

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SUPERCELL OY,
Petitioner,

v.

GREE, INC.,
Patent Owner.

Case PGR2018-00008
Patent 9,597,594 B2

Before MICHAEL W. KIM, TIMOTHY J. GOODSON,
and AMANDA F. WIEKER, *Administrative Patent Judges*.

KIM, *Administrative Patent Judge*.

FINAL WRITTEN DECISION
35 U.S.C. § 328(a) and 37 C.F.R. § 42.73

I. INTRODUCTION

A. *Background*

Supercell Oy (“Petitioner”) filed a Petition (“Pet.”) for post-grant review of claims 1–20 of U.S. Patent No. 9,597,594 B2 (“the ’594 patent”) (Ex. 1001) pursuant to 35 U.S.C. §§ 321–329. Paper 1. GREE Inc. (“Patent Owner”) filed a Preliminary Response (“Prelim. Resp.”). Paper 7. With authorization from the Board (Paper 11), Petitioner filed a Reply to Patent Owner’s Preliminary Response (Paper 12) and Patent Owner filed a Sur-Reply (Paper 13).

On May 1, 2018, we ordered that “a post-grant review is hereby instituted for claims 1–20 of the ’594 patent with respect to all grounds set forth in the Petition.” Paper 15, 16 (“Dec.”). After institution of trial, Patent Owner filed a Patent Owner Response (Paper 24, “PO Resp.”), Petitioner filed a Reply (Paper 27, “Pet. Reply”), and, with Board authorization (Paper 30), Patent Owner filed a Sur-Reply (Paper 34, “PO Sur-Reply”).

Patent Owner also filed a Motion to Exclude Evidence (Paper 35; “PO Mot.”), to which Petitioner filed an Opposition to Patent Owner’s Motion to Exclude Evidence (Paper 39; “Pet. Opp.”), and Patent Owner filed a Reply to Opposition to Motion to Exclude (Paper 40; “PO Reply”). An oral hearing was held on November 28, 2018. Paper 41 (“Tr.”).

The Board has jurisdiction under 35 U.S.C. § 6. In this Final Written Decision, after reviewing all relevant evidence and assertions, we determine that Petitioner has met its burden of showing, by a preponderance of the evidence, that claims 1, 8, and 10–20 of the ’594 patent are unpatentable. We determine further that Petitioner has not met its burden of showing, by a

preponderance of the evidence, that claims 2–7 and 9 of the '594 patent are unpatentable. We further grant Patent Owner's Motion to Exclude.

B. Related Proceedings

Petitioner identifies the following matter: *GREE, Inc. v. Supercell K.K.*, Case 2017 (Yo) No. 22046 in Tokyo District Court, associated with related patent JP 5,676,032, which relates to PCT/JP2014/07673. Pet. 2; Ex. 1001, (63) (the '594 patent also claiming priority to PCT/JP2014/07673).

C. The '594 patent

The '594 patent relates generally to a method of improving the usability of computer games, where a user builds and defends a virtual city, by using templates to allow the user to more easily change game elements within a game space. Ex. 1001, 1:42–60, 2:5–11. More specifically, the '594 patent describes such a game where a user creates a city by arranging various game elements, where those various game elements may include facilities, characters, soldiers, weapons, cards, figures, avatars, and items. Ex. 1001, 4:26–29; 4:38–40. The user's city may then be attacked by opposing players, and the layout and design of the user's city becomes a factor in whether the user is able to defend successfully the city. Ex. 1001, 1:44–49. According to the '594 patent, as a player progresses in a game and expands their city within the game space, it becomes more complicated for a player to keep track of an ever-increasing number of game elements, for example, changes to the positions, types, and levels of those game elements. Ex. 1001, 1:50–55. To address this problem, the '594 patent describes a game play method where a user may modify the game space using templates that can be applied to a predetermined area. Ex. 1001, 1:61–2:10. Hence, a

user is able to automatically rearrange a group of game elements to match a predesigned template. Ex. 1001, 4:34–37.

D. Illustrative Claim

Claims 1–20 are pending and challenged, of which claims 1, 10, 11, and 12 are independent. Independent claim 12, which is representative, is reproduced below:

12. A device in communication with a server, comprising:
a memory device storing game software instructions; and
one or more hardware processors configured to execute the game software instructions perform operations including:
storing first positions of game contents;
creating a template defining game contents and second positions of one or more of the game contents arranged in a game space based on a template creation command by a game player,
storing the created template in the memory device, and
applying the template to a predetermined area within the game space based on a template application command by the game player.

E. The Alleged Ground of Unpatentability

The Petition asserts that claims 1–20 of the '594 patent are unpatentable as being directed to patent ineligible subject matter. Pet. 16–38.

F. Eligibility of Patent for Post-Grant Review

The post-grant review provisions of the Leahy-Smith America Invents Act (“AIA”)¹ only apply to patents subject to the first inventor to file provisions of the AIA. AIA § 6(f)(2)(A). Specifically, the first inventor to

¹ Pub L. No. 112-29, 125 Stat. 284 (2011).

file provisions apply to any application for patent, and to any patent issuing thereon, that contains or contained at any time a claim to a claimed invention that has an effective filing date on or after March 16, 2013. AIA § 3(n)(1). Furthermore, “[a] petition for a post-grant review may only be filed not later than the date that is 9 months after the date of the grant of the patent or of the issuance of a reissue patent (as the case may be).” 35 U.S.C. § 321(c); *see also* 37 C.F.R. § 42.202(a) (setting forth the same).

Petitioner asserts that the instant Petition was filed within nine months of the March 21, 2017, issue date of the ’594 patent. Pet. 2. Further, the application that issued as the ’594 patent was filed on December 30, 2015. Ex. 1001, (22). Patent Owner does not dispute that the ’594 patent is eligible for post-grant review. *See generally* PO Resp. We find that the ’594 patent is eligible for post-grant review.

II. ANALYSIS OF GROUND OF UNPATENTABILITY

We now turn to Petitioner’s asserted ground of unpatentability to determine whether Petitioner has met its burden of showing, by a preponderance of the evidence, that each of claims 1–20 are unpatentable. 35 U.S.C. § 326(e).

A. *Claim Construction*

In this post-grant review, a claim in an unexpired patent shall be given its broadest reasonable construction in light of the specification of the patent in which it appears. 37 C.F.R. § 42.200(b); *see also* *Cuozzo Speed Techs.*,

LLC v. Lee, 136 S. Ct. 2131, 2144–46 (2016).² Under the broadest reasonable construction standard, claim terms generally are given their ordinary and customary meaning, as would be understood by one of ordinary skill in the art in the context of the entire disclosure. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007). However, a “claim term will not receive its ordinary meaning if the patentee acted as his own lexicographer and clearly set forth a definition of the disputed claim term in either the specification or prosecution history.” *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed. Cir. 2002). We determine that only the following claim term, “template,” needs express construction. *See Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999) (“[O]nly those terms need be construed that are in controversy, and only to the extent necessary to resolve the controversy.”).

Independent claim 12 recites “a template defining game contents and second positions of one or more of the game contents arranged in a game space.” Independent claims 1, 10, and 11 each recite similar limitations. Petitioner asserts that “[a] template is a record of the positions of one or more game pieces in a game that can be applied in other game spaces.” Pet. 13 (citing Ex. 1001, 2:2–3). In support, Petitioner cites numerous portions of the ’594 patent. Pet. 13–16 (citing Ex. 1001, 6:28–45, 6:50–57, 7:4–15, 7:37–48, 8:18–24, 11:29–33, 16:25–35, 17:42–56, 18:52–19:9, Figs. 3A–3E).

² For petitions filed on or after November 13, 2018, the *Phillips* standard will be applied. *Changes to the Claim Construction Standard for Interpreting Claims in Trial Proceedings Before the Patent Trial and Appeal Board*, 83 Fed. Reg. 51,340 (Oct. 11, 2018) (to be codified at 37 C.F.R. pt. 42).

While not squarely rooted in a claim construction, Patent Owner repeatedly makes a variation of the following argument: “[t]he claim recites that the ‘template’ defines both ‘game contents’ and their ‘second positions,’ providing limits to the structure and composition of the template.” PO Resp. 20; *see, e.g.*, PO Resp. 27 (referencing “[t]he use of templates storing game contents and positions thereof”); PO Sur-Reply 9–10 (“[T]he claims recite, for example, a template ‘defining game contents and second positions of one or more of the game contents.’”).

We determine that these proposed constructions of “template” are misplaced, in that they are largely no more than regurgitations of claim language. Put simply, we are unpersuaded that the term “template” itself has anything to do with “game contents” and “second positions.” To be sure, the claim limitations related to “game contents” and “second positions” further limit “template” within the context of the claim, and must be considered. They are considered, however, as claim terms themselves, and not as a part of a definition of “template.”

As a part of its construction of “template,” however, Petitioner does assert that “[a] template is a record” Pet. 13 (citing Ex. 1001, 2:2–3); *see also* Pet Reply 9 (“The challenged independent claims recite nothing more than automating tasks that can be performed manually by a human, including record keeping of the location of one or more game pieces (‘creating a template’ and ‘storing’ the template information).”). Although not set forth expressly as a claim construction, Patent Owner repeatedly uses the term “data structure” in connection with the claimed “template.” *See, e.g.*, PO Resp. 33 (referencing “use of data structures implemented as templates”), 35 (“[T]he claim use of templates . . . is a data structure.”). At

oral argument, Patent Owner confirmed its position that a “template” was a “data structure.” Tr. 43:15–44:2. No party has identified any substantive difference between “record” and “data structure,” and we do not find any, as a record appears to be no more than a structure for storing data.

In its most relevant definition, Merriam Webster’s Collegiate Dictionary defines “template” as “something that establishes or serves as a pattern.” Merriam Webster’s Collegiate Dictionary 1286 (11th ed. 2007) (Ex. 3004). The Authoritative Dictionary of IEEE Standard Terms defines “template matching” as follows: “(A) An image processing technique in which patterns or shapes are detected by comparison with pre-specified patterns or shapes called templates. *See also*: image matching. (B) A pattern recognition technique using the principle described in definition (A).” The Authoritative Dictionary of IEEE Standard Terms 1161 (7th ed., IEEE Press 2000) (Ex. 3003). The common theme in these dictionary definitions is that a “template” includes a “pattern,” which also denotes data set forth in a structure, and thus is consistent with the features of both a “record” and “data structure.”

We have considered the parties’ citations to portions of the claims and specification of the ’594 patent that use the term “template,” and find that they are consistent with “record.” Accordingly, for all of the foregoing reasons, we construe a “template” as a “record.”

B. Petitioner’s Lack of Testimonial or Extrinsic Evidence

Patent Owner asserts that Petitioner’s failure to provide relevant testimonial or extrinsic evidence compels a conclusion that Petitioner has failed to meet its burden that the challenged claims are unpatentable. PO Resp. 12–13. Patent Owner asserts that this is so especially for

Petitioner’s assertions that certain claim elements are “well-understood, routine, conventional.” PO Sur–Reply 2–4 (citing Ex. 2004 ¶ 34; Exs. 1011, 1012). Petitioner responds that expert testimony is sometimes unnecessary to establish ineligibility under 35 U.S.C. § 101, for example, when there is no genuine issue of material fact or when the specification itself provides the requisite evidence. Pet. Reply 4–5. As an initial matter, we note that Petitioner has provided some extrinsic evidence, for example, Exhibits 1003–1005, 1011, 1012, and 1015, as well as testimonial evidence in the form of the deposition testimony of Mr. Crane. That aside, however, we agree with Petitioner’s contention that such extrinsic evidence is not always necessary for the reasons stated.

Even with respect to a disputed factual inquiry as to whether a claim element is “well-understood, routine, conventional,” the Federal Circuit has repeatedly held that intrinsic evidence can be dispositive. *See, e.g., Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1317 (Fed. Cir. 2016) (“The written description is particularly useful in determining what is well-known or conventional.”); *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1348 (Fed. Cir. 2015) (relying on specification’s description of additional elements as “well-known,” “common,” and “conventional”); *TLI Commc’ns LLC v. AV Auto. LLC*, 823 F.3d 607, 614 (Fed. Cir. 2016) (specification describing additional elements as “either performing basic computer functions such as sending and receiving data, or performing functions ‘known’ in the art”). The Federal Circuit further has used case law, when appropriate, to satisfy the inquiry as well. *TLI Commc’ns*, 823 F.3d at 614 (citing *Alice Corp. v. CLS Bank Int’l*, 573 U.S. 208, 216 (2014) and other Federal Circuit cases to satisfy factual

inquiry that adding generic computer components to an abstract idea is not an inventive concept).

To be sure, if there is a disputed factual inquiry where the intrinsic evidence and case law are silent, Petitioner's lack of relevant testimonial and extrinsic evidence can be fatal, especially where Patent Owner has provided pertinent countervailing evidence. We determine here, however, that Petitioner has satisfied its evidentiary burden with the evidence and testimony of record.

C. Weight to be Afforded Mr. Crane's Testimony

Petitioner asserts that the testimony of Patent Owner's declarant, Mr. Crane, deserves no weight because (1) Mr. Crane does not provide the underlying facts or data for some of his findings as required by 37 C.F.R. § 42.65(a); (2) Mr. Crane fails to address the specific language of the claims at issue; and (3) Mr. Crane admits that he did not opine on any aspect relevant to step two of the *Alice* inquiry. Pet. Reply 6–8 (citing Ex. 2004 ¶¶ 18, 31; Ex. 1010, 37:17–42:10, 44:7–52:24, 53:2–55:7, 117:11–118:9). Patent Owner responds that (1) Petitioner has not identified any particular facts or data that are allegedly lacking; (2) the underlying factual basis for all of Mr. Crane's testimony is his "training, knowledge, and experience in the relevant art," which Petitioner has not challenged; (3) Mr. Crane did address certain claim limitations; and (4) Mr. Crane is offered as a fact witness, not a legal one, and some uncertainty about the legal formulation of steps in the *Alice* inquiry is irrelevant. PO Sur-Reply 4–7 (citing Ex. 2004 ¶¶ 3, 15, 32–47; Ex. 1010, 36:21–37:15). We have reviewed all the cited testimony, and agree with Patent Owner.

More specifically, we disagree with Petitioner that every aspect of a declarant’s testimony requires articulated underlying facts or data specific to that testimony. We agree with Patent Owner that, in many instances, a declarant’s background can be sufficient. To the extent we determine that any testimony lacks adequate support, we discount the weight accorded that testimony appropriately.

We also agree with Patent Owner that Mr. Crane is offered as a technical expert with respect to specific inquiries for certain claim terms, and is not expected to display the same command of legal doctrines as a lawyer. We note, however, that Petitioner’s characterization that Mr. Crane “failed to address [*Alice*] step two” is incorrect. Ex. 1010, 47:15–20 (“THE WITNESS: As I said, there’s no section of my declaration that specifically applies that second standard of the legal standard. But I just pointed out, and I’ll reiterate, that there are sections in my declaration that may be used to help someone try to answer that question.”).

D. Claims 1–20 as Directed to Patent Ineligible Subject Matter Under 35 U.S.C. § 101

Petitioner contends that claims 1–20 do not recite patent eligible subject matter under 35 U.S.C. § 101. Pet. 16–38 (citing Exs. 1001, 1003). Patent Owner disagrees. PO Resp. 12–48 (citing Exs. 1001, 1003, 2004, 2006–2011). Petitioner replies. Pet. Reply 8–24 (citing Exs. 1001, 1009–1012, 2004). Patent Owner responds. PO Sur-Reply 8–22 (citing Exs. 1001, 2004).

1. Relevant Law

An invention is patent eligible if it claims a “new and useful process, machine, manufacture, or composition of matter.” 35 U.S.C. § 101. However, the Supreme Court has long interpreted 35 U.S.C. § 101 to include

implicit exceptions: “[l]aws of nature, natural phenomena, and abstract ideas” are not patentable. *E.g.*, *Alice*, 573 U.S. at 216.

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*. *Id.* at 217–218 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 75–77 (2012)). In accordance with that framework, we first determine what concept the claim is “directed to.” *See Alice*, 573 U.S. at 219 (“On their face, the claims before us are drawn to the concept of intermediated settlement, i.e., the use of a third party to mitigate settlement risk.”); *see also Bilski v. Kappos*, 561 U.S. 593, 611 (2010) (“Claims 1 and 4 in petitioners’ application explain the basic concept of hedging, or protecting against risk.”).

Concepts determined to be abstract ideas in the § 101 analysis include certain methods of organizing human activity, such as fundamental economic practices (*Alice*, 573 U.S. at 219–220; *Bilski*, 561 U.S. at 611); mathematical formulas (*Parker v. Flook*, 437 U.S. 584, 594–95 (1978); and mental processes (*Gottschalk v. Benson*, 409 U.S. 63, 69 (1972)). Concepts determined to be patent eligible include physical and chemical processes, such as “molding rubber products” (*Diamond v. Diehr*, 450 U.S. 175, 192 (1981)), “tanning, dyeing, making waterproof cloth, vulcanizing India rubber, smelting ores” (*id.* at 184 n.7 (citing *Corning v. Burden*, 56 U.S. 252, 267–268 (1854))), and manufacturing flour (*Benson*, 409 U.S. at 69 (citing *Cochrane v. Deener*, 94 U.S. 780, 785 (1876))).

In *Diehr*, the claim at issue recited a mathematical formula, but the Supreme Court held that “[a] claim drawn to subject matter otherwise statutory does not become nonstatutory simply because it uses a

mathematical formula” *Diehr*, 450 U.S. at 176; *see also id.* at 192 (“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*, *Flook*).

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. “[M]erely requir[ing] generic computer implementation[] fail[s] to transform that abstract idea into a patent-eligible invention.” *Id.*

2. *Whether the Claims Are “Directed to” an Abstract Idea*

a. *Petitioner’s Initial Analysis*

Petitioner asserts that the claims are directed to “creating and applying a template.” Pet. 20, 21. Petitioner asserts that “creating and applying a template” is an abstract idea because it (1) “consists entirely of mental steps that can be carried out by a human, either mentally, using pen and paper, or with real-world game pieces”; (2) is merely “automating [a] manually-achievable purpose[]”; and (3) “cannot be considered to be directed to an improvement in computer technology because neither the claims nor the specification recites any new technology, new process, or improvement to existing technologies.” Pet. 16–28.

For support, Petitioner provides a reasoned analysis as to why “[t]he ’594 patent’s claimed concept of creating and applying a template . . . consists entirely of mental steps that can be carried out by a human, either mentally, using pen and paper, or with real-world game pieces.” Pet. 21–23. Petitioner additionally directs us to *Planet Bingo, LLC v. VKGS LLC*, 576 F. App’x 1005, 1005–1007 (Fed. Cir. 2014) (“The . . . patents claim managing a bingo game while allowing a player to repeatedly play the same sets of numbers in multiple sessions.”). Petitioner asserts that the claims in *Planet Bingo* are sufficiently analogous to the claims of the ’594 patent, in that both sets of claims reasonably are characterized as directed to the same general concept of repeatedly applying a template to a game space.

As further evidence, Petitioner analogizes the current claims to a game of correspondence chess, as described in *A Guide to Correspondence Chess in Wales*. Pet. 21, 22 (citing Ex. 1003). In correspondence chess, a player records the current state of the chess game, indicates the player’s next move on a post card, and sends the post card to a second player who will modify their game board to reflect the updated state of the chess game. Pet. 21, 22 (citing Ex. 1003). Petitioner asserts that, in creating the post card, the first player creates a template defining game contents, stores the created template, and allows a second player to apply the template to a predetermined area. Pet. 22. In this way, Petitioner asserts that correspondence chess is evidence that the “claimed process is a well-known mental process and method of organizing human activity – and is, therefore, abstract.” *Id.* at 23.

*b. Patent Owner's Assertions Concerning
What the Claims are "Directed to"*

Patent Owner asserts that independent claim 12 is not representative, in that the various claims recite unique limitations not recited in independent claim 12. PO Resp. 17–19. Patent Owner asserts that even for independent claim 12, Petitioner has failed to address all of the claim limitations.

PO Resp. 19–21. Petitioner responds that independent claim 12 indeed is representative, and that Patent Owner has not shown how any of the unique limitations identified for the other independent claims indicate that independent claim 12 is not representative. Pet. Reply 5–6. We agree with Petitioner, in that Patent Owner's assertions are misplaced.

Fundamentally, we view Patent Owner's assertion as comprising two sub-assertions. First, Patent Owner appears to be asserting that every claim limitation must be accounted for in a subject matter eligibility analysis. We agree. That, however, has nothing to do with whether a particular claim is representative.

Second, Patent Owner appears to be asserting that independent claim 12 is the broadest claim, and by selecting the broadest claim, Petitioner's formulation of the concept independent claim 12 is "directed to" is also broad, in that it does not account for every claim limitation in, for example, the dependent claims. Identifying the concept to which the claim is "directed" merely addresses some claim limitations in connection with the first aspect of the *Alice* inquiry. While every claim limitation certainly must be accounted for somewhere in the § 101 analysis, there is no mandate that every claim limitation be addressed in connection with identifying the concept to which the claim is "directed," i.e., as part of *Alice* step 1. Some limitations may be addressed in *Alice* step 2.

i. Framework for Formulating What a Claim is “Directed to”

To better illustrate this framework, it is instructive to consider the Supreme Court’s approach in *Bilski* and *Alice* in formulating the concept that a claim is “directed to.” In *Bilski*, representative independent claim 1 recites at least 92 words. The Supreme Court reduced the concept down to between one and three words, depending on how you count them, in determining what independent claim 1 is “directed to.” *Bilski*, 561 U.S. at 611 (“Claims 1 and 4 in petitioners’ application explain the basic concept of hedging, or protecting against risk.”). In *Alice*, the Supreme Court clarified that the series of steps, and hence claim limitation equivalents, in *Bilski* considered to be accounted for in the concept of “hedging risk” were as follows “(1) initiating a series of financial transactions between providers and consumers of a commodity; (2) identifying market participants that have a counterrisk for the same commodity; and (3) initiating a series of transactions between those market participants and the commodity provider to balance the risk position of the first series of consumer transactions.” *Alice*, 573 U.S. at 218–219.

In *Alice*, representative independent claim 33 recites 198 words. *Id.* at 213 n.2. The Supreme Court reduced the concept down to between two and ten words, depending on how you count them. *Id.* 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.”). The series of steps, and hence claim limitation equivalents, accounted for in *Alice* by “intermediated settlement” appear to be as follows:

[A] method of exchanging financial obligations between two parties using a third-party intermediary to mitigate settlement risk. The intermediary creates and updates “shadow” records to

reflect the value of each party's actual accounts held at "exchange institutions," thereby permitting only those transactions for which the parties have sufficient resources. At the end of each day, the intermediary issues irrevocable instructions to the exchange institutions to carry out the permitted transactions.

Id. at 219. The Supreme Court further indicated that what was not accounted for by "intermediated settlement," and thus needed to be accounted for in step two of *Alice*, included "a computer," "a computer system," and "a computer-readable medium containing program code." *Id.* at 221–224.

The Federal Circuit recently elaborated that formulating the concept a claim is "directed to" requires a careful reading of the claim as a whole in light of the specification. *Data Engine Techs. LLC v. Google LLC*, 906 F.3d 999, 1011 (Fed Cir. 2018). In doing so, the Federal Circuit indicated that "it is not enough to merely identify a patent-ineligible concept underlying the claim; we must determine whether that patent-ineligible concept is what the claim is 'directed to.'" *Rapid Litig. Mgmt. Ltd. v. CellzDirect, Inc.*, 827 F.3d 1042, 1050 (Fed. Cir. 2016). The Federal Circuit further has held that, after formulating the concept the claims are "directed to," the inquiry under *Alice* step two is to determine whether claim limitations *other than the steps for executing the formulated concept* are "well-understood, routine, and conventional." *BSG Tech LLC v. BuySeasons, Inc.*, 899 F.3d 1281, 1290 (Fed. Cir. 2018).

ii. *Application of "Directed to" Framework to Patent Owner's Assertions*

Beginning with independent claim 12, Patent Owner identifies several claim limitations that purportedly are not accounted for by Petitioner.

PO Resp. 19–21 (citing Ex. 1001, 28:11–25). We agree with Patent Owner that each claim limitation must be accounted for. Under the above framework, however, Petitioner only needed to account for each claim limitation under either a formulation of the concept a claim is “directed to” or under *Alice* step two. We evaluate Patent Owner’s identified limitations in light of that framework.

Patent Owner first identifies “[a] device in communication with a server, comprising: a memory device storing game software instructions; and one or more hardware processors configured to execute the game software instructions perform operations.” PO Resp. 19. We agree with Patent Owner that these are not steps for executing the concept of “creating and applying a template.” Petitioner, however, has accounted for these limitations under *Alice* step two as generic computer technology. Pet. 29–32.

Patent Owner next identifies the italicized portions of “creating a template defining game contents and second positions of one or more of the game contents *arranged in a game space based on a template creation command by a game player*” and “applying the template to a predetermined area *within the game space based on a template application command by the game player.*” PO Resp. 19–20. Petitioner also has accounted for these limitations under *Alice* step two, asserting that “[t]hese steps cannot provide an inventive concept because they describe only the result of a command from a user to a computer, but provide no insight into how the claimed computer will execute the command.” Pet. 32–33.

Patent Owner further identifies the entirety of the claim limitation of “creating a template defining game contents and second positions of one or

more of the game contents arranged in a game space based on a template creation command by a game player,” and asserts that Petitioner has not accounted for “game contents” and “second positions.” PO Resp. 20. The portion from “arranged” onward, i.e., “arranged in a game space based on a template creation command by a game player,” has already been addressed above. For the rest of the claim limitation, however, Patent Owner’s assertion has some merit, in that the words “creating and applying a template” do not appear to account literally for “game contents” and “second positions,” and the Petition does not address these claim limitations in *Alice* step two. *See generally* Pet. 29–33.

As a part of its claim construction analysis, however, Petitioner asserts that “[a] template is a record of the positions of one or more game pieces in a game that can be applied in other game spaces.” Pet. 13–16 (citing Ex. 1001, 2:2–3, 6:28–45, 6:50–57, 7:4–15, 7:37–48, 8:18–24, 11:29–33, 16:25–35, 17:42–56, 18:52–19:9, Figs. 3A–3E). At oral argument, when asked what terms should be added to the formulation of the concept the claims are “directed to,” Patent Owner identified “move game contents.” Tr. 49:18–51:18.³ When the assertions in this and the previous two paragraphs are considered together, we take the parties to agree that the current formulation of the concept that independent claim 12 is “directed to,” namely “creating and applying a template,” should be clarified to include the express claim language of “positions of one or more of the game contents.” We agree that is consistent with the claim language and cited

³ We acknowledge that this statement was made “off the cuff” (Tr. 51:14–15). However, it is also consistent with Patent Owner’s assertion set forth in the immediately prior paragraph.

portions of the '594 patent. Accordingly, we clarify the concept that independent claim 12 is “directed to” as “creating and applying a template of positions of one or more game contents.”

Patent Owner also asserts that Petitioner has not accounted adequately for the limitation of “applying the template to a predetermined area within the game space based on a template application command by the game player.” PO Resp. 20. Our analysis is analogous to that set forth in the preceding three paragraphs, and need not be repeated.

For independent claims 1 and 10, Patent Owner identifies the claim limitation of “moving, by the computer, the game contents arranged at the first positions within the game space to the second positions of the game contents defined by the template within the predetermined area.”

PO Resp. 17. For reasoning analogous to that set forth above for independent claim 12, we are persuaded that all of the claim limitations are accounted for, by Petitioner, either in the concept of “creating and applying a template of positions of one or more game contents” or in *Alice* step two.

Patent Owner repeatedly asserts variations of “the problems solved by the '594 patent are unique to (i.e. ‘necessarily rooted in’) and directly arise from computer city-building games,” namely, monotony and boredom. PO Resp. 23–34, 40–42 (citing Ex. 1001, 1:43–60; Ex. 2004 ¶¶ 21, 23, 26–27, 29–33, 39, 47, 52; Ex. 2011, claim 7); PO Sur-Reply 12–13 (citing Ex. 1001, 3:31–34). This could be read as an assertion that the formulation of the concept independent claim 12 is “directed to” should be modified to include some variation of “computer city-building games” and associated monotony and boredom. Petitioner responds that each of “computer” and “city-building games” merely limit the invention to a technological

environment, and that, in any case, none of the claims recite limitations with any variation of “city building” or monotony and boredom associated with them. Pet. Reply 10. We agree with Petitioner.

Specifically, we credit the above cited testimony of Mr. Crane, which is supported by the cited portions of the '594 patent, that there are boredom and monotony problems associated with city building games. We agree with Petitioner, however, that there is no language in the claims concerning computer city building games that serves as a sufficient justification to modify “creating and applying a template of positions of one or more game contents” to account for those aspects. And if there is insufficient justification for including language for computer city building games, we also see no basis for including language about monotony and boredom associated with those games.

With respect to monotony and boredom alone, we note those are not problems restricted to any technological environment, and, in any case, whether something is boring or monotonous is subjective. So even if nods to monotony and boredom alone, disembodied from city building games, were to be included in the concept the claim is “directed to,” we are unclear how they would be limiting. Put another way, insofar as the concept the claim is “directed to” is a solution to boredom and monotony, we do not see the point of including the problem it is solving.

Patent Owner also makes several assertions that the claims, when read in the light of the specification, call for simultaneous movement of multiple game pieces. PO Resp. 38–40 (citing Ex. 1001, 1:50–60, 15:49–52; Ex. 2004 ¶¶ 29, 34, 45); PO Sur-Reply 19–20 (citing Ex. 1001, 3:31–32, 4:34–37; Ex. 2004 ¶¶ 46–47). This could be read as an assertion that the

formulation of the concept independent claim 12 is “directed to” should be modified to account for such features. Petitioner responds that the claims and specification do not require simultaneous movement of multiple game pieces, and, indeed, explicitly disclose movement of only one piece at a time. Pet. Reply 11–12, 20–21 (citing Ex. 1001, 1:50–60, 17:42–56, Fig. 9; Ex. 1010, 24:12–28:19, 30:2–31:16, 59:18–60:14, 85:14–90:16, 95:22–96:15; Ex. 2004 ¶¶ 33, 45–47). In addition to reiterating the points made in its Patent Owner Response, Patent Owner replies that this is a belated claim construction argument, made by Petitioner, to “insert the limitation of ‘sequential’ or ‘iterative’ movement of game contents into the claim language,” and that Patent Owner’s position is supported by the claim language of the “applying” step of independent claim 12, in that the “applying” is performed based on a single “template application command by the game player.” PO Sur-Reply 9–12 (Ex. 1001, 1:50–53, 4:33–37; 17:50–52; Ex. 2004 ¶¶ 45, 47). We agree with Petitioner.

Specifically, we agree that there is no basis in either the claim language of independent claim 12, or the specification, that requires simultaneous movement of multiple game pieces. Independent claim 12 expressly recites “creating a template . . . of one or more of the game contents,” indicating movement of only one game piece expressly is contemplated. Mr. Crane’s testimony here is not contradictory, in that paragraphs 45 and 47 of his Declaration presume movement of multiple game pieces (Ex. 2004 ¶ 45 (“application of the template *in this context* serves to move many (if not all) of a player’s game pieces simultaneously”) (emphasis added)), and we have no trouble crediting testimony that “moving multiple game pieces simultaneously provides a demonstrably different in-

game result than moving game pieces singly.” Ex. 2004 ¶ 46. The “context” of independent claim 12, however, is that such a feature is not required, as confirmed by Mr. Crane. Ex. 1010, 90:13–16 (“In the case where there is only one element that might interact, then that is the movement of a single object and not simultaneous movement of multiple objects.”), 96:7–15.

Moreover, we do not read Petitioner’s position as a belated claim construction argument, primarily because Petitioner does not ask for any terms to be added. Instead, Petitioner is asserting, and we agree, that the term “applying” both broadly and reasonably encompasses each of the “simultaneous” and “iterative” scenarios, which is consistent with its assertions set forth in the Petition. As for Patent Owner’s assertion that the “applying” is performed based on a single “template application command by the game player,” while we agree, the assertion is misplaced, as a single command can be the basis for either “simultaneous” or “iterative” actions.

Patent Owner asserts further that, among other claims, independent claim 1 concern improvements to a graphical user interface (“GUI”). PO Resp. 23, 31 (citing Ex. 1001, 1:50–60); PO Sur–Reply 14–15 (citing Ex. 2004 ¶¶ 24, 43). Petitioner responds that independent claim 12 does not recite a “specific, structured graphical user interface paired with a prescribed functionality.” Pet. Reply 12–15 (citing Ex. 1001, 28:11–25; Ex. 1010, 113:7–114:17, 121:1–123:12, 131:20–24, 132:2–12, 132:20–133:9). We agree with Petitioner, and are persuaded that the concept of what independent claim 12 is “directed to” should not be modified to include any references about improvements to a GUI. While we agree with Patent Owner that the “applying the template” step of independent claim 12, in the

context of computers, most likely occurs on a GUI, the claim does not recite such language explicitly. The same is true for independent claim 1.

Moreover, we are persuaded that there is nothing about “applying a template,” or any other claim language, that indicates that it is an improvement to a GUI. As claimed, “applying the template” may change what is displayed on the GUI; however, we are persuaded that such displaying alone, without further technical details concerning how the displaying of the “applying the template” occurs, cannot constitute an improvement to a GUI. Pet. Reply 22–24 (citing Ex. 1010, 32:17–33:8, 113:21–24; 114:6–9, 114:15–17, 130:8–131:16, 131:20–24, 132:2–12, 133:2–12; Ex. 2004 ¶¶ 35–38, 42–44; Ex. 2009, 388). Indeed, Patent Owner’s expert, Mr. Crane, agreed that there is no specific mechanism for “applying the template” recited in the claim. Ex. 1010, 132:2–12, 132:20–133:9. The same analysis is applicable to claim elements such as “predetermined area,” “game space,” “game contents,” or “positions,” as we are persuaded that none of them are specific to, and thus require, a GUI. Mr. Crane’s testimony in paragraphs 24 and 43 of his Declaration (Ex. 2004) does not persuade us otherwise, as such testimony does not refer to any claim language.

Accordingly, based on the above, we find that independent claim 12 is directed to “creating and applying a template of positions of one or more game contents.” And as set forth above, we construe “template” as “record.”

c. Whether “Creating and Applying a Template of Positions of One or More Game Contents” is an Abstract Idea

As an initial matter, we note that Patent Owner admits that “the generic idea of a template existed prior to the invention in the ’594 patent.” PO Resp. 28. We are unclear as to any meaningful differences between “the

generic idea of a template” and “creating and applying a template of positions of one or more game contents.” By default, any template must be created, and the point of creating it is to allow it to be applied. With respect to “positions of one or more game contents,” templates must involve placement of content relative to other content, and we are persuaded, for the reasons set forth below, that the “game” aspect of the “content” is not a meaningful distinction here, especially where independent claim 12 does not provide any further details as to how the “content” is “game” oriented.

Having said that, Patent Owner sets forth numerous substantive assertions as to why its claims are not directed to a “generic idea of template,” but are directed to a particular manner of applying a template similar to claims for “a particular user interface improvement that functions in a specific manner” determined to be patent eligible in *Core Wireless Licensing S.A.R.L. v. LG Electronics, Inc.*, 880 F.3d 1356, 1362 (Fed. Cir. 2018). PO Resp. 28–31 (citing Ex. 1001, 1:50–60). Petitioner disagrees. Pet. Reply 13–15 (citing Ex. 1010, 131:20–24, 132:2–12, 132:20–133:9). While each assertion will be addressed in turn, in summary, we agree with Petitioner.

At a high level, the parties dispute whether the claims at issue here are directed to the same concept as those set forth in *Core Wireless* determined to be patent eligible. We are persuaded that they are not. As set forth above, independent claim 12 is directed to the concept of “creating and applying a template of positions of one or more game contents.” In *Core Wireless*, the Federal Circuit found that “[t]he asserted claims in this case are directed to [the concept of] an improved user interface for computing devices, not to the abstract idea of an index” and “these claims are directed to [a concept of] a

particular manner of summarizing and presenting information in electronic devices.” 880 F.3d at 1362. In comparing the concept from independent claim 12 to those identified in *Core Wireless*, we conclude they are nothing alike.

Patent Owner then makes a comparison of three purportedly corresponding limitations from the claims in *Core Wireless* and independent claim 11 in this proceeding. PO Resp. 28–29. Petitioner replies that the comparison is inapposite because, unlike the claims in *Core Wireless*, independent claim 11 does no more than recite “three broadly claimed result-oriented functions” of storing “game content” in any form, and without any mechanism for achieving the “creating” and “applying” functions. Pet. Reply 14 (citing Ex. 1010, 131:20–24, 132:2–12, 132:20–133:9). We agree with Petitioner.

Independent claim 1 from one of the patents at issue in *Core Wireless* reads as follows:

1. A computing device comprising a display screen, the computing device being configured to display on the screen a menu listing one or more applications, and additionally being configured to display on the screen an application summary that can be reached directly from the menu, wherein the application summary displays a limited list of data offered within the one or more applications, each of the data in the list being selectable to launch the respective application and enable the selected data to be seen within the respective application, and wherein the application summary is displayed while the one or more applications are in an un-launched state.

Core Wireless, 880 F.3d at 1359.

Patent Owner first asserts that independent claim 11 includes a limitation that “specifies the particular data structure which must be stored in memory, and the specific contents of those data structures.” We presume

that limitation to be “a storage unit configured to store game contents arranged within the game space, first positions of the game contents within the game space, and a template defining second positions of one or more game contents.” The corresponding language from *Core Wireless* appears to be the following: “Claim 1 of the ’476 patent requires ‘an application summary that can be reached directly from the menu,’ specifying a particular manner by which the summary window must be accessed.” 880 F.3d at 1362. We agree with Petitioner that the “storage unit,” as recited in independent claim 11, does not recite storing data in manner analogous to the specificity of how the above-referenced claim *in Core Wireless* recites accessing the summary window.

Patent Owner next asserts that independent claim 11 concerns “limit[ing] where the template may be applied to a predetermined area in the game space, and it limits the application of the template to when the player provides an explicit command,” which we presume to refer to independent claim 11’s recitation of “a processing unit configured to apply the template to a predetermined area within the game space based on the command by the player.” The corresponding language from *Core Wireless* appears to be the following: “The claim further requires the application summary window list a limited set of data, ‘each of the data in the list being selectable to launch the respective application and enable the selected data to be seen within the respective application.’” 880 F.3d at 1362. We agree with Petitioner that the two limitations are not comparable. For example, the language from *Core Wireless* recites a computer-specific way of implementing a function, “the data in the list being selectable to launch,” whereas independent claim

11 contains only a generic recitation of “based on the command by the player.”

The last limitation of independent claim 11 identified by Patent Owner concerns “restrain[ing] what the application of the template may do with respect to the game contents, namely moving all of the contents subject to the template from their first positions to their second positions,” which we presume to be the following limitation of independent claim 11: “wherein when the template is applied, the processing unit moves the game contents arranged at the first positions within the game space to the second positions of the game contents defined by the template.” The corresponding language from *Core Wireless* appears to be the following: “This claim limitation restrains the type of data that can be displayed in the summary window.” 880 F.3d at 1362–63. While these claim portions admittedly are similar, they are both broad, and we are not persuaded that the similarity in these limitations alone is sufficient to show that the overall claims are analogous.

Patent Owner makes similar assertions with respect to *Trading Techs. Int’l, Inc. v. CQG, INC.*, 675 F. App’x 1001 (Fed. Cir. 2017). PO Resp. 23; PO Sur-Reply 13–14. Specifically, Patent Owner asserts that, like the claims in *Trading Technologies.*, the instant claims “require a specific, structured graphical user interface paired with a prescribed functionality directly related to the graphical user interface’s structure that is addressed to and resolves a specifically identified problem in the prior state of the art.” PO Resp. 23 (citing *Trading Techs.*, 675 F. App’x at 1004). Petitioner replies that the instant claims are unlike those in *Trading Technologies.* Pet. Reply 12–13. We agree with Petitioner.

We again begin at a high level and compare concepts. As set forth above, independent claim 12 is directed to “creating and applying a template of positions of one or more game contents.” That concept is nothing like the concept from *Trading Techs.*, which “require[s] a specific, structured graphical user interface paired with a prescribed functionality directly related to the graphical user interface’s structure that is addressed to and resolves a specifically identified problem in the prior state of the art.” 675 F. App’x at 1004.

Independent claim 1 from the patent at issue in *Trading Techs.* is set forth below:

1. A method for displaying market information relating to and facilitating trading of a commodity being traded in an electronic exchange having an inside market with a highest bid price and a lowest ask price on a graphical user interface, the method comprising;

dynamically displaying a first indicator in one of a plurality of locations in a bid display region, each location in the bid display region corresponding to a price level along a common static price axis, the first indicator representing quantity associated with at least one order to buy the commodity at the highest bid price currently available in the market;

dynamically displaying a second indicator in one of a plurality of locations in an ask display region, each location in the ask display region corresponding to a price level along the common static price axis, the second indicator representing quantity associated with at least one order to sell the commodity at the lowest ask price currently available in the market;

displaying the bid and ask display regions in relation to fixed price levels positioned along the common static price axis such that when the inside market changes, the price levels along the common static price axis do not move and at least one of the first and second indicators moves in the bid or ask display regions relative to the common static price axis;

displaying an order entry region comprising a plurality of locations for receiving commands to send trade orders, each location corresponding to a price level along the common static price axis; and

in response to a selection of a particular location of the order entry region by a single action of a user input device, setting a plurality of parameters for a trade order relating to the commodity and sending the trade order to the electronic exchange.

675 F. App'x at 1003. We have no trouble agreeing with Petitioner that the above claim is indeed “a specific, structured graphical user interface paired with a prescribed functionality directly related to the graphical user interface’s structure that is addressed to and resolves a specifically identified problem in the prior state of the art.” *Id.* at 1004. For example, the claim above from *Trading Technologies* recites “displaying an order entry region comprising a plurality of locations for receiving commands to send trade orders.” We are persuaded that recitation is a function specific to a “specific, structured graphical user interface.” By contrast, the closest limitations in independent claim 12 are the “template creation command” and the “template application command.” As noted above, however, those limitations are devoid of specifics as to how the recited commands are accomplished, and we are persuaded they are not analogous to the purportedly corresponding limitations of the above claim from *Trading Techs.*

Patent Owner also asserts that Petitioner is incorrect that the claims merely automate human activity. PO Resp. 24–25, 38–40 (citing Ex. 1001, 1:50–60, 15:49–52; Ex. 2004 ¶¶ 29, 34, 35, 45); PO Sur-Reply 9–13 (citing Ex. 1001, 1:50–53, 4:33–37, 17:50–52; Ex. 2004 ¶¶ 45, 47). Petitioner responds as follows:

The challenged independent claims recite nothing more than automating tasks that can be performed manually by a human, including record keeping of the location of one or more game pieces (“creating a template” and “storing” the template information) and then automating the humanly-performable task of moving the game piece or game pieces to the specified location in accordance with the template (“applying a template”).

Pet. Reply 9; *see also id.* at 8–10 (citing Ex. 1010, 64:22–72:9, 70:15–71:4).

We agree with Petitioner.

Most of Patent Owner’s assertions, in this regard, are that the claims are “directed to” more than mere automation of human activity, for example, simultaneous movement of game pieces and problems specifically arising in the realm of computer technology. Those assertions already have been addressed above.⁴ The remaining inquiry then, is whether the concept independent claim 12 is directed to, i.e., “creating and applying a template of positions of one or more game contents,” involves automation of human activity. On that issue, we find that Petitioner’s above assessment is accurate: that “creating and applying a template of positions of one or more game contents” is no more than a method of organizing human activity, in that it manages interactions between people in a social activity governed by the rules and instructions of a game.

Patent Owner additionally asserts that Petitioner’s comparison of the instant claims to those in *Planet Bingo* is erroneous for several reasons. PO Resp. 31–36. First, Patent Owner asserts that the instant claims “are

⁴ We have considered paragraphs 29, 34, 35, 45, and 47 of Mr. Crane’s Declaration (Ex. 2004), but the assertions set forth therein are misplaced, as they do not refer to claim language. The citations in Mr. Crane’s Declaration to the written description portion of the ’594 patent are misplaced for the same reasons.

drawn toward computer city-building games” and “specific improvements in the graphical user-interface for computer city-building games through the use of data structures implemented as templates for game contents within a virtual game space,” while the claims in *Planet Bingo* “were directed to nothing more than ‘managing/playing the game of Bingo.’” PO Resp. 32–33 (citing Ex. 1001, Abs., 1:43–60; Ex. 2004 ¶¶ 26–27, 32–33, 39, 47, 52; Ex. 2011, claim 7). Petitioner responds that “the ’594 claims are not limited to ‘city-building’ games, nor to a ‘player vs. player mechanic of attacking another player’s city.’” Pet. Reply 16 (citing Ex. 1010, 73:2–74:10; 102:1–18; 106:14–20). We agree with Petitioner.

As set forth above, independent claim 12 is directed to the concept of “creating and applying a template of positions of one or more game contents.” As also set forth above, we are persuaded that this concept should not be modified to include language concerning “computer city-building games” or “improvements in the graphical user-interface.” Accordingly, the remaining issue is whether the above concept corresponds adequately to the concept identified in *Planet Bingo*, which, as admitted by Patent Owner, is “managing/playing the game of Bingo.” We find that it does because, like the concept in *Planet Bingo*, the concept recited in claim 12 of “creating and applying a template of positions of one or more of game contents” also manages interactions between people in a social activity governed by the rules and instructions of a game. Both concepts are a method of organizing human activity. Indeed, a direct, side-by-side comparison of independent claim 1 from the patent in *Planet Bingo* and independent claim 12 illustrates the appropriateness of the comparison:

Independent claim 1 from <i>Planet Bingo</i>	Independent claim 12 of the '594 patent
A system for managing a game of Bingo which comprises:	A device in communication with a server, comprising:
a computer with a central processing unit (CPU) and with a memory and with a printer connected to the CPU; an input and output terminal connected to the CPU and memory of the computer; and a program in the computer enabling	a memory device storing game software instructions; and one or more hardware processors configured to execute the game software instructions perform operations including
(i) input of at least two sets of Bingo numbers which are preselected by a player to be played in at least one selected game of Bingo in a future period of time; (ii) storage of the sets of Bingo numbers which are preselected by the player as a group in the memory of the computer;	storing first positions of game contents; creating a template defining game contents and second positions of one or more of the game contents arranged in a game space based on a template creation command by a game player, storing the created template in the memory device
(iii) assignment by the computer of a player identifier unique to the player for the group having the sets of Bingo numbers which are preselected by the player wherein the player identifier is assigned to the group for multiple sessions of Bingo; (iv) retrieval of the group using the player identifier; (v) selection from the group by the player of at least one of the sets of Bingo numbers preselected by the player and stored in the memory of the computer as the group for play in a selected game	applying the template to a predetermined area within the game space based on a template application command by the game player.

<p>of Bingo in a specific session of Bingo wherein a number of sets of Bingo numbers selected for play in the selected game of Bingo is less than a total number of sets of Bingo numbers in the group;</p> <p>(vi) addition by the computer of a control number for each set of Bingo numbers selected for play in the selected game of Bingo;</p> <p>(vii) output of a receipt with the control number, the set of Bingo numbers which is preselected and selected by the player, a price for the set of Bingo numbers which is preselected, a date of the game of Bingo and optionally a computer identification number; and</p> <p>(viii) output for verification of a winning set of Bingo numbers by means of the control number which is input into the computer by a manager of the game of Bingo</p>	
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If anything, the above comparison illustrates the breadth of independent claim 12 in the '594 patent as compared to independent claim 1 from *Planet Bingo*, further supporting Petitioner's assertions that independent claim 1 from *Planet Bingo* is directed to an abstract idea, so is independent claim 12.

Related to the above comparison, Patent Owner further asserts that "a preferred set of bingo numbers" cannot correspond specifically to a "template" because bingo numbers are merely a set of specific numbers, and "a 'template' alone cannot be 'played.'" PO Resp. 35 (citing Ex. 2004 ¶ 39). Petitioner responds that this appears to refer to user interface design

problems, which is inapposite. Pet. Reply 16 (citing Ex. 1010, 121:1–123:12). As set forth above, we construe “template” as “record.” The above claim from *Planet Bingo* recites “storage of the sets of Bingo numbers,” which is a “record” and, hence, reads on a “template.” Furthermore, we are persuaded there is no meaningful distinction between “playing” Bingo numbers and “applying” a template, as both take the stored information and apply it to the current game space. The same analysis is applicable to Patent Owner’s subsequent assertion that “the claimed use of templates defining the first positions and second positions of those game contents is a data structure describing the positional relationship, type, and arrangement of those game contents— whatever they may be—in the game space.” PO Resp. 35 (citing Ex. 2004 ¶ 39).

Patent Owner makes many assertions, similar to those already discussed, responding to Petitioner’s assertions that correspondence chess is analogous to “creating and applying a template of positions of one or more game contents.” PO Resp. 36–37 (citing Ex. 1001, Abs.; Ex. 1003, 1–2; Ex. 2004 ¶¶ 46–47, 56, 58, 60). For example, Patent Owner asserts that the instant claims concern computer city-building games while correspondence chess is a physical game. For the reasons set forth above, the type of game is not relevant. In another example, Patent Owner asserts that there is no use of a template in correspondence chess, because “all pieces start from the exact same beginning board positions in every game.” Patent Owner’s assertion is misplaced, as we are unclear as to the relevance of the beginning board positions for “creating and applying a template of positions of one or more game contents,” which does not specify any beginning positions. If

anything, the position of the game contents prior to the application of the template is a “beginning position.”

Furthermore, Petitioner asserts the following with respect to correspondence chess:

To play the game, the first player fills out a post card with information that represents the current state of the board and makes an indication on the post card of player’s intended move. The player then mails the post card to the opposing player, who then, having already set up a chess board, moves a piece on the board in accordance with the instruction on the post card. *See Ex. 1003, A Guide to Correspondence Chess in Wales*, at pp. 1–2.

This real-world analog reads on each of the claimed steps in each of the independent claims: (1) by recording the current state of the chess game, the first chess player stores the first positions of game contents; (2) by indicating on the post card the first player’s intended move, the player creates a template defining game contents and (3) stores the created template; (4) by sending the post card to the second player, the first player applies the template to a predetermined area, and (5) (which is required in independent claims 1, 10, and 11) the second player moves the corresponding piece on the chess board as indicated in the post card is the required movement of the game facility.

Pet. 22. We have no difficulty in finding that this corresponds properly to “creating and applying a template of positions of one or more game contents.”

Patent Owner cites additional cases, such as *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1257 (Fed. Cir. 2014) and *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1337 (Fed. Cir. 2016), for similar propositions, but in much less detail, as *Core Wireless* and *Trading Technologies*. *See, e.g.*, PO Sur-Reply 19. In any event, we remain

persuaded that Petitioner’s citations to *Planet Bingo* and correspondence chess are more appropriate for the reasons set forth above.⁵

Accordingly, for the reasons set forth above, we find that “creating and applying a template of positions of one or more game contents” is an abstract idea.

3. *Whether the Claims Contain an “Inventive Concept”*

a. *Petitioner’s Initial Analysis*

We next turn to the second step of the *Alice* and *Mayo* framework. Here, we consider the elements of the claims “individually and ‘as an ordered combination’” to determine whether the additional elements “‘transform the nature of the claim’ into a patent-eligible application.” *Alice*, 573 U.S. at 217 (quoting *Mayo*, 566 U.S. at 78). In general, Petitioner asserts that the claims of ’594 patent provide no inventive concept, because the ’594 patent’s “central advance is its suggestion to apply the concept of creating and applying a template on generic computer technology.” Pet. 29. In other words, Petitioner asserts that beyond the abstract idea, the claims recite only generic computer components including a “computer”; “server” or “hardware processor”; “storage unit”; and “memory device.” Pet. 30 (citing Ex. 1001, Claim 12, 2:12–13, 5:19–20). Further, Petitioner argues that “neither the claim language nor the specification provides any insight into how the claimed creation and application of a template is performed on

⁵ Petitioner additionally cites to *Tranxition, Inc. v. Lenovo (U.S.), Inc.*, 664 F. App’x 968, 971 (Fed. Cir. 2016) (Pet. 23) and *Credit Acceptance Corp. v. Westlake Services*, 859 F.3d 1044, 1055 (Fed. Cir. 2017). Pet. Reply 8–9; see also Tr. 59:7–21 (Patent Owner addressing the same). Because of our reliance on *Planet Bingo* and correspondence chess, we see no need to analyze these cases as well.

a computer.” Pet. 32. In other words, Petitioner asserts that the steps of the ’594 patent are recited in a functional manner, i.e., only performing rudimentary computer functions, such that the steps are no more than being “executed on a computer.” Pet. 33.

b. Patent Owner’s Assertions Concerning Independent Claims 1 and 10–12

Patent Owner asserts that the use of templates in the claimed manner is an inventive concept. PO Resp. 42–48 (citing Ex. 1001, 1:50–60, 5:49–55, Figs. 2B–2D, 3A–3E; Ex. 2004 ¶¶ 32–39, 41–47, 53–54, 56); PO Sur-Reply 21. More specifically, Patent Owner asserts that

the use of templates—in this particular claimed application—was not well-understood, routine, or conventional at the time of the ’594 patent. To the contrary, the use of templates in the manner described and claimed in the ’594 patent represents a significant improvement in the user-interface for computer city-building games, allowing a user to execute stratagems through the simultaneous movement of game contents.

PO Resp. 43; *see also* PO Resp. 1, 13, 14, 16, 17, 20, 21, 23, 26, 29, 31, 40 (additional assertions concerning unconventional implementation of templates). Petitioner responds that (1) “PO cannot save its claim by arguing that creating and applying a template – the abstract idea itself that the claim is ‘directed to’ – is ‘unconventional’” (Pet. Reply 19 (citing Ex. 2004 ¶ 34)), (2) the recited computer components entirely are conventional (Pet. Reply 19–20 (citing Ex. 1001, 2:12–13, 4:64–5:4, 5:19–20; Ex. 1010, 113:21–24, 114:6–9, 114:15–17)), and (3) Patent Owner’s arguments regarding “simultaneous” movements are not claimed (Pet. Reply 20–21 (citing Ex. 1001, 1:50–60; Ex. 1010, 24:12–28:19, 30:2–31:16, 59:18–60:14; Ex. 2004 ¶¶ 33, 45–47)). We agree with Petitioner.

Patent Owner’s fundamental misapprehension is that Petitioner must show that each claim limitation is “well-understood, routine, conventional,” regardless of whether than claim limitation is a part of the abstract idea. That is incorrect. The Supreme Court’s approach in *Alice* is instructive. There, the Supreme Court did not go through how each claim limitation was “well-understood, routine, conventional.” Instead, the Supreme Court took only those additional elements not accounted for by “intermediated settlement,” such as “a computer,” “a computer system,” “a computer-readable medium containing program code,” and performed the “well-understood, routine, conventional” analysis as to those elements. *Id.* at 221–224. The Federal Circuit has since confirmed this approach. *BSG Tech LLC*, 899 F.3d at 1290 (“It has been clear since *Alice* that a claimed invention’s use of the ineligible concept to which it is directed cannot supply the inventive concept that renders the invention ‘significantly more’ than that ineligible concept.”).

When this framework is applied properly, we see how most of Patent Owner’s assertions fall away. For example, Patent Owner asserts that “Petitioner has provided no evidence that the use of templates in computer city-building games was well-understood, routine, or conventional at the time of the ’594 patent.” PO Resp. 43–44 (citing Ex. 1001, 1:50–60; Ex. 2004 ¶¶ 33–34). Petitioner was not required to provide such evidence, however, for two reasons. First, as analyzed above, Petitioner was not required to account for “computer city-building games” because that concept is not recited in the independent claims. Second, and more importantly, Petitioner was not required to account for any limitations related to “creating and applying a template of positions of one or more game contents,”

because, like “intermediated settlement” in *Alice*, that is the abstract idea itself. Mr. Crane’s testimony does not persuade us otherwise, in that while he asserts that “[t]emplates providing such strategic information as claimed were not well-known, routine, or conventional in the field at the time of the ’594 patent” (Ex. 2004 ¶ 34), the only “strategic information” we can identify in the independent claims is the non-specific positioning of game content within the game space, which we are persuaded is a part of “creating and applying a template of positions of one or more game contents.”

The same is true for Patent Owner’s next assertion that “the claimed creation of templates defining first and second positions game contents represented a significant advance over what was known in the art at the time of the ’594 patent” and “the claims recite the use of templates ‘defining’ game contents.” PO Resp. 44–46 (citing Ex. 1001, 1:50–53, 5:49–55, Figs. 2B–2D; Ex. 2004 ¶¶ 33–34, 38–39, 41–42, 53, 54, 56). This assertion is also irrelevant, as “templates defining first and second positions game contents” and “use of templates ‘defining’ game contents” are each a part of “creating and applying a template of positions of one or more game contents,” which is, again, the abstract idea itself. *BSG Tech LLC*, 899 F.3d at 1290.

For Patent Owner’s assertion that the ability to move all game contents affects a template “simultaneously,” we are persuaded such an assertion is erroneous for all the reasons set forth above and reiterated by Petitioner; namely, that the independent claims do not recite “simultaneously” or an equivalent thereof.

Patent Owner additionally asserts as follows:

Contrary to Petitioner’s claim that “neither the claim language nor the specification provides any insight into *how* the claimed creation and application of a template is performed on a computer” (Pet. 32 (emphasis in original)), the ’594 patent provides sufficient detail on how the inventive concepts described above are implemented.

PO Resp. 47–48 (citing Ex. 1001, Figs. 2B–2D, 3A–3E; Ex. 2004 ¶¶ 35–38, 42–44). While that may be true, such implementation details are inapposite unless they are recited in the claims, and not just described in the Specification (as analyzed in the cited portions of Mr. Crane’s Declaration). We are persuaded here that such implementation details are not recited adequately in the independent claims, at least in a manner that deviates meaningfully from “creating and applying a template of positions of one or more game contents.”

Instead, Petitioner was required to account only for the “additional elements” in the claims, which are as follows: “computer”; “server” or “hardware processor”; “storage unit”; and “memory device.” Pet. 30 (citing Ex. 1001, Claim 12, 2:12–13, 5:19–20). For those limitations, Petitioner provides evidentiary support from the ’594 patent itself, as well as case law, that each was “well-understood, routine, conventional.” Pet. 29–32. Patent Owner does not dispute these assertions, and thus we are persuaded, and find, that they are supported adequately.

To be sure, we understand that claim limitations are not to be considered isolation, but as a part of a larger whole. *Flook*, 437 U.S. at 594. Nevertheless, for the reasons set forth above, we are persuaded that the independent claims, as a whole, are directed to an abstract idea where the

computer implementations are ancillary, as opposed to a computer-specific improvement, for the reasons set forth above.

Accordingly, we are persuaded that Petitioner has met its burden of showing that independent claims 1 and 10–12 do not contain an inventive concept beyond the abstract idea of “creating and applying a template of positions of one or more game contents.”

c. Whether Petitioner has Shown that Dependent Claims 2–4 and 9 Contain an Inventive Concept

For dependent claims 2–4 and 9, Petitioner asserts the following:

Dependent claim 2 and its dependent claim 3 describe the method of claim 1, but add that the method is conducted in a multi-player environment wherein a second player can also create and apply templates within the game space. Dependent claim 4 also describes the method of claim 1, but adds the requirement that the computer obtains and applies a pre-existing template from a different computer. Dependent claim 9 adds a requirement that the computer store a template based on a combination of more than one template. Rather than supply the '594 patent with an inventive concept, these dependent claims merely expand the patent's reach to cover various types of social, city-building games, on various types of computers for multiple types of templates. They thus add no “inventive concept” sufficient to rescue the claims from patent ineligibility, they merely expand its pre-emptive footprint.

Pet. 33–34. Patent Owner asserts that the limitations recited in these claims are not accounted for adequately. PO Resp. 17–18, 21–22; *see also* Tr. 24:14–25:2 (Board identifying dependent claims 2–4). We agree with Patent Owner.

Specifically, Petitioner does not explain why “merely expand[ing] its pre-emptive footprint” excuses Petitioner from accounting for these express claim limitations. Pet. 34. Although we would characterize the dependent

claims as narrowing the pre-emptive footprint, in that they narrow the claim scope, Petitioner seems to be admitting that these claims recite additional details beyond “creating and applying a template of positions of one or more game contents,” an admission with which we agree, and, indeed, we further agree with the Petitioner’s summary of those additional details in these claims. For example, Petitioner asserts that “[d]ependent claim 9 adds a requirement that the computer store a template based on a combination of more than one template.” Pet. 33. Accordingly, it was incumbent upon Petitioner to account for “a template based on a combination of more than one template” in some form or manner. Petitioner did not do so.

Certainly, Petitioner did not provide any evidentiary support or analysis to show that “a template based on a combination of more than one template” was “well-understood, routine, conventional.” And even if Petitioner meant to alter the concept the claims are “directed to” to account for this subject matter, and then perform the analysis of whether that concept is an abstract idea, Petitioner still falls short. Specifically, the concept for dependent claim 9 then becomes “creating and applying a template based on a combination of more than one template of positions of one or more game contents.” We fail to see how either *Planet Bingo* or correspondence chess accounts for this concept. The same analysis is applicable to the limitations of dependent claims 2–4.

Accordingly, we are unpersuaded that Petitioner has met its burden of showing that dependent claims 2–4 and 9 do not contain an inventive concept beyond the abstract idea of “creating and applying a template of positions of one or more game contents.”

d. Whether Petitioner has Shown that Dependent Claims 5–7 Contain an Inventive Concept

For dependent claims 5–7, Petitioner asserts that they merely “add rules to deal with problems that may arise after applying the template,” which are “directed to the abstract idea of creating and applying a template.” Pet. 34. Alternatively, Petitioner asserts that the recitations are insignificant extra-solution activity because they are unrelated to the problem the invention sought to solve. Pet. 35. Patent Owner asserts that the limitations recited in these claims are not accounted for adequately. PO Resp. 18, 21–22; *see also* Tr. 24:14–25:2, 26:1–27:10 (Board identifying dependent claim 7). We agree with Patent Owner.

Dependent claim 5 recites:

when the number of game contents arranged within the game space is smaller than the number of game contents for which the second positions are defined by the template, the computer moves the game contents arranged at the first positions within the game space to the second positions of the game contents defined by the template to which the moving distance is the smallest.

We are unpersuaded that this subject matter is accounted for adequately by “creating and applying a template,” because it is a specific way of “applying of template.” Specifically, when there are fewer game contents in the game space than in the template, there are potentially infinite ways such a situation can be accounted for. Because the claim limitation explicitly specifies one such way, we are unpersuaded that such a claim limitation may be summarily dismissed as merely being subsumed within “creating and applying a template.”

With respect to Petitioner’s assertion concerning insignificant extra-solution activity, we are unpersuaded that the aforementioned limitations are

accurately characterized as so, because they further define the concept of, or solution to, “creating and applying a template” itself. Specifically, in order to “apply the template” where there are fewer game contents in the game space than in the template, the aforementioned limitations must be considered. We are unpersuaded that something that is a part of the solution is “extra-” to it.

Moreover, even if the aforementioned limitations plausibly could be characterized as insignificant extra-solution activity, the Supreme Court has held that the touchstone of such activity is that it is generally “conventional” or “obvious.” *Mayo*, 566 U.S. at 79 (citing *Flook*, 437 U.S. at 590 (“Purely ‘conventional or obvious’ [pre]-solution activity” is normally not sufficient to transform an unpatentable law of nature into a patent-eligible application of such a law.”)). Petitioner has not provided any evidence, identified any case law, or provided sufficient analysis that the aforementioned limitations were either “conventional” or “obvious.” The analysis in the previous sentence is applicable to whether Petitioner has shown adequately that dependent claim 5 was “well-understood, routine, conventional,” and the entirety of the aforementioned analysis of dependent claim 5 is also applicable to the limitations of dependent claims 6 and 7.

Accordingly, we are unpersuaded that Petitioner has met its burden of showing that dependent claims 5–7 do not contain an inventive concept beyond the abstract idea of “creating and applying a template of positions of one or more game contents.”

*e. Whether Petitioner has Shown that Dependent Claim 8
Contains an Inventive Concept*

For dependent claim 8, Petitioner asserts as follows: “Claim 8 adds a requirement that the template is created and stored in the computer based on

the command of the player. Because this limitation is included in independent claim 12, it was included in the above analysis.” Pet. 36. Patent Owner asserts that the limitations recited in these claims are not accounted for adequately. PO Resp. 18, 21–22. We agree with Petitioner that the limitations of dependent claim 8 are a part of “creating and applying a template of positions of one or more game contents.”

Accordingly, we are persuaded that Petitioner has met its burden of showing that dependent claim 8 does not contain an inventive concept beyond the abstract idea of “creating and applying a template of positions of one or more game contents.”

f. Whether Petitioner has Shown that Dependent Claims 13–18 Contain an Inventive Concept

For dependent claims 13–17, Petitioner asserts the following:

Claims 13 through [17] depend from claim 12. Claims 13 through 15 describe applying the template by “replacing” an existing area. Claims 16 and 17 describe storing one template and multiple templates respectively These are simply variations of the independent claims. They thus add no “inventive concept” sufficient to rescue the claims from ineligibility.

Pet. 36. Patent Owner asserts that the limitations recited in these claims are not accounted for adequately. PO Resp. 18, 21–22. We agree with Petitioner. For example, dependent claim 13 recites “wherein the template is applied to the predetermined area within the game space by replacing an existing area within the game space.” We are persuaded that there is no other way a template could be applied, other than by replacing an existing area within the game space. Our analysis is the same for dependent claims 14–16.

For dependent claim 17, even when the concept is altered to account for this limitation, i.e., “creating and applying templates of positions of one or more game contents,” it is accounted for by *Planet Bingo*, whose claim recites “storing a player’s preferred sets of bingo numbers; retrieving one such set upon demand, and playing that set; while simultaneously tracking the player’s sets, tracking player payments, and verifying winning numbers.” *Id.*, 576 Fed. App’x at 1005–6 (cited at Pet. 21) (emphasis added). Additionally, it is axiomatic that duplication has no patentable significance. *In re Harza*, 274 F.2d 669, 671 (CCPA 1960) (“It is well settled that the mere duplication of parts has no patentable significance unless a new and unexpected result is produced.”). We determine here that such duplication, as recited, is not distinct substantively from “well-understood, routine, conventional.”

For dependent claim 18, in the Institution Decision we asserted as follows:

We acknowledge that the Petition does not appear to address directly dependent claim 18. Having said that, the Petition repeatedly uses the plural term “claims” in its step two *Alice/Mayo* analysis. *See e.g.*, Pet. 29 (“The claims of the ’594 patent recite only conventional and functional components incidental to implementing the abstract idea of creating and applying a template.”) (emphasis added). Furthermore, on a substantive basis, we discern no meaningful distinction between the subject matter of claim 18 and that of representative claim 12. Specifically, both claims 12 and 18 require selecting a template based on a command by the game player and applying the template to a predetermined area. *See Ex. 1001*, 28:11–25, 28:49–53. Hence, although the Petition does not explicitly set forth a separate analysis of claim 18, we are persuaded that the Petition adequately addresses the subject matter of claim 18, through its analysis of claim 12. *See Pet. 32, 33*. Of course,

Patent Owner may argue to the contrary, and submit supporting evidence, during trial.

Dec. 14–15. During trial, despite an express invitation to do so, Patent Owner did not provide any evidence or analysis to disturb this assertion. And even when we consider it anew, we determine that it is correct.

Accordingly, we are persuaded that Petitioner has met its burden of showing that dependent claims 13–18 do not contain an inventive concept beyond the abstract idea of “creating and applying a template of positions of one or more game contents.”

g. Whether Petitioner has Shown that Dependent Claims 19 and 20 Contain an Inventive Concept

For dependent claims 19 and 20, Petitioner asserts that “claims 19 and 20 describe storing the templates in a server connect to the device and that the templates are stored in the server in the form of a ‘table.’ These are simply variations of the independent claims. They thus add no ‘inventive concept’ sufficient to rescue the claims from ineligibility.” Pet. 36.

Petitioner asserts further that the recited limitations are described generically in functional terms and, as such, are insufficient to impart an inventive concept. Pet. 36–37 (citing Ex. 1001, 5:5–14, 5:38–62, Fig. 2). Patent Owner asserts that the limitations recited in these claims are not accounted for adequately. PO Resp. 18, 21–22. We agree with Petitioner.

Specifically, we agree with Petitioner that dependent claim 19 only recites generic components that are “well-understood, routine, conventional,” which Petitioner has supported with citations to the ’549 patent, and that the “table” recited in dependent claim 20 is not meaningfully distinguishable from a “template,” which we construe as a “record” above.

Accordingly, we are persuaded that Petitioner has met its burden of showing that dependent claims 19 and 20 do not contain an inventive concept beyond the abstract idea of “creating and applying a template of positions of one or more game contents.”

4. *Conclusion*

We are persuaded that Petitioner has met its burden of showing, by a preponderance of the evidence, that claims 1, 8, and 10–20 are unpatentable as being directed to patent ineligible subject matter. We are not persuaded that Petitioner has met its burden of showing, by a preponderance of the evidence, that claims 2–7 and 9 are unpatentable as being directed to patent ineligible subject matter.

III. ANALYSIS OF PATENT OWNER’S ASSERTIONS CONCERNING 35 U.S.C. § 325(D)

“Patent Owner respectfully requests that the Board exercise its discretion under § 325(d) and deny the petition,” based primarily on the fact that in five child applications the Examiner has determined the claims to be patent eligible subject matter. PO Resp. 8–12. Petitioner responds that “no statute or caselaw provides any reason to terminate review of a parent matured patent based on an examiner’s preliminary review of a child application under § 101 or an applicant’s terminal disclaimers.” Pet. Reply 1–5. We agree with Petitioner.

Patent Owner first asserts that “Petitioner’s pattern of activity before the Office raises at least the appearance of harassment—of the 43 petitions for post-grant review filed in FY2018, Petitioner has filed 14, all against Patent Owner.” PO Resp. 10. Petitioner responds that its filings are merely responding to the fact that “almost two years ago, in a letter to Petitioner’s

CEO, [Patent Owner] specifically threatened Petitioner with suit regarding the allowed application of the '594," and that "[s]tarting in May 2017 and continuing to present, PO has filed no fewer than 30 separate infringement actions in Japan – one of which asserts the Japanese counterpart to the '594 – and PO has threatened to launch a similar series of suits in the U.S."

Pet. Reply 3. We agree with Petitioner. We are unpersuaded that challenging each of 14 different patents with a discrete petition, based on a credible threat of a lawsuit on at least some of those very patents, constitutes harassment.

Patent Owner next argues, in support of its "appearance of harassment" assertion, that "Petitioner presents no expert testimony—and in most of the proceedings, no evidence at all—to support any of its challenges." PO Resp. 10. Petitioner responds that "expert testimony is unnecessary to invalidate a patent under § 101." Pet. Reply 4–5. As best as we are able to ascertain, the implication is that by not providing expert testimony, Petitioner is making Patent Owner expend resources in not-quite bad faith (PO Resp. 10 n.2), because they have no expectation of actually prevailing. We agree with Petitioner for the reasons stated above. Furthermore, we note that Petitioner has advocated vigorously for its positions throughout the proceeding, and that any lack of expert testimony simply reflects a strategic and economic decision that any petitioner may make when preparing its petition, and does not signal an absence of Petitioner's faith in the strength of its positions for the reasons set forth above.

Patent Owner further asserts that "the Examiner has considered the issue of § 101 validity and determined the claims were not drawn to an

abstract idea at least five times during prosecution of patents in the '594 patent family.” PO Resp. 11. And because the Examiner also “determined the [claims in those other applications] were not patentably distinct from those of the '594 patent . . . then the challenged claims of the '594 patent are valid under § 101,” and the Board should not waste its limited resource revisiting this settled issue. PO Resp. 11–12. Petitioner responds that the Board’s discretion in whether to institute is broad, and that “[t]he Board disfavors denying a petition by § 325(d) when the issue in dispute was raised during the examination of child applications or considered during an *ex parte* proceeding.” Pet. Reply 1–2. Petitioner also asserts that “PO failed to compare the scope of the child claims to the claims at issue in the '594 [patent] to show their alleged similarities, but merely relied on terminal disclaimers. Terminal disclaimers are not an admission that claims are patentably indistinct.” Pet. Reply 2–3. On the whole, we agree with Petitioner.

Specifically, Patent Owner identifies the following language from a May 14, 2018, Office Action of U.S. Patent Application No. 15/636,964 (“the '964 application”), which claims priority to the '594 patent via U.S. Patent Application No. 15/393,646:

Examiner determined that the claimed invention is necessarily rooted in computer technology and thus not drawn to an abstract idea. For example, the claimed invention is drawn towards online gaming wherein the claimed hardware and software components interact to deliver an immersive virtual gaming environment. The claimed invention sets forth requirements for how to operate these interconnected components online, and over the Internet, to remote users. Thus, the claimed invention aligns with the facts of the Federal Circuit decisions in at least *DDR*

Holdings, Enfish and Core Wireless. Hence, Examiner finds that the claims are patent-eligible under 35 USC §101.

Ex. 2009, 388. Independent claim 1 pending at the time of the above Office Action reads as follows:

1. An electronic device comprising:
circuitry configured to

execute a game by arranging, based on a command received from a first player, a plurality of game contents within a game space, the game contents including at least game contents for defending from an attack initiated by another player;

receive a command to create a template for defending an attack initiated by another player from the first player;

create, responsive to the received command to create the template, a plurality of templates defining the plurality of game contents and respective positions of the plurality of game contents within the game space;

create a plurality of images that each correspond to one of the plurality of templates;

display a screen including the plurality of images;

receive a selection corresponding to one of the displayed images, and

apply a template corresponding to the received selection to a game space.

Ex. 2009, 363. We certainly give weight to the Examiner's determinations with respect to subject-matter eligibility on the related claims, and whether the relevant claims are patentably indistinct. We determine, however, that there are sufficient differences between the above claim, and the independent claims of the '594 patent, that counsel against our exercise of discretion under 35 U.S.C. § 325(d) and denial of the petition on the basis

urged by Patent Owner. For example, the above claim recites limitations such as “the game contents including at least game contents for defending from an attack initiated by another player” and “create a plurality of images that each correspond to one of the plurality of templates” that are plausibly technology specific limitations that are not recited in any of the claims of the ’594 patent. We have conducted a similar analysis of the claims of the other applications cited by Patent Owner, and come to the same determination. Ex. 2006, 230; Ex. 2007, 43; Ex. 2008, 43; Ex. 2010, 327.

Finally, Patent Owner was unaware of any instance where the Board, essentially, de-instituted a trial portion of a proceeding based on 35 U.S.C. § 325(d), let alone de-institute after oral hearing where all that is left is the issuance of a final written decision. Tr. 73:14–23. While the fact that the Board has not yet exercised its discretion in such manner certainly does not preclude the Board from taking such an action in the future under the appropriate circumstances, the absence of previous such actions by the Board, nevertheless, weighs against our exercise of discretion in such a manner.

For the above reasons, we decline to exercise our discretion under 35 U.S.C. § 325(d) and deny the petition at this late stage in the proceeding.

IV. MOTION TO EXCLUDE

Patent Owner files a Motion to Exclude Exhibits 1011, 1012. PO Mot. 1–7. Petitioner filed an Opposition. Pet. Opp. 1–10. Patent Owner filed a Reply. PO Reply 1–5. For the reasons set forth below, the Motion is *granted*.

A. *Exhibit 1011*

Exhibit 1011 is referred to by Petitioner as “Exeter Chess Club, New Starting Formations (Tabi’at), available at <http://exeterchessclub.org.uk/content/newstarting-formations-tabiat>.”

Pet. Reply v. Patent Owner asserts that Exhibit 1011 should be excluded as hearsay under Federal Rules of Evidence (“FRE”) 802, because it is an out-of-court statement made for the truth of the matter asserted. PO Mot. 1–4. Patent Owner asserts further that no exception applies. PO Mot. 4. While we will address Petitioner’s assertions in detail below, on the whole, we are persuaded that Patent Owner has met its burden.

Petitioner first asserts that Patent Owner’s assertion is facially deficient, because Patent Owner, as the moving party, did not identify the specific textual portions of Exhibit 1011 that are being offered for the truth of the matter asserted. PO Mot. 1–4. Patent Owner replies that (1) the Motion does identify specific hearsay assertions, (2) Patent Owner’s general identification of the entire Exhibit merely mirrors Petitioner’s general reliance on the entire Exhibit, and (3) the single non-precedential paper cited by Petitioner is distinguishable. PO Reply 1–3. We agree with Patent Owner.

Specifically, we agree that Patent Owner’s general identification of the entire Exhibit is a result of Petitioner’s lack of specificity with respect to the specific portions of Exhibit 1011 being relied on, and that, in any case, Patent Owner did attempt to identify the subject matter relied on by quoting the portions of Petitioner’s Reply which reference Exhibit 1011. PO Mot. 2–3 (“[T]he statement ‘[u]sing tabi’at allowed the players to progress the game more quickly and test how strategic formations would

fare against other starting formations’ is another factual assertion for which Petitioner cites Exhibit 1011 as support.”). In other words, we are persuaded that Patent Owner tailored its challenge as much as possible, given the manner in which Petitioner relied on Exhibit 1011. We also agree that the case cited by Petitioner is not controlling for the reasons stated.

Petitioner next asserts that Patent Owner’s citation to 37 C.F.R. § 42.53(a) is erroneous, because it does not apply to documentary evidence. Pet. Opp. 3–4. Patent Owner clarifies that it is not relying on 37 C.F.R. § 42.53 as an independent basis for excluding Exhibit 1011. PO Reply 3. The parties are in agreement that 37 C.F.R. § 42.53(a) is inapposite, so there is nothing to decide.

Petitioner further asserts that statements made in Exhibit 1011 are not hearsay because they are not being relied upon for the truth of the matter asserted, but are “verbal acts” that have independent legal significance. Pet. Opp. 5–6. Patent Owner responds that the “verbal acts” doctrine does not apply because there is no legal right being affected. PO Reply 4–5. We agree with Patent Owner. “Verbal acts” are statements made, in areas such as contracts of offers for sale, where the making of a statement affects, for example, whether a contract or offer for sale can be enforced. *Echo Acceptance Corp. v. Household Retail Servs., Inc.*, 267 F.3d 1068, 1087–88 (10th Cir. 2001). That is not the nature or character of how Petitioner relies on Exhibit 1011.

Petitioner finally relies on the residual exception of FRE 807. Pet. Reply 6–10. Patent Owner responds that the residual exception should be applied sparingly when “the evidence is very important and very reliable,” and that Petitioner has not met the requirements of FRE 807.

PO Reply 5 (quoting *United States v. Kim*, 595 F.2d 755, 766 (D.C. Cir. 1979)). We agree with Patent Owner.

The residual exception to the hearsay rule is to be reserved for “exceptional cases,” and is not “a broad license on trial judges to admit hearsay statements that do not fall within one of the other exceptions.” *Conoco Inc. v. Dep’t of Energy*, 99 F.3d 387, 392 (Fed. Cir. 1996), as amended on reh’g in part (Jan. 2, 1997) (internal quotations omitted). FRE 807 reads as follows:

(a) In General. Under the following circumstances, a hearsay statement is not excluded by the rule against hearsay even if the statement is not specifically covered by a hearsay exception in Rule 803 or 804:

- (1) the statement has equivalent circumstantial guarantees of trustworthiness;
- (2) it is offered as evidence of a material fact;
- (3) it is more probative on the point for which it is offered than any other evidence that the proponent can obtain through reasonable efforts; and
- (4) admitting it will best serve the purposes of these rules and the interests of justice.

For the first circumstance, Petitioner cites the Affidavit of Mr. Christopher Butler (Exhibit 1015), and the fact that the Exhibits corroborate each other, as showing that the statements have “equivalent circumstantial guarantees of trustworthiness” as other hearsay exceptions. Pet. Opp. 7–9. We agree with Patent Owner that this is inadequate. Mr. Butler’s Affidavit, at best, testifies as to the authenticity of the webpage itself, and not the statements set forth therein. Furthermore, we are persuaded that two exhibits excluded as hearsay, i.e., Exhibits 1011 and 1012, cannot corroborate each other, or at least in the manner advocated for

by Petitioner, where Petitioner has not shown how the exhibits are related, other than generally by subject matter.

For the second circumstance, we agree with Patent Owner that Exhibits 1011 and 1012 are “offered as evidence of a material fact,” hence this dispute.

For the third circumstance, we are persuaded that if *tabi’at* and *shatranj* are as well-known as Petitioner asserts, that printouts from two websites are not “more probative on the point for which it is offered than any other evidence that the proponent can obtain through reasonable efforts.” FRE 807(a)(3).

Finally, for the fourth circumstance, for the challenges to the independent claims of the ’594 patent, Petitioner’s challenge is successful even without Exhibit 1011. Furthermore, for the dependent claims for which Petitioner’s challenge is unsuccessful, Petitioner did not rely on Exhibit 1011. *See generally* Pet. 33–37; Pet. Reply 18–19. Given that, we are persuaded that admitting Exhibit 1011 does not serve the interests of justice.

We are persuaded that Patent Owner has met its burden of showing that Exhibit 1011 should be excluded as hearsay under FRE 802, and that no exception applies.

B. Exhibit 1012

Exhibit 1012 is referred to by Petitioner as “Chess History I: Shatranj, available at <https://www.chess.com/clubs/forum/view/chess-history-1-shatranj>.” Pet. Reply v. Patent Owner makes the same assertions concerning Exhibit 1012 as were made for Exhibit 1011, Petitioner makes similar responses, and Patent Owner makes similar replies. PO Mot. 4–7;

Pet. Opp. 1–10; PO Reply 1–5. For the reasons similar to those set forth above for Exhibit 1011, we agree with Patent Owner with respect to Exhibit 1012. Indeed, we note that, in many respects, Exhibit 1012 is even more problematic in that (1) the statements relied upon appear to have been made by commenters on a website, and not the website itself (i.e., hearsay of hearsay), (2) using the criteria in Mr. Butler’s Affidavit, the webpage can only be authenticated back to 2018, (3) Patent Owner specifically challenges the forum post dates (PO Mot. 5), and (4) there is no testimony or evidence as to how those forum post dates, e.g., “Oct. 1, 2008,” were machine-generated.

We are persuaded that Patent Owner has met its burden of showing that Exhibit 1012 should be excluded as hearsay under FRE 802, and that no exception applies.

C. Conclusion

Patent Owner’s Motion to Exclude Exhibits 1011 and 1012 is *granted*.

V. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that claims 1, 8, and 10–20 of the ’594 patent are held unpatentable;

FURTHER ORDERED that claims 2–7 and 9 have not been shown to be unpatentable;

FURTHER ORDERED that Patent Owner’s Motion to Exclude is *granted*; and

FURTHER ORDERED that, because this is a Final Written Decision, parties to the proceeding seeking judicial review of the Decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

PGR2018-00008
Patent 9,597,594 B2

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