March 8, 2019  
Wilmington, Delaware

*Christopher J. Burke*

**BURKE, United States Magistrate Judge**

Presently before the Court in this patent infringement case is Defendant Rhapsody International Inc. (“Rhapsody”) and Defendant Spotify USA Inc.’s (“Spotify” and collectively, “Defendants”) “Early Motion for Summary Judgment of Invalidity Pursuant to 35 U.S.C. § 101 [“Section 101”]” (the “Motion”), filed pursuant to Federal Rule of Civil Procedure 56. (D.I. 9)<sup>1</sup> Defendants argue that Plaintiff S.I.SV.EL. Societa Italiana per lo Sviluppo Dell’Elettronica S.p.A’s (“Plaintiff”) asserted United States Patent Nos. 7,412,202 (the “’202 patent”), 8,490,123 (the “’123 patent”), 7,035,863 (the “’863 patent”), 8,321,456 (the “’456 patent”), and 7,734,680 (the “’680 patent”) (collectively, the “asserted patents” or the “patents-in-suit”) are directed to non-patent-eligible subject matter pursuant to Section 101. (D.I. 11) This Memorandum Opinion will address the Motion as it relates to the ’202 patent only.<sup>2</sup> For the reasons set out below, the Court GRANTS Defendants’ Motion as it relates to that patent.

## **I. BACKGROUND**

### **A. Factual Background**

The ’202 patent is entitled “Method and Apparatus for Generating Recommendations based on User Preferences and Environmental Characteristics.” (D.I. 1, ex. 1 (the “’202 patent”)) The technology described in the ’202 patent “relates to recommendation systems, such as

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<sup>1</sup> The Motion was originally brought jointly by three Defendants (in three separate cases): Civil Action No. 18-68-MN-CJB (in which the Defendant was Rakuten Kobo Inc.), Civil Action No. 18-69-MN-CJB (in which the Defendant is Rhapsody) and Civil Action No. 18-70-MN-CJB (in which the Defendant is Spotify). (D.I. 9) Subsequent to oral argument on the instant Motion, Plaintiff and Defendant Rakuten Kobo Inc. settled their case, (Civil Action No. 18-68-MN-CJB, D.I. 26; D.I. 27); the other two cases remain pending. Unless otherwise noted, citations to the record herein will refer to the record in Civil Action No. 18-70-MN-CJB.

<sup>2</sup> The Court will address the remaining patents in subsequent Memorandum Opinions.

recommenders for audio programming, television programming or other content, and more particularly, to a method and apparatus for generating recommendations based on environmental characteristics, such as [] geographic location, characteristics of the location or the weather.” ('202 patent, col. 1:8–13; *see also id.*, Abstract (noting that, in general, the patent discloses “[a] recommendation system . . . that generates recommendations for one or more items based on user preferences and one or more environmental factors[]”)) The '202 patent contains 35 claims, of which six (claims 1, 7, 15, 23, 26 and 31) are independent claims. (*Id.*, cols. 5:56-8:54)

By way of setting out the need for the asserted invention at issue, the '202 patent explains that at the time, users of electronic devices (like portable radios) could receive a transmitted audio signal from a given radio station at an assigned frequency within a certain radius of the station’s antenna. (*Id.*, col. 1:17-23) “As the user moves away from the transmitting antenna, however, the received signal gradually degrades until the user eventually must select a new radio station.” (*Id.*, col. 1:23-26) The patent notes that in such a scenario, if the user was in an unfamiliar radio market, or if there were a large number of frequencies to choose from, this might make it challenging for the user to select a new station. (*Id.*, col. 1:26-32) It then explains that, at the time, there were systems that provided a solution to this problem—systems that could identify a “program type” field associated with each radio station, such that a user could select a new radio station based on the user’s preferred program type. (*Id.*, col. 1:34-42) This type of “program type code” could be used to “enable suitable receivers and recorders to be pre-set to respond only to programs of the desired type.” (*Id.*, col. 1:42-44)<sup>3</sup>

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<sup>3</sup> The radio station scenario is exemplary, as the patent claims are not all limited to the recommendation or selection of radio stations. Certain claims (e.g., claims 2, 8, 16) explicitly state that the “item” at issue is a radio station, but others do not contain that limitation. ('202 patent, cols. 6:6-7, 6:35-36 & 7:5-6)

However, the '202 patent explains that these prior art systems also had some limitations. That is, they did not account for “the current location of the user or other environmental factors.” (*Id.*, col. 1:48-49) “For example, in a given geographic area, the user may have a preferred radio station having a program type that is distinct from the user’s program type preferences in his or her home area.” (*Id.*, col. 1:49-52) According to the patent, a need thus existed for: (1) “a method and apparatus for making recommendations based on the preferences of the user and environmental characteristics, such as location, characteristics of the location or weather[;]” (2) “a method and apparatus for lea[rn]ing a user[’]s preferences under various environmental characteristics[;]” and (3) a “method and apparatus for selecting an alternate radio station or another item based on the user[’]s demonstrated preferences under similar environmental characteristics, such as in the same or a similar geographic area.” (*Id.*, col. 1:53-62) The '202 patent, as is further described below, purports to have addressed these needs. (*Id.*, cols. 1:65-2:20)

## **B. Procedural Background**

On January 8, 2018, Plaintiff filed its Complaint. (D.I. 1) On March 22, 2018, Defendants filed the instant Motion. (D.I. 9) The parties thereafter jointly consented to the Court’s jurisdiction to conduct all proceedings and to enter a final order as to the Motion. (D.I. 10)

The parties completed briefing on the instant Motion on June 19, 2018. (D.I. 20) Defendants requested oral argument on the pending Motion, (D.I. 22), and the Court held argument on November 7, 2018, (D.I. 23 (hereinafter “Tr.”)).

## **II. STANDARD OF REVIEW**

### **A. Standard of Review Regarding a Rule 56 Motion**

A grant of summary judgment is appropriate where “the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law.” Fed. R. Civ. P. 56(a). The moving party bears the burden of demonstrating the absence of a genuine issue of material fact. *See Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 585 n.10 (1986). If the moving party has sufficiently demonstrated the absence of such a dispute, the nonmovant must then “come forward with specific facts showing that there is a genuine issue for trial.” *Id.* at 587 (internal quotation marks, citation and emphasis omitted). If the nonmoving party fails to make a sufficient showing in this regard, then the moving party is entitled to judgment as a matter of law. *Celotex Corp. v. Catrett*, 477 U.S. 317, 322-23 (1986). During this process, the Court will “draw all reasonable inferences in favor of the nonmoving party, and it may not make credibility determinations or weigh the evidence.” *Reeves v. Sanderson Plumbing Prods., Inc.*, 530 U.S. 133, 150 (2000).

However, in order to defeat a motion for summary judgment, the nonmoving party must “do more than simply show that there is some metaphysical doubt as to the material facts.” *Matsushita Elec. Indus. Co.*, 475 U.S. at 586-87. The “mere existence of *some* alleged factual dispute between the parties will not defeat an otherwise properly supported motion for summary judgment; the requirement is that there be no *genuine* issue of *material* fact.” *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 247-48 (1986) (emphasis in original). Facts that could alter the outcome are “material,” and a factual dispute is “genuine,” only where “the evidence is such that a reasonable jury could return a verdict for the nonmoving party.” *Id.* at 248. “If the evidence is merely colorable . . . or is not significantly probative . . . summary judgment may be granted.” *Id.* at 249-50 (internal citations omitted).

A party asserting that a fact cannot be—or, alternatively, is—genuinely disputed must support the assertion either by citing to “particular parts of materials in the record, including depositions, documents, electronically stored information, affidavits or declarations, stipulations (including those made for purposes of the motion only), admissions, interrogatory answers, or other materials”; or by “showing that the materials cited do not establish the absence or presence of a genuine dispute, or that an adverse party cannot produce admissible evidence to support the fact.” Fed. R. Civ. P. 56(c)(1)(A) & (B).<sup>4</sup>

**B. Legal Standards Relating to Patentable Subject Matter**

Patent-eligible subject matter is defined in the Patent Act as follows:

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.

35 U.S.C. § 101. While the scope of Section 101 is broad, there is an “important implicit exception [to it]: [l]aws of nature, natural phenomena, and abstract ideas are not patentable.”

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<sup>4</sup> The parties stipulated that it was appropriate to address the Section 101 arguments made herein by way of Defendants’ filing of this early summary judgment Motion. (D.I. 8 at 2 (“[T]he Parties believe the asserted patents’ eligibility under 35 U.S.C § 101 is an important threshold question that can and should be resolved at the outset of these matters in an effort to save the Court’s and the Parties’ valuable time and resources[.]”); *see also* D.I. 16 at 1-3; Tr. at 9) Despite this, at times in its briefing, Plaintiff seemed to suggest that (1) the Motion could or should be treated as a Rule 12 motion, not a summary judgment motion, or that (2) if the Motion was to be treated as a summary judgment motion, Plaintiff should be given leave to take additional discovery regarding the substance of the Motion before any decision was made on the Motion. (D.I. 14 at 11-12, 36-38; D.I. 20 at 2) At oral argument, however, Plaintiff’s counsel confirmed that it was appropriate for the Court to consider the Motion to be a summary judgment motion and to decide the Motion at this time. (*Cf.* Tr. at 35, 136) The Court will thus disregard any argument to the contrary in Plaintiff’s briefing.

*Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 134 S. Ct. 2347, 2354 (2014) (internal quotation marks and citation omitted).

In *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 134 S. Ct. 2347 (2014), the Supreme Court of the United States provided the two-step framework for assessing whether a patent contains eligible subject matter under Section 101. The Court briefly discusses both of these steps below.

### **1. Step One**

Pursuant to step one, courts “must . . . determine whether the claims at issue are directed to a patent-ineligible concept[.]” such as an abstract idea. *Alice*, 134 S. Ct. at 2355. Here the claims are considered in their entirety to ascertain not simply whether they *involve* a patent-ineligible concept, but whether ““their character as a whole is directed to [an abstract idea.]”” *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016) (quoting *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015)). “The abstract ideas category embodies the longstanding rule that [a]n idea of itself is not patentable.” *Alice*, 134 S. Ct. at 2355 (internal quotation marks and citations omitted).

What is an abstract idea? It can be (but is not necessarily limited to) a “preexisting, fundamental truth” about the natural world “that has always existed,” or a “method of organizing human activity” (such as a “longstanding commercial practice”). *Id.* at 2356 (internal quotation marks and citations omitted); *see also DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1256-57 (Fed. Cir. 2014). A claim to an abstract idea has been described by the United States Court of Appeals for the Federal Circuit as one directed to a “‘disembodied’ concept . . . a basic building block of human ingenuity, untethered from any real-world application[.]” *CLS Bank Int'l v. Alice Corp. Pty. Ltd.*, 717 F.3d 1269, 1286 (Fed. Cir. 2013) (citation omitted). Beyond that, the “abstract idea” category has not been crisply defined, *see Alice*, 134 S. Ct. at 2357

(declining to “labor to delimit the precise contours of the ‘abstract ideas’ category”), and the Supreme Court and the Federal Circuit have found it sufficient to compare claims at issue to those claims already found to be directed to an abstract idea in previous cases, *see Enfish*, 822 F.3d at 1334.

As to claims like those at issue here, which involve systems or methods relating to computer technology, a relevant step one question is whether the claims “‘focus on a specific means or method that improves the relevant technology’ or [instead] are ‘directed to a result or effect that itself is the abstract idea[.]’” *Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1241 (Fed. Cir. 2016) (quoting *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1314 (Fed. Cir. 2016)). Put differently, courts try to ascertain whether the “claims do no more than describe a desired function or outcome, without providing any limiting detail that confines the claim to a particular solution to an identified problem.” *Affinity Labs of Tex., LLC v. Amazon.com Inc.*, 838 F.3d 1266, 1269 (Fed. Cir. 2016). At step one, courts should not “oversimplif[y]” an invention’s key inventive concepts or “downplay[]” its benefits. *Enfish, LLC*; 822 F.3d at 1337-38; *see also McRO, Inc.*, 837 F.3d at 1313 (“[C]ourts ‘must be careful to avoid oversimplifying the claims’ by looking at them generally and failing to account for the specific requirements of the claims.”) (citation omitted).

How does one know what a patent claim is “directed to”? The Federal Circuit has indicated that the patent’s specification can be helpful in answering this question. If a claim contains a particular element or elements that are described by the patent’s specification as what the “present invention comprises” or as being “the innovation over the prior art” or “the essential, most important aspect” of the patented invention (or are otherwise similarly described) then it stands to reason that the claim is “directed to” that element or concept. *See Enfish*, 822



F.3d at 1337; *Internet Patents Corp.*, 790 F.3d at 1348; *see also Kaavo, Inc. v. Amazon.com Inc.*, Civil Action No. 15-638-LPS-CJB, Civil Action No. 15-640-LPS-CJB, 2016 WL 6562038, at \*6-7 (D. Del. Nov. 3, 2016). And if that element or concept is not itself an abstract idea, then the claim is not ineligible. That said, the Federal Circuit has recognized that in some cases “involving computer-related claims, there may be close calls about how to characterize what the claims are directed to”; in such cases, “an analysis of whether there are arguably concrete improvements in the recited computer technology [may] take place under step two.” *Enfish*, 822 F.3d at 1339.

## 2. Step Two

If a claim *is* directed to an abstract idea, then step two of the *Alice* framework requires a court to assess “[w]hat else is there in the claims”; a court does so by considering “the elements of each claim both individually and ‘as an ordered combination’ to determine whether the additional elements ‘transform the nature of the claim’ into a patent-eligible application.” *Alice*, 134 S. Ct. at 2355 (internal quotation marks and citation omitted). The Supreme Court describes step two as a search for an “inventive concept”—“*i.e.*, an element or combination of elements that is sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.” *Id.* (internal quotation marks and citation omitted); *see also Berkheimer v. HP Inc.*, 881 F.3d 1360, 1367 (Fed. Cir. 2018). The purpose of the “inventive concept” requirement is to “ensure that the claim is more than a drafting effort designed to monopolize the abstract idea.” *Alice*, 134 S. Ct. at 2357 (internal quotation marks, citation, and brackets omitted).

Neither “limiting the use of an abstract idea to a particular technological environment[,]” nor simply stating an abstract idea and adding the words “apply it with a computer[,]” will

transform an abstract idea into a patent-eligible invention. *Id.* at 2358 (internal quotation marks and citations omitted) (“[T]he mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention.”). And the additional elements within the claim, apart from the abstract idea itself, must involve more than “‘well-understood, routine, conventional activit[ies]’ previously known to the industry.” *Id.* at 2359 (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 73 (2012)); *see also Prometheus*, 566 U.S. at 82 (“[S]imply appending conventional steps, specified at a high level of generality, to . . . abstract ideas cannot make those . . . ideas patentable.”). Instead, claims relating to computer functionality must provide “a specific technical solution beyond simply using generic computer concepts in conventional way.” *BASCOM Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1352 (Fed. Cir. 2016); *see also Amdocs (Israel) Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288, 1302 (Fed. Cir. 2016) (examining at step two whether the claim described a “technical improvement over prior art technologies and served to improve the performance of the [computer] system itself”).

### **C. How to Assess Section 101 Challenges Pursuant to Rule 56**

While patentability under Section 101 is ultimately a question of law, this question of law is also one that “may contain underlying issues of fact.” *Berkheimer*, 881 F.3d at 1365; *see also Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1128 (Fed. Cir. 2018) (“While the ultimate determination of eligibility under [Section] 101 is a question of law, like many legal questions, there can be subsidiary fact questions which must be resolved en route to the ultimate legal determination.”). “When there is no genuine issue of material fact regarding whether[, for example,] the claim element or claimed combination is well-understood, routine, [and] conventional to a skilled artisan in the relevant field, this [Section 101] issue can be

decided on summary judgment as a matter of law.” *Berkheimer*, 881 F.3d at 1368.

### III. DISCUSSION

In addressing Defendants’ Motion, the Court will first set out which claims of the '202 patent it will address herein. Thereafter, it will analyze these claims under both *Alice* steps.

#### A. Claims at Issue

In its Complaint, Plaintiff alleges infringement of “at least claims 1, 3, and 5 of the '202 patent[.]” (D.I. 1 at ¶ 16) With their Motion, however, Defendants sought dismissal of all claims of the patent on Section 101 grounds. (D.I. 11 at 12; *see* D.I. 16 at 2) In doing so, Defendants did not formally designate any one claim of the patent as “representative” for purposes of the eligibility analysis; instead, in their opening brief, while they included some discussion of all of the patent claims, they understandably tended to focus most on the three claims that Plaintiff had specifically called out in the Complaint (claims 1, 3 and 5). (D.I. 11 at 4-5, 12-17; Tr. at 12; *see* D.I. 16 at 2)

In response, in its opposition brief, Plaintiff made arguments about patent eligibility that focused only on the content of claims 1 and 6; it argued why, in light of the content of those claims, all of the patent’s claims were patent eligible. (D.I. 14 at 14-15) In light of this, the Court will address claims 1 and 6 herein, treating them as “representative” claims and understanding that Plaintiff’s arguments for eligibility rise and fall on the arguments it made as to these two claims. *See Berkheimer*, 881 F.3d at 1335-36; *TMI Sols. LLC v. Bath & Body Works Direct, Inc.*, C.A. No. 17-965-LPS-CJB, 2018 WL 4660370, at \*6 (D. Del. Sept. 28, 2018). Put differently, if none of Plaintiff’s arguments as to claims 1 and 6 are successful, that means that all of the patent’s claims should be deemed ineligible. (D.I. 16 at 7, 15; Tr. at 13-15, 51)

Claim 1 of the '202 patent recites:

1. A method for recommending an item to a user, comprising the steps of:

observing one or more environmental characteristics;

learning preferences of said user for each item to be recommended while exposed to and under said one or more observed environmental characteristics; and

generating a recommendation score for said item based on features of said item and said learned preferences of said user under said one or more observed environmental characteristics, wherein said one or more observed environmental characteristics includes at least one of a weather condition, a characteristic of motion of said user, a location, and one or more characteristics of said location and each of the one or more observed environmental characteristics is associated with a weight assigned by the user.

('202 patent, cols. 5:57-6:5) Dependent claim 5 states: “The method of claim 1, wherein said learned preferences of said user under said one or more environmental characteristics are recorded in a profile.” (*Id.*, col. 6:10-12) And dependent claim 6 reads: “The method of claim 5, wherein said learned preferences of said user under said one or more environmental characteristics are recorded in a profile as a set of rules by a decision tree recommender.” (*Id.*, col. 6:13-16)

**B. *Alice's Step One***

With regard to step one, Defendants argue that all asserted claims “are directed to the abstract idea of recommending an item based on a user’s environment.” (D.I. 11 at 12 (emphasis omitted); *see also* Tr. at 17) Plaintiff does not dispute that “recommending an item based on a user’s environment” is an abstract idea, (D.I. 14 at 14-16; *see also* Tr. at 58), and the Court agrees that it is. After all, this is a disembodied concept, and one that is “devoid of a concrete or tangible application.” *See Ultramercial, Inc. v. Hulu LLC*, 772 F.3d 709, 715 (Fed. Cir. 2014).

But Plaintiff asserts that the claims are not, in fact, “directed to” this abstract idea. Instead, Plaintiff argues that Defendants oversimplify the patent by ignoring certain language of the claims that narrow the patent’s scope. (D.I. 14 at 14-16; D.I. 20 at 9-11) Plaintiff notes that claim 1, for example, is not only related to “recommending an item based on a user’s environment” but contains additional purportedly important and “unconventional” elements, such as that the method at issue: (1) learns the “preferences” of the user for each item to be recommended when the user is exposed to certain environmental characteristics; (2) generates a “recommendation score” based on the features of the recommended item and the user’s preferences; and (3) includes “a weight assigned by the user” that is associated with each of the environmental characteristics. (D.I. 14 at 14-15; D.I. 20 at 10; Tr. at 53-54) And as to claim 6, Plaintiff points out that the claim adds that the user’s learned preferences are “recorded in a profile by a decision tree recommender.” (D.I. 14 at 15) In sum, Plaintiff’s argument is that the claims are directed to something “far more distinct” than what Defendants assert is the abstract idea. (*Id.*)

Of course, Plaintiff is correct that the claims *make reference to* these additional elements. But for the following four reasons, the Court agrees with Defendants that as a legal matter, the heart of the claims are “directed to” the abstract idea at issue.

First, the patent specification describes the invention at issue in broad terms that sound a lot like a re-articulation of Defendants’ abstract idea (“recommending an item based on a user’s environment”). For example, the very title of the patent is: “Method and Apparatus for Generating Recommendations based on User Preferences and Environmental Characteristics[.]” (’202 patent, Title) The first sentence of the patent’s “Abstract” describes the invention similarly, explaining that the invention is one that “generates recommendations for one or more

items based on user preferences and one or more environmental factors.” (*Id.*, Abstract)

Moreover, when the patentee was articulating the “need” for the patented invention in the “Background of the Invention” section, it described the invention using this same type of broad, abstract phraseology: “[a] need therefore exists for a method and apparatus for making recommendations based on the preferences of the user and environmental characteristics, such as location, characteristics of the location or weather.” (*Id.*, col. 1:53-56 (emphasis added)) The “Summary of the Invention” section is little different; its first sentence describes the invention as one able to “generate[] recommendations for one or more items based on preferences of the user and one or more environmental characteristics.” (*Id.*, cols. 1:65-2:2) And perhaps most persuasively, the “Field of the Invention” section states that “[t]he present invention relates to recommendation systems, such as recommenders for audio programming, television programming or other content, and *more particularly*, to a method and apparatus for *generating recommendations based on environmental characteristics*, such as the geographic location, characteristics of the location or the weather.” (*Id.*, col. 1:8-13 (emphasis added))

Second, it is notable that the other purportedly “unconventional” limitations in the claims called out by Plaintiff here are not often referenced in the patent specification—or, if they are, they are referenced in ways suggesting that they are not central to the character of the invention as a whole. For example, the use of a “decision tree recommender” or the concept of a user-assigned “weight” are mentioned only once each in the specification. (*Id.*, cols. 3:47-49 & 5:4-7)<sup>5</sup> Likewise, the use of a “recommendation score” is not emphasized as a key component

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<sup>5</sup> With regard to the “weight” element, Plaintiff nonetheless argues its importance based on Plaintiff’s assertion that the element was added to the claim “during prosecution and is [the very] reason why the patent was issued over the prior art.” (D.I. 20 at 10 (emphasis omitted); *see Tr.* at 66-69) The Court will address this issue further in the step two analysis.

throughout the patent at issue. The patent does make reference to this concept, but those references frequently use permissive (and not mandatory) language (i.e., noting that the recommendation score “can be” generated), which makes it seem as if the score itself is not a core part of the invention. (*See e.g., id.*, Abstract; *id.*, col. 2:17) And while the patent makes occasional reference to the invention learning a user’s preference, the claims and the specification say little about *how* the invention does so. (*Id.*, Abstract; *id.*, cols. 2:2-4, 2:66-3:3 & 4:51-54) (noting only that user preferences may be learned via the use of an unclaimed “environmental data collection system”))

Third, it is notable that the preamble of each independent claim describes the methods/systems/computer readable mediums set out therein similarly to the abstract idea at issue. (D.I. 16 at 15) Each preamble states that the method/system/medium is one “for recommending an item to a user[.]” (‘202 patent, cols. 5:57, 6:17, 6:52, 7:21, 7:48-49 & 8:23-24); *see also Two-Way Media Ltd. v. Comcast Cable Commc’ns, LLC*, 874 F.3d 1329, 1340 (Fed. Cir. 2017) (noting that it was not an error for the district court to cite “to the preamble in its review of whether the claims are directed to an abstract idea” where the court’s inquiry was “centered on determining the ‘focus’ of the claims”)).

And fourth, as Defendants argue, (D.I. 11 at 13; Tr. at 20-21), it really does seem that “with the exception of generic computer-implemented steps, there is nothing in the claims themselves that foreclose them from being performed by a human, mentally or with pen and paper.” *Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1318 (Fed. Cir. 2016).<sup>6</sup> For example, in setting out an embodiment of the invention, the specification explains that:

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<sup>6</sup> The Court assumes herein that in some way, all of the claims (including claims 1 and 6) implicate the use of a computer. (D.I. 14 at 16; Tr. at 34, 40-41) Obviously, some claims

[T]he audio recommender 100 may learn that a given user prefers Jazz music in New Orleans, a radio station with frequent traffic reports when leaving an urban setting (or whether the movement is characterized by stop-and-go traffic) and a radio station with a “Top 40” program type when the weather is sunny and above 55 degrees.

(’202 patent, col. 3:4-9 (certain emphasis omitted)) At oral argument, Defendants’ counsel provided the Court with a persuasive illustration (using the first of the above-referenced examples) of how the same type of method could be and has often been used by humans outside of the computer context. The illustration showed a passenger “observ[ing] that a driver is getting into the spirit of being in New Orleans” (claim 1’s “observing” step), “learn[ing] that [the] driver prefers Jazz while in New Orleans” (claim 1’s “learning” step) and “provid[ing] a recommendation for a Jazz radio station in New Orleans[,]” perhaps after assigning a greater weight to the driver’s preference for Jazz than to other types of programming (claim 1’s “generating” step). (Defendants’ Hearing Presentation, Slide 14; Tr. at 19-20) The Court agrees that such an illustration helps establish that the representative claims have an easily articulable human analogue.<sup>7</sup> Cf. *D&M Holdings Inc. v. Sonos, Inc.*, 309 F. Supp. 3d 207, 214 (D. Del

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(i.e., the system claims and computer readable medium claims) do so explicitly. But it is worth noting that, at least on their face and looking only to the text of the claim language itself, it is not otherwise clear that the patent’s method claims (including claims 1 and 6) actually require a computer at all.

<sup>7</sup> Plaintiff cites to a declaration from its expert, Dr. Michael J. Pazzani, at various points in its briefing, including here for the proposition that the “’202 invention cannot be performed by the human mind or with the pen and paper.” (D.I. 14 at 15) But, in his declaration, while Dr. Pazzani states that the “ability to learn preferences of a user for items described by many characteristics under a variety of environmental characteristics is not practical in one’s head or with the aid of a pencil and paper[,]” (D.I. 15 at ¶ 17), claim 1 is not so limited. At base, its steps require only the utilization of “one or more” environmental characteristics and the claim does not specify that the number of “items” at issue need be so vast that only a computer could possibly perform the method at issue.



2018) (finding that a claim was directed to the abstract idea of “choosing to play back media with or without playback preferences” in part because it was directed “to the automation of a process that can be (and has been) performed by humans”).

For these reasons, the Court agrees with Defendants that the claims are directed to the abstract idea of “recommending an item based on a user’s environment.” It thus proceeds to step two.

### **C. *Alice’s Step Two***

Defendants next argue that the '202 patent lacks an inventive concept at *Alice’s* step two. For the following reasons, the Court agrees with Defendants.

#### **1. The Claims Lack a Technological Inventive Concept**

As was noted above in the step one analysis, the representative claims do not make reference to the use of anything other than well-known and conventional technology. Indeed, although the Court is assuming that method claims 1 and 6 require the use of some type of

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In one conclusory-sounding sentence of his declaration, Dr. Pazzani similarly argues that claim 6’s reference to the use of a “decision tree recommender,” ('202 patent, col. 6:13-16), is “only practical on a computer.” (D.I. 14 at 15 (citing D.I. 15 at ¶ 19 (“[C]laim 6 requires the use of a decision-tree learner[,], a method that is only practical on a computer”))) Dr. Pazzani’s bare conclusion is rebutted persuasively by a lengthy fact-based series of paragraphs in the declaration submitted by Defendants’ expert, Dr. Kevin Jeffay. (D.I. 17 at ¶¶ 34-35 (noting that “[d]ecision trees are a long standing, basic method of organizing and visualizing a set of decisions[,]” explaining that “[a] flowchart, for example, is a type of decision tree” and citing to a prior art patent cited in the '202 patent to support this position) (citing D.I. 17-1, ex. B at 4:7-23)) There is thus no genuine dispute of material fact as to this point. But even if there were, it would not necessarily prevent the claims from being patent ineligible. *See Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat. Ass’n*, 776 F.3d 1343, 1347 (Fed. Cir. 2014) (rejecting argument that “claims are not drawn to an abstract idea because human minds are unable to process and recognize the stream of bits output by a scanner” as “the claims in *Alice* also required a computer that processed streams of bits, but nonetheless were found to be abstract”).

computer, the claims on their face do not overtly call out the use of any technological means at all. *See infra* at 15-16 & n.6. That is not surprising, as Defendants note, because “the purported problem solved by the '202 patent—‘making recommendations based on the preferences of the user and environmental characteristics’—is not [inherently] technological” at all. (D.I. 11 at 15 (citing '202 patent, col. 1:53-56))

Even to the extent that the claims do require the use of a computer, that, of course, is not sufficient to save their eligibility. This is because a claim to an abstract idea that is implemented through only generic computer technology is still a claim to an abstract idea. *Cf. BASCOM*, 827 F.3d at 1350 (stating that “claims would not contain an inventive concept” if they “merely recite the abstract idea . . . along with the requirement . . . to perform it on a set of generic computer components[]”).

And indeed, the '202 patent specification repeatedly emphasizes that the invention at issue utilizes only generic hardware and/or software. (*See* D.I. 17 at ¶ 38) For example, the patent explains that the “audio recommender 100[,]” i.e., the component that can make the recommendations at issue, “may be embodied as any article of manufacture, any computing device, such as a personal computer or workstation, that contains a processor 120, such as a central processing unit (CPU), and memory 110, such as RAM and/or ROM.” ('202 patent, col. 3:62-66) When the patent discusses how a user’s location or movement may be tracked, or how weather conditions may be observed (i.e., for the purposes of using these as environmental characteristics), it says that the invention may track location “for example, from a global positioning system (GPS) . . . or an enhanced cellular 911 (E911) system” and movement “from a motion sensing system . . . such as rate of motion from a speedometer” and derive weather from “a weather data collection system.” (*Id.*, col. 3:16-29) In other words, it describes these

components in a manner indicating that they were standard and well-known at the time. (*See* D.I. 17 at ¶ 42) Additionally, in the one instance where the patent mentions the concept of assigning weights to an environmental characteristic, ('202 patent, col. 5:4-7), there is no suggestion that this is done in an unconventional way. (D.I. 17 at ¶ 43 (Defendants' expert, Dr. Kevin Jeffay, noting that “[g]iving weights to calculate an overall score was well-known and conventional . . . at the time of the '202 patent's filing.”)) And similarly, the patent explains that the claimed recommendation score may be by a “decision tree recommendation system in accordance with the techniques described” in a number of listed, previously-filed patent applications—including one patent application that described the use of a long-known “Bayesian recommendation system[.]” ('202 patent, col. 3:37-48; *see also* D.I. 17 at ¶ 43 (Dr. Jeffay noting that decision trees and Bayesian recommendation systems were well known and conventional for a person of skill in the art at the time))

Thus, nothing about the use of any of the individual pieces of hardware or software technology claimed in claims 1 or 6, standing alone, can provide the requisite inventive concept here. *Two-Way Media Ltd.*, 874 F.3d at 1339 (“Nothing in the claims or their constructions . . . requires anything other than conventional computer and network components operating according to their ordinary functions.”).

## **2. The Ordered Combination is Not Inventive**

Of course, even if the claims only implicate the use of conventional technology, it still could be that they utilize such conventional elements in an unconventional manner, leading to a patent-eligible invention. *See McRO, Inc.*, 837 F.3d at 1313 (“Whether at step one or step two of the *Alice* test, in determining the patentability of a method, a court must look to the claims as an ordered combination, without ignoring the requirements of the individual steps.”); *BASCOM*,

827 F.3d at 1350 (noting that “an inventive concept can be found in the non-conventional and non-generic arrangement of known, conventional pieces[]”). And Plaintiff indeed argues that there is a genuine issue of fact as to whether “the asserted claims of the '202 patent each recite elements which are combined and utilized in an unconventional manner, resulting in an inventive whole.” (D.I. 14 at 17) In the Court’s view, however, the record cannot support that conclusion.

As an initial matter, Defendants’ expert, Dr. Jeffay, states that the ordered combination of elements at issue was not unconventional. He notes that “[c]orrelating user behavior with user environments to determine what a user would like and then providing the user with a recommendation was a well-known and conventional methodology far before the '202 patent’s invention.” (D.I. 17 at ¶ 44)

Next (and importantly), the declaration of Plaintiff’s expert, Dr. Pazzani, did not offer any real evidence to combat Defendants’ assertion. In his declaration, Dr. Pazzani opines that: (1) “the use of observed environmental characteristics in a recommendation system is far from conventional[;]” (2) “a computerized recommendation process [that] makes recommendations based on [certain claimed characteristics]” was “unheard of” prior to the invention; and (3) the invention’s “way of learning and making recommendations based on the preferences of the user and environmental characteristics . . . was completely unconventional and represented a considerable advance in the field of recommendation engine technology.” (D.I. 15 at ¶¶ 13, 15-16) The primary problem with these assertions is that they are almost entirely conclusory. (D.I. 16 at 5-6) Dr. Pazzani provides no underlying factual support for his claims. And he cites to no underlying documents or prior art to bolster these statements.<sup>8</sup> This cannot be enough to create a

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<sup>8</sup> In its briefing, Plaintiff states in response that “Dr. Pazzani . . . literally viewed the entire universe of evidence in these cases . . . through the lens of his extensive experience in

genuine issue of material fact with regard to unconventionality. (Tr. at 29, 38); *see also Move, Inc. v. Real Estate Alliance Ltd.*, 721 F. App'x 950, 957 (Fed. Cir. 2018) (finding that an expert's "conclusory declaration" that provided "no citations to support [a proffered legal conclusion] and contain[ed] no additional rationale" amounted to a "bald assertion" that did "not satisfy the inventive concept requirement"); *Kaavo Inc. v. Amazon.com Inc.*, 323 F. Supp. 3d 630, 644 (D. Del. 2018) (finding that an expert's testimony was insufficient to create a genuine issue of material fact regarding *Alice's* step two, as the testimony was conclusory and contrary to the intrinsic record, such that "[n]o reasonable fact finder could find for Plaintiff").<sup>9</sup>

Lastly, Plaintiff's step two argument regarding the '202 patent's prosecution history is also unavailing. As was previously noted, Plaintiff argues that claim 1's element requiring that "each of the one or more observed characteristics is associated with a weight assigned by the user" was "added during prosecution and is [the very] reason why the patent was issued over the prior art." (D.I. 20 at 10 (emphasis omitted); *see* D.I. 15 at ¶ 13; Tr. at 66-69) However, the record is very light with regard to this issue. Plaintiff has presented only a portion of the

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the field." (D.I. 20 at 3) The problem here is that, to the extent Plaintiff is correct, Dr. Pazzani did not *cite* to any of that evidence in providing his opinion, nor did he *explain* how any of that evidence provides support for his ultimate opinion. In the key paragraphs of his declaration on this point (paragraphs 13, 14 and 16), other than with regard to a reference to the prosecution history in paragraph 13 (an issue further discussed below), the only words that Dr. Pazzani uses amount to different ways of stating a bare legal conclusion: "The ordered combination of steps was unconventional."

<sup>9</sup> Moreover, in stating only that this combination of steps was "unheard of" or "a considerable advance" at the relevant time, it is difficult to tell whether Dr. Pazzani is saying anything more than that the invention at issue amounted to a *new* idea. Of course, a *new* abstract idea is still an abstract idea. *See SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1163 (Fed. Cir. 2018) ("The claims here are ineligible because their innovation is an innovation in ineligible subject matter."); *Synopsis, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1151 (Fed. Cir. 2016) ("[A] claim for a *new* abstract idea is still an abstract idea.") (emphasis in original); *see also* (Tr. at 71-72).

prosecution history, in which it appears that the patentee, in an attempt to overcome a rejection by the Examiner for unpatentability, requested amendment of what became claim 1 (and other of the claims) to add this limitation. (D.I. 21, ex. A at 2-10)<sup>10</sup> However, there is nothing else of record that sheds light on: (1) why the Examiner ultimately allowed the claims at issue; or (2) even assuming the addition of this limitation was the thing that overcame the Examiner's objection, how the added limitation demonstrates that the claims were not only novel, but also (for Section 101 purposes) amounted to the unconventional use of computers (i.e., an improvement in computer functionality). (*Id.*; Tr. at 68-69 (Plaintiff's counsel acknowledging that this piece of the prosecution history is an example of the patentee not saying "too much" about the rationale behind the amendments at issue)); *cf. Listingbook, LLC v. Mkt. Leader, Inc.*, 144 F. Supp. 3d 777, 788 n.5 (M.D.N.C. 2015) (finding at the summary judgment stage that "the fact that the examiner did not reject the claim a second time under [Section] 101" should not lead to an inference that the amendments had resulted in a patent eligible invention as, without more, that bare fact was "neither compelling nor persuasive").

### 3. Preemption

Lastly, the Court will turn to the question of preemption. The Supreme Court has stated that the "concern that drives th[e] exclusionary principle [regarding the non-eligibility of abstract ideas i]s one of pre-emption[.]" *Alice*, 134 S. Ct. at 2354, in that if a claim is so abstract so as to "pre-empt use of [the claimed] approach in all fields, and would effectively grant a monopoly

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<sup>10</sup> In addition to proposing that the claims be amended in this way, the patentee also proposed amending the claims by eliminating a few other words (and by having other proposed claims withdrawn). (D.I. 21, ex. A at 2-10)

over an abstract idea[,]” it would not be patent eligible, *Bilski v. Kappos*, 561 U.S. 593, 612 (2010).

Claim 1 makes reference to broad, generalized steps—the “observing” step, the “learning” step and the “generating” step—that do not require any specialized technology nor offer much in the way of specifics as to *how* this “observing,” “learning” and “generating” actually get accomplished. (D.I. 17 at ¶ 48) How does the method learn the preferences of the user for an item? Claim 1 does not seem to specify. How is a recommendation score generated using “one or more” listed environmental characteristics? Claim 1 is largely silent, other than by requiring that a “weight” be assigned to those characteristics (in a non-specific way). Likewise, claim 6 does not specify how the decision tree recommender creates the set of rules that is then recorded in the profile. (See '202 patent, col. 6:13-16) Further, the claims are not limited to any particular subject matter and, thus, cast a wide net in that regard.<sup>11</sup> Were the claims patent eligible, although they would not literally cover the entire field of the abstract idea at issue, their breadth appears to be significant. (D.I. 17 at ¶ 47) That, in turn, raises preemption concerns. *See Electric Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1356 (Fed. Cir. 2016) (cautioning against “claims so result-oriented, so functional, as to effectively cover any solution to an identified problem”).

#### IV. CONCLUSION

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<sup>11</sup> Despite the fact that a portion of the specification focused on how the invention might be used to recommend radio stations to a user, claims 1 and 6 are not so limited. ('202 patent, col 2:49-54 (explaining that “[w]hile the present invention is illustrated herein in the context of audio content recommendations, the present invention can be applied to *any* automatically generated recommendations that are based on an evaluation of user behavior, such as a listening history, viewing history or purchase history”) (emphasis added); D.I. 17 at ¶ 47; Tr. at 61)

For the foregoing reasons, the Court finds that Defendants' Section 101 Motion with regard to the '202 patent should be GRANTED. An appropriate Order will issue.