IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF TEXAS MARSHALL DIVISION

GREE, INC.,

Plaintiff,

v.

SUPERCELL OY,

Defendant.

Case No. 2:19-cv-00071-JRG-RSP

Case No. 2:19-cv-00161-JRG-RSP

Case No. 2:19-cv-00200-JRG-RSP

Case No. 2:19-cv-00237-JRG-RSP

CLAIM CONSTRUCTION MEMORANDUM OPINION AND ORDER

This Order addresses the claim-construction disputes presented by the parties in four cases: No. 2:19-cv-00071-JRG-RSP (the "'071 Case"), No. 2:19-cv-00161-JRG-RSP (the "'161 Case"), No. 2:19-cv-00200-JRG-RSP (the "'200 Case"), and Case No. 2:19-cv-00237-JRG-RSP (the "'237 Case"). Before the Court are the opening claim construction briefs of GREE, Inc. ("Plaintiff") ('071 Case Dkt. No. 110, '161 Case Dkt. No. 75, '200 Case Dkt. No. 75, '237 Case Dkt. No. 54, all filed on Feb. 25, 2020), the responses of Supercell Oy ("Defendant") ('071 Case Dkt. No. 120, '161 Case Dkt. No. 83, '200 Case Dkt. No. 82, '237 Case Dkt. No. 60, all filed on Mar. 10, 2020), and Plaintiff's replies ('071 Case Dkt. No. 122, '161 Case Dkt. No. 85, '200 Case Dkt. No. 84, '237 Case Dkt. No. 62, all filed on Mar. 17, 2020). The Court held a hearing on the issues of claim construction and claim definiteness on April 14, 2020. Having considered the arguments and evidence presented by the parties at the hearing and in their briefing, the Court issues this Order.

¹ Citations to the parties' filings are to the filing's number in the docket (Dkt. No.) and pin cites are to the page numbers assigned through ECF.

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I. BACKGROUND

In the four cases addressed in this Order, Plaintiff alleges infringement of 14 U.S. Patents. In the '071 Case, Plaintiff asserts U.S. Patent No. 9,597,594 (the "'594 Patent"). In the '161 Case, Plaintiff asserts two U.S. Patents: No. 10,286,318 (the "'318 Patent") and No. 10,279,262 (the "'262 Patent"). In the '200 Case, Plaintiff asserts 9 U.S. Patents: No. 10,300,385 (the "'385 Patent"), No. 10,307,675 (the "'675 Patent"), No. 10,307,676 (the "'676 Patent"), No. 10,307,677 (the "'677 Patent"), No. 10,307,678 (the "'678 Patent"), No. 10,328,347 (the "'347 Patent"), No. 10,335,682 (the "'682 Patent"), No. 10,335,683 (the "'683 Patent"), and No. 10,398,978 (the "'978 Patent"). In the '237 Case, Plaintiff asserts two U.S. Patents: No. 10,328,346 (the "'346 Patent") and No. 10,335,689 (the "'689 Patent"). The '594, '262, '318, '385, '675, '676, '677, '678, '346, '347, '682, '683, '689, and '978 Patents are collectively referred to herein as the "Asserted Patents."

A. The '594, '385, '675, '676, '677, '678, '347, '682, '683, and '978 Patents

The '594, '385, '675, '676, '677, '678, '347, '682, '683, and '978 Patents (collectively, the "'594 Patent Family") are related through a series of continuation applications stemming from the '594 Patent. The patents each list an earliest priority claim to a foreign application filed on September 27, 2013.

The abstract of the '594 Patent provides:

Provided is a method for controlling a computer, etc., which makes it possible to improve the usability of city building games. The computer is provided with a storage unit configured to store game contents arranged within a game space, positions of the game contents, and a template defining positions of one or more of game contents, and progresses a game by arranging the game contents within the game space based on a command by a player. The method includes when the template is applied to a predetermined area within the game space based on the command by the player, moving, by the computer, the game contents arranged within the game space to the positions of the game contents defined by the template.

Claim 1 of the '594 Patent, an exemplary computer-control-method claim, recites as follows, with disputed claim language emphasized:

1. A method for controlling a computer that is provided with a storage unit configured to store game contents arranged within a game space, first positions of the game contents within the game space, and a *template defining second positions* of one or more of the game contents, and that progresses a game by arranging the game contents within the game space based on a command by a player, the method comprising:

when the *template* is applied to a *predetermined area* within the game space based on the command by the player, *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.

B. The '318 and '262 Patents

The '262 and the '318 Patents are related through priority claims. The '262 Patent purports to be a continuation of the application that issued as the '318 Patent. The patents each list an earliest priority claim to a foreign application filed on January 31, 2013.

The abstract of the '318 Patent provides:

In a communication system including a server (1) and a plurality of communication terminals (2) capable of communication with the server (1), based on a variety of parameters indicating the status of a space formed within a game playable by the user of each communication terminal (2) over the communication system, the server (1) transmits advisory information (132), which suggests the next action for the space, to the communication terminal (2). The communication terminal (2) displays a screen including the received advisory information (132).

The abstract of the '262 Patent provides:

In a communication system including a server and a plurality of communication terminals capable of communication with the server, based on a variety of parameters indicating the status of a space formed within a game playable by the user of each communication terminal over the communication system, the server transmits advisory information, which suggests the next action for the space, to the communication terminal. The communication terminal displays a screen including the received advisory information.

Claim 1 of the '262 Patent, an exemplary server claim, recites as follows, with disputed claim language emphasized:

1. A server comprising:

- a communication unit configured to communicate with a plurality of communication terminals for a plurality of users;
- a memory configured to store one or more parameters related to a status of a *virtual space* in a game for each user; and
- a controller configured to

make a determination of a *facility* which has not been arranged in a first virtual space of a first user during the game, the determination being made prior to selection of the facility by the first user and made based on the one or more parameters related to the status of the first virtual space of the first user, wherein the one or more parameters include a level of the first virtual space and a number of *facilities* already arranged in the first virtual space,

generate *advisory information* related to the facility, the advisory information encouraging the first user to arrange the facility as a next action in order to contribute to development of the first virtual space,

transmit the generated advisory information related to the facility to a first communication terminal of the first user for display of the advisory information, and

cause a first screen including the generated advisory information to be displayed on the first communication terminal.

C. The '346 Patent

The '346 Patent lists an earliest priority claim to a foreign application filed on May 31, 2013.

The abstract of the '346 Patent provides:

A non-transitory computer readable recording medium stores game program code instructions for a game in which a first user and a second user do battle, and when the game program code instructions are executed by a computer, the game program code instructions cause the computer to perform a data storage function of storing a first panel data that includes a plurality of panels associated with the first user to a storage unit; a control function of receiving information regarding a selection by the first user, the selection being for one or more panels indicating characters to be disposed in one or more divisions of a game display screen including a display region formed by the divisions; the data storage function further stores the panel associated with information of motion to the storage unit, and the control function transmits information for displaying the panel as a moving character according to the information of motion associated with the panel when the panel is disposed in a target division.

Claim 1 of the '346 Patent, an exemplary computer-readable-medium claim, recites as follows, with disputed claim language emphasized:

- 1. A non-transitory computer readable recording medium storing game program code instructions for a game in which a first user and a second user do battle, and when the game program code instructions are executed by a computer, the game program code instructions cause the computer to perform:
 - a data storage function of storing a first panel data that includes a plurality of *panels* associated with the first user to a storage unit; and
 - a control function of receiving information regarding a selection by the first user, the selection being for one or more panels indicating one or more characters, wherein the data storage function further stores each panel associated with information of motion to the storage unit, and
 - the control function further receives information related to selection of one or more *divisions* in which the one or more characters indicated in the selected one or more panels are to be displayed as one or more moving characters in a game display screen including one or more regions formed by the one or more divisions, and transmits information for *displaying the one or more moving characters according to the information of motion* associated with each panel stored in the storage unit.

D. The '689 Patent

The '689 Patent lists an earliest priority claim to a foreign application filed on December 27, 2013.

The abstract of the '689 Patent provides:

A non-transitory computer readable recording medium has stored thereon instructions to be executed on a computer providing terminal devices with a battle game in which users each operate a unit. The instructions cause the computer to perform the steps of: determining a unit parameter of each of a plurality of units, group information being associated with each unit and indicating a group, among a plurality of groups, to which the unit belongs; deploying the units on a field, divided into regions, in the battle game; varying the unit parameter of a first unit on the field based on the group information associated with the first unit and the group information associated with a second unit on the field, the second unit having a predetermined positional relationship with the first unit; and conducting a battle between the first unit and other units using the varied unit parameter.

Claim 9 of the '689 Patent, an exemplary game-control-system claim, recites as follows, with disputed claim language emphasized:

- 9. A game control system comprising:
- a unit deploy module configured to deploy a plurality of units on a field displayed on a display, the plurality of units being movable in the field; and a unit parameter variation module configured to vary an attack strength of a first unit among the plurality of units so that the attack strength of the first

unit, in response to the first unit and a second unit among the plurality of units satisfying a first positional relationship by a movement of at least one of the first unit and the second unit, is decreased to be lower than the attack strength of the first unit when the first unit and the second unit do not satisfy the first positional relationship, wherein

the attack strength is an attack strength for attacking a stronghold on the field and attacking a *third unit*, the first unit and the third unit not belonging to an identical group,

the first unit and the second unit attack the stronghold, and the first positional relationship is satisfied by the movement causing the second unit to be located within a first range of the first unit.

II. LEGAL PRINCIPLES

A. Claim Construction

"It is a 'bedrock principle' of patent law that 'the claims of a patent define the invention to which the patentee is entitled the right to exclude." Phillips v. AWH Corp., 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (quoting Innova/Pure Water Inc. v. Safari Water Filtration Sys., Inc., 381 F.3d 1111, 1115 (Fed. Cir. 2004)). To determine the meaning of the claims, courts start by considering the intrinsic evidence. Id. at 1313; C.R. Bard, Inc. v. U.S. Surgical Corp., 388 F.3d 858, 861 (Fed. Cir. 2004); Bell Atl. Network Servs., Inc. v. Covad Commc'ns Grp., Inc., 262 F.3d 1258, 1267 (Fed. Cir. 2001). The intrinsic evidence includes the claims themselves, the specification, and the prosecution history. *Phillips*, 415 F.3d at 1314; *C.R. Bard, Inc.*, 388 F.3d at 861. The general rule—subject to certain specific exceptions discussed *infra*—is that each claim term is construed according to its ordinary and accustomed meaning as understood by one of ordinary skill in the art at the time of the invention in the context of the patent. Phillips, 415 F.3d at 1312-13; Alloc, Inc. v. Int'l Trade Comm'n, 342 F.3d 1361, 1368 (Fed. Cir. 2003); Azure Networks, LLC v. CSR PLC, 771 F.3d 1336, 1347 (Fed. Cir. 2014) (quotation marks omitted) ("There is a heavy presumption that claim terms carry their accustomed meaning in the relevant community at the relevant time.") cert. granted, judgment vacated, 135 S. Ct. 1846 (2015).

"The claim construction inquiry . . . begins and ends in all cases with the actual words of the claim." *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1248 (Fed. Cir. 1998). "[I]n all aspects of claim construction, 'the name of the game is the claim." *Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286, 1298 (Fed. Cir. 2014) (quoting *In re Hiniker Co.*, 150 F.3d 1362, 1369 (Fed. Cir. 1998)) *overruled on other grounds by Williamson v. Citrix Online, LLC*, 792 F.3d 1339 (Fed. Cir. 2015). First, a term's context in the asserted claim can be instructive. *Phillips*, 415 F.3d at 1314. Other asserted or unasserted claims can also aid in determining the claim's meaning, because claim terms are typically used consistently throughout the patent. *Id.* Differences among the claim terms can also assist in understanding a term's meaning. *Id.* For example, when a dependent claim adds a limitation to an independent claim, it is presumed that the independent claim does not include the limitation. *Id.* at 1314–15.

"[C]laims 'must be read in view of the specification, of which they are a part." *Id.* (quoting *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995) (en banc)). "[T]he specification 'is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term." *Id.* (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)); *Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1325 (Fed. Cir. 2002). But, "[a]lthough the specification may aid the court in interpreting the meaning of disputed claim language, particular embodiments and examples appearing in the specification will not generally be read into the claims." *Comark Comme'ns, Inc. v. Harris Corp.*, 156 F.3d 1182, 1187 (Fed. Cir. 1998) (quoting *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1571 (Fed. Cir. 1988)); *see also Phillips*, 415 F.3d at 1323. "[I]t is improper to read limitations from a preferred embodiment described in the specification—even if it is the only embodiment—into the claims absent a clear indication in the intrinsic record that the

patentee intended the claims to be so limited." *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 913 (Fed. Cir. 2004).

The prosecution history is another tool to supply the proper context for claim construction because, like the specification, the prosecution history provides evidence of how the U.S. Patent and Trademark Office ("PTO") and the inventor understood the patent. *Phillips*, 415 F.3d at 1317. However, "because the prosecution history represents an ongoing negotiation between the PTO and the applicant, rather than the final product of that negotiation, it often lacks the clarity of the specification and thus is less useful for claim construction purposes." *Id.* at 1318; *see also Athletic Alts., Inc. v. Prince Mfg.*, 73 F.3d 1573, 1580 (Fed. Cir. 1996) (ambiguous prosecution history may be "unhelpful as an interpretive resource").

Although extrinsic evidence can also be useful, it is "less significant than the intrinsic record in determining the legally operative meaning of claim language." *Phillips*, 415 F.3d at 1317 (quoting *C.R. Bard, Inc.*, 388 F.3d at 862). Technical dictionaries and treatises may help a court understand the underlying technology and the manner in which one skilled in the art might use claim terms, but technical dictionaries and treatises may provide definitions that are too broad or may not be indicative of how the term is used in the patent. *Id.* at 1318. Similarly, expert testimony may aid a court in understanding the underlying technology and determining the particular meaning of a term in the pertinent field, but an expert's conclusory, unsupported assertions as to a term's definition are not helpful to a court. *Id.* Extrinsic evidence is "less reliable than the patent and its prosecution history in determining how to read claim terms." *Id.* The Supreme Court has explained the role of extrinsic evidence in claim construction:

In some cases, however, the district court will need to look beyond the patent's intrinsic evidence and to consult extrinsic evidence in order to understand, for example, the background science or the meaning of a term in the relevant art during the relevant time period. *See, e.g., Seymour v. Osborne*, 11 Wall. 516, 546 (1871)

(a patent may be "so interspersed with technical terms and terms of art that the testimony of scientific witnesses is indispensable to a correct understanding of its meaning"). In cases where those subsidiary facts are in dispute, courts will need to make subsidiary factual findings about that extrinsic evidence. These are the "evidentiary underpinnings" of claim construction that we discussed in *Markman*, and this subsidiary factfinding must be reviewed for clear error on appeal.

Teva Pharm. USA, Inc. v. Sandoz, Inc., 574 U.S. 318, 331–32 (2015).

B. Departing from the Ordinary Meaning of a Claim Term

There are "only two exceptions to [the] general rule" that claim terms are construed according to their plain and ordinary meaning: "1) when a patentee sets out a definition and acts as his own lexicographer, or 2) when the patentee disavows the full scope of the claim term either in the specification or during prosecution." *Golden Bridge Tech., Inc. v. Apple Inc.*, 758 F.3d 1362, 1365 (Fed. Cir. 2014) (quoting *Thorner v. Sony Comput. Entm't Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012)); *see also GE Lighting Sols., LLC v. AgiLight, Inc.*, 750 F.3d 1304, 1309 (Fed. Cir. 2014) ("[T]he specification and prosecution history only compel departure from the plain meaning in two instances: lexicography and disavowal."). The standards for finding lexicography or disavowal are "exacting." *GE Lighting Sols.*, 750 F.3d at 1309.

To act as his own lexicographer, the patentee must "clearly set forth a definition of the disputed claim term," and "clearly express an intent to define the term." *Id.* (quoting *Thorner*, 669 F.3d at 1365); *see also Renishaw*, 158 F.3d at 1249. The patentee's lexicography must appear "with reasonable clarity, deliberateness, and precision." *Renishaw*, 158 F.3d at 1249.

To disavow or disclaim the full scope of a claim term, the patentee's statements in the specification or prosecution history must amount to a "clear and unmistakable" surrender. *Cordis*

² Some cases have characterized other principles of claim construction as "exceptions" to the general rule, such as the statutory requirement that a means-plus-function term is construed to cover the corresponding structure disclosed in the specification. *See, e.g., CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1367 (Fed. Cir. 2002).

Corp. v. Bos. Sci. Corp., 561 F.3d 1319, 1329 (Fed. Cir. 2009); see also Thorner, 669 F.3d at 1366 ("The patentee may demonstrate intent to deviate from the ordinary and accustomed meaning of a claim term by including in the specification expressions of manifest exclusion or restriction, representing a clear disavowal of claim scope."). "Where an applicant's statements are amenable to multiple reasonable interpretations, they cannot be deemed clear and unmistakable." 3M Innovative Props. Co. v. Tredegar Corp., 725 F.3d 1315, 1326 (Fed. Cir. 2013).

III. CONSTRUCTION OF DISPUTED TERMS

A. Case No. 2:19-cv-071 and Case No. 2:19-cv-200

A-1. "template"

Disputed Term ³	Plaintiff's	Defendant's
	Proposed	Proposed
	Construction	Construction
"template"	plain and ordinary	record
	meaning	
• '594 Patent Claim 1		
• '675 Patent Claims 1–4, 8–15, 19–24, 26–28, 30		
• '676 Patent Claims 1, 5–7, 11–24		
• '677 Patent Claims 1–3, 7–20		
• '678 Patent Claims 1–3, 5–7, 9–10, 12–13		
• '347 Patent Claims 1–8, 10–17, 19–26, 28–30		
• '682 Patent Claims 10–12, 14–15		
• '978 Patent Claims 1, 5–7, 11–13, 17–18		

The Parties' Positions

Plaintiff submits: The meaning of "template" in the claims is readily apparent without construction and construing it as "record" would not clarify claim scope. While the PTAB construed "template" as "record" in a Post Grant Review of the '594 Patent, that construction was under the broadest-reasonable-interpretation standard and is not binding on the Court. And the

³ For all term charts in this order, the listed claims are those identified by the parties in their Joint Claim Construction Charts ('071 Case Dkt. No. 123; '161 Case Dkt. No. 88; '200 Case Dkt. No. 86; '237 Case Dkt. No. 64).

PTAB's decision is currently on appeal. '071 Case Dkt. No. 110 at 14–17; '200 Case Dkt. No. 75 at 14–17.⁴

Defendant responds: As explained in the '594 Patent, a "template' is a 'record' of the positions of one or more game pieces in a game that can be applied in other games spaces." During Post Grant Review of the '594 Patent, Plaintiff explained that the "template" is a "data structure." The PTAB agreed, noting that there is no difference between a "record" and a "data structure" and construed "template" as "record." '071 Case Dkt. No. 120 at 10–12; '200 Case Dkt. No. 82 at 10–13.

In addition to the claims themselves, Defendant cites the following intrinsic and extrinsic evidence to support its position: **Intrinsic evidence**: '594 Patent fig.4, col.7 ll.16–48; Patent Owner's Response at 33, 35, *Supercell Oy v. GREE Inc.*, PGR2018-00008 ('594 Patent) (P.T.A.B. July 3, 2018), paper 24 (Defendant's Ex. F, '071 Case Dkt. No. 120-7 at 37, 39) (Defendant's Ex. C, '200 Case Dkt. No. 82-4 at 37, 39); Record of November 28, 2018 Oral Hearing at 43:15–18, *Supercell Oy v. GREE Inc.*, PGR2018-00008 ('594 Patent) (P.T.A.B. Dec. 31, 2018), paper 41 (Defendant's Ex. G, '071 Case Dkt. No. 120-8 at 44) (Defendant's Ex. D, '200 Case Dkt. No. 82-5 at 4); Final Written Decision at 6–8, *Supercell Oy v. GREE Inc.*, PGR2018-00008 ('594 Patent) (P.T.A.B. Jan. 2, 2019), paper 42 (Defendant's Ex. E, '071 Case Dkt. No. 120-6 at 7–9) (Defendant's Ex. B, '200 Case Dkt. No. 82-3 at 7–9). **Extrinsic evidence**: *Merriam-Webster's*

⁴ Plaintiff cites dictionaries, a PTAB decision, and a variety of file-wrapper records, but did not provide these documents as exhibits to the opening brief.

⁵ The Court treats patent-owner and PTAB submissions in an Inter Partes Review or Post Grant Review as intrinsic evidence. *See Aylus Networks, Inc. v. Apple Inc.*, 856 F.3d 1353, 1359–61 (Fed. Cir. 2017) (holding that "statements made by a patent owner during an IPR proceeding can be considered during claim construction and relied upon to support a finding of prosecution disclaimer"); *Phillips*, 415 F.3d at 1317 ("Like the specification, the prosecution history provides evidence of how the PTO and the inventor understood the patent.").

Collegiate Dictionary at 1286 (11th ed. 2007), "template" (Defendant's Ex. B, '071 Case Dkt. No. 120-3 at 4) (Defendant's Ex. E, '200 Case Dkt. No. 82-6 at 4); IEEE 100 The Authoritative Dictionary of IEEE Standard Terms at 1161 (7th ed. 2000), "template matching" (Defendant's Ex. C, '071 Case Dkt. No. 120-4 at 4) (Defendant's Ex. F, '200 Case Dkt. No. 82-7 at 4).

Plaintiff replies: It would be improper to replace "template" with the "overly broad" term "record." Indeed, the term "record" is not used in the '594 Patent. As explained during the Post Grant Review of the '594 Patent, the "template" of the claims is a specific type of "data structure." But this does not equate "template" with "data structure." Rather, counsel there explained that a "template" is "something . . . where you save information to be applied later on in a computer context." Ultimately, the details of the "template" are set forth in the claims. '071 Case Dkt. No. 122 at 8–12; '200 Case Dkt. No. 84 at 8–11.

Plaintiff cites further intrinsic and extrinsic evidence to support its position: Intrinsic evidence: '594 Patent col.3 II.49–50, col.7 II.16–17; Patent Owner's Response at 33, 35, Supercell Oy v. GREE Inc., PGR2018-00008 ('594 Patent) (P.T.A.B. July 3, 2018), paper 24 (Defendant's Ex. F, '071 Case Dkt. No. 120-7 at 37, 39) (Defendant's Ex. C, '200 Case Dkt. No. 82-4 at 37, 39); Record of November 28, 2018 Oral Hearing at 7:11–20, 43:18–21, Supercell Oy v. GREE Inc., PGR2018-00008 ('594 Patent) (P.T.A.B. Dec. 31, 2018), paper 41 (Defendant's Ex. G, '071 Case Dkt. No. 120-8 at 8, 44) (Defendant's Ex. D, Dkt. No. 82-5 at 4); Final Written Decision at 8, Supercell Oy v. GREE Inc., PGR2018-00008 ('594 Patent) (P.T.A.B. Jan. 2, 2019), paper 42 (Defendant's Ex. E, '071 Case Dkt. No. 120-6 at 9). Extrinsic Evidence: Petition for Post-Grant Review at 13, Supercell Oy v. GREE Inc., PGR2018-00008 ('594 Patent) (P.T.A.B. Nov. 7. 2017), paper 1 (Plaintiff's Ex. A, '071 Case Dkt. No. 122-1 at 9) (Plaintiff's Ex. A, '200 Case Dkt. No.

84-1 at 9); 6 Claypool '675 Patent PGR Decl. 7 ¶ 65, Supercell Oy v. GREE Inc., PGR2020-00038 ('675 Patent) (P.T.A.B. Mar. 3, 2020), Exhibit 1012 (Plaintiff's Ex. C, '071 Case Dkt. No. 122-3) (Plaintiff's Ex. C, '200 Case Dkt. No. 84-3); Claypool '678 Patent PGR Decl. 8 ¶ 44, Supercell Oy v. GREE Inc., PGR2018-00042 ('678 Patent) (P.T.A.B. Mar. 3, 2020), Exhibit 1005 (Plaintiff's Ex. D, '071 Case Dkt. No. 122-4) (Plaintiff's Ex. D, '200 Case Dkt. No. 84-4).

Analysis

The issue in dispute is whether a "template" is necessarily a "record." A "template" is a data structure for storing a pattern. While it may be that some records are templates and some templates are records, the evidence of record does not support equating "template" with "record."

The claims provide significant context for understanding "template." For example, Claim 1 of the '594 Patent recites "a template defining second positions of one or more of the game contents . . . moving . . . the game contents arranged at the first positions within the game space to the second positions of the game contents defined by the template." Claim 1 of the '675 Patent provides similar context: "creating . . . a first template based on the arrangement of the plurality of game contents in the first respective positions within the game space . . . and applying the first template to a game space by allocating one or more of the plurality of game contents to positions

⁶ The Court treats petitioner's submissions in an Inter Partes Review or Post Grant Review as extrinsic evidence because these submissions do not necessarily reflect the patent owner's or the PTO's understanding of the patent. *See Aylus Networks*, 856 F.3d at 1359–61 (holding that "statements made by a patent owner during an IPR proceeding can be considered during claim construction and relied upon to support a finding of prosecution disclaimer" (emphasis added)); *Phillips*, 415 F.3d at 1317 ("Like the specification, the prosecution history provides evidence of how the PTO and the inventor understood the patent." (emphasis added)).

⁷ Declaration of Mark L. Claypool, Ph.D. in Support of Petition for Post Grant Review of U.S. Patent Nos. 10,307,675, 10,307,676, & 10,307,677. Plaintiff identifies PGR2020-00038, PGR2020-00039, and PGR2020-00041. '071 Case Dkt. No. 122 at 1 n.1; '200 Case Dkt. No. 84 at 1 n.1.

⁸ Declaration of Mark L. Claypool, Ph.D. in Support of Petition for Post Grant Review of U.S. Patent No. 10,307,678.

defined by the template." The other claims at issue provide similar context, indicating that the template denotes some pattern of distribution of game contents.

The "pattern" aspect of the template was recognized during the Post Grant Review of the '594 Patent. For instance, Plaintiff described that in the context of the claims, a template is "a data structure describing the positional relationship, type, and arrangement of those game contents . . . in the game space." Patent Owner's Response at 35, *Supercell Oy v. GREE Inc.*, PGR2018-00008 (P.T.A.B. July 3, 2018), paper 24, '071 Case Dkt. No. 120-7 at 39; *see also* Record of November 28, 2018 Oral Hearing at 7:11–20, 43:18–21, PGR2018-00008 (P.T.A.B. Dec. 31, 2018), paper 41 (Plaintiff arguing that the template is "a data structure that holds second positions of the game content"), '071 Case Dkt. No. 120-8 at 44. While the PTAB expressly construed "template" as "record," it also explained 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." Final Written Decision at 8, PGR2018-00008 (P.T.A.B. Jan. 2, 2019), paper 42, '071 Case Dkt. No. 120-6 at 9.

The extrinsic evidence of record also indicates the "pattern" aspect of "template." For instance, one dictionary provides the following definition: "something that establishes or serves as a pattern." *Merriam-Webster's Collegiate Dictionary* at 1286 (11th ed. 2007), '071 Case Dkt. No. 120-3 at 4.

Ultimately, the template of the claims serves as a pattern for game-content allocation. The term "record" alone may not convey this "pattern" nature of the template.

Accordingly, the Court construes "template" as follows:

• "template" means "data structure storing a pattern."

A-2. "moving" and "moves"

Disputed Term	Plaintiff's Proposed Construction	Defendant's Proposed Construction
"moving" • '594 Patent Claim 1 • '676 Patent Claims 18, 24 • '677 Patent Claims 12	plain and ordinary meaning	causing to change position on the display in real time during game play
"moves" • '594 Patent Claim 2	plain and ordinary meaning	cause to change position on the display in real time during game play

Because the parties' arguments and proposed constructions with respect to these terms are related, the Court addresses the terms together.

The Parties' Positions

Plaintiff submits: The term "moving" is used in the claims to denote moving game contents within the game space when the template is applied. Defendant's proposed construction improperly adds the limitation of "in real time during game play." Such a limitation is not supported by the intrinsic record, which simply notes that templates are used during gameplay. '071 Case Dkt. No. 110 at 17–19; '200 Case Dkt. No. 75 at 18–19.9

Defendant responds: As explained by Plaintiff during Post Grant Review of the '594 Patent, templates are applied "at precisely the needed time." Similarly, Plaintiff explained during prosecution of the '677 Patent that the claimed invention was distinct over the prior art because the prior art did not "disclose the use of the templates by users during game play." '071 Case Dkt. No. 120 at 14–15; '200 Case Dkt. No. 82 at 13.

⁹ Plaintiff cites the file wrapper for the '677 Patent but did not provide the document as an exhibit to the opening brief.

In addition to the claims themselves, Defendant cites the following **intrinsic evidence** to support its position: Patent Owner's Response at 33, 34, 44, 45, *Supercell Oy v. GREE Inc.*, PGR2018-00008 ('594 Patent) (P.T.A.B. July 3, 2018), paper 24 (Defendant's Ex. F, '071 Case Dkt. No. 120-7 at 37–38, 48–49) (Defendant's Ex. C, '200 Case Dkt. No. 82-4 at 37–38, 48–49); '677 Patent File Wrapper March 19, 2018 Amendment at 10–11 (Defendant's Ex. D, '071 Case Dkt. No. 120-5 at 10–11) (Defendant's Ex. H, '200 Case Dkt. No. 82-9 at 10–11); Crane '594 Patent PGR Decl. 10 13–14, *Supercell Oy v. GREE Inc.*, PGR2018-00008 ('594 Patent) (P.T.A.B. July 3, 2018), Exhibit 2004 (Defendant's Ex. H, '071 Case Dkt. No. 120-9 at 14–15) (Defendant's Ex. G, '200 Case Dkt. No. 82-8 at 4–5).

Plaintiff replies: The statement its expert made in Post Grant Review of the '594 Patent was about the ability to apply templates at the right time, it was not about "moving" and did not use the term "real time." The statement it made during prosecution of the '677 Patent likewise does not suggest "real time" movement during game play. Rather, the statement contrasted the use of the template in operation of the game with the use a template in development of a game. Finally, Defendant has represented to the PTAB that the meaning of "moving" in the claims is apparent without construction. '071 Case Dkt. No. 122 at 12–14; '200 Case Dkt. No. 84 at 12–13.

Plaintiff cites further intrinsic and extrinsic evidence to support its position: **Intrinsic Evidence**: Crane '594 Patent PGR Decl. ¶ 33, *Supercell Oy v. GREE Inc.*, PGR2018-00008 (Patent No. 9,597,594) (P.T.A.B. July 3, 2018), Exhibit 2004 (Defendant's Ex. H, '071 Case Dkt. No. 120-9 at 37, 39) (Defendant's Ex. G, '200 Case Dkt. No. 82-8 at 4–5); '677 Patent File Wrapper March 19, 2018 Amendment at 10–11 (Defendant's Ex. D, '071 Case Dkt. No. 120-5 at 10–11) (Defendant's Ex. H, Dkt. No. 82-9 at 10–11). **Extrinsic Evidence**: Petition for Post-Grant Review,

¹⁰ Declaration of David Crane.

Supercell Oy v. GREE Inc., PGR2018-00008 ('594 Patent) (P.T.A.B. Nov. 7, 2017), paper 1 (Plaintiff's Ex. A, '071 Case Dkt. No. 122-1) (Plaintiff's Ex. A, '200 Case Dkt. No. 84-1); Claypool '675 Patent PGR Decl. ¹¹ ¶ 64, Supercell Oy v. GREE Inc., PGR2018-00038 (Patent No. '675 Patent) (P.T.A.B. Mar. 3, 2020), Exhibit 1012 (Plaintiff's Ex. C, '071 Case Dkt. No. 122-3) (Plaintiff's Ex. C, '200 Case Dkt. No. 84-3); Petition for Post-Grant Review, Supercell Oy v. GREE Inc., PGR2018-00039 ('676 Patent) (P.T.A.B. Mar. 4, 2020), paper 2 (Plaintiff's Ex. G, '071 Case Dkt. No. 122-7) (Plaintiff's Ex. G, '200 Case Dkt. No. 84-7); Petition for Post-Grant Review, Supercell Oy v. GREE Inc., PGR2018-00041 ('677 Patent) (P.T.A.B. Mar. 3, 2020), paper 2 (Plaintiff's Ex. H, '071 Case Dkt. No. 122-8) (Plaintiff's Ex. H, '200 Case Dkt. No. 84-8).

Analysis

The issue in dispute is whether the "moving" of the claims inherently occurs in real time during game play. It does not.

The claims provide significant context for understanding when the "moving" occurs. For example, Claim 1 of the '594 Patent recites that "when the template is applied . . . moving . . . the game contents" Similarly, Claim 18 of the '676 Patent provides "apply the template by moving the one or more game contents allocated in the game space to the positions within the game space of the plurality of game contents defined by the template." Thus, the timing of the "moving" of the claim is set forth in the claims by reference to the application of the template.

The statements made during Post Grant Review and examination of the patents that Defendant relies upon do not mandate that moving must be "in real time during game play." First, it is not

¹¹ Declaration of Mark L. Claypool, Ph.D. in Support of Petition for Post Grant Review of U.S. Patent Nos. 10,307,675, 10,307,676, & 10,307,677. Plaintiff identifies PGR2020-00038, PGR2020-00039, and PGR2020-00041. '071 Case Dkt. No. 122 at 1 n.1; '200 Case Dkt. No. 84 at 1 n.1.

clear what "in real time" means in Defendant's proposal. This term appears not to be used in the '594 Patent or its progeny and it is not used in the Post Grant Review or prosecution history statements at issue. Second, "during game play" is already expressed in the claims. The timing distinction made by Plaintiff in prosecution of the '677 Patent is between the time of development and the time of execution of the game. For example, Plaintiff explained:

The template 222 in Shuman, therefore, is a template that is provided to a game developer 130 to assist in the development of a game before the game is actually completed and executed. As such, the templates 222 of Shuman are not developed by a player that is actively executing a game. More concretely, Shuman fails to disclose that his system receives information for reproducing a template for defending an attack initiated by another player, much less that the template defines positions of game contents in a game space and is created by a first terminal executing a game by arranging, based on a player's command, the game contents within the game space, the game contents including at least a game content for defending from an attack initiated by another player, as required by amended independent claim 1. As Shuman fails to disclose the use of the templates by users during gameplay, Shuman also fails to disclose sending . . . information for reproducing the template to a second terminal different from the first terminal, the second terminal executing the game by arranging, based on a player's command, game contents within the game space, the game contents including at least a game content for defending from an attack initiated by another player, which is also a feature required by amended independent claim 1.

'677 Patent File Wrapper, March 19, 2018 Amendment at 10–11 (emphasis in original), '071 Case Dkt. No. 120-5 at 10–11. Thus, Plaintiff explained that templates that cause the movement in the claimed invention are for executing a game as opposed to templates that are used for creating a game. Thus, "during game play" means during execution of a claimed method or operation of a claimed device; this is already expressed in the claims.

Accordingly, the Court rejects Defendant's proposed construction and determines that "moving" has its plain and ordinary meaning without the need for further construction.

A-3. The Area Terms

Disputed Term	Plaintiff's Proposed Construction	Defendant's Proposed Construction
"predetermined area"	plain and ordinary	portion of the game space that
• '594 Patent Claim 1	meaning	is smaller than the game space
"an existing area within the game space"	plain and ordinary meaning	a portion of the game space that is smaller than the
• '347 Patent Claims 8, 17, 26		[entire] game space
"the existing area"		
• '347 Patent Claims 18, 27		
"predetermined area within the game space"		
• '978 Patent Claim 1		
"area of the game space"		
• '978 Patent Claims 3, 9, 15		
"part of a game space"		
 '385 Patent Claims 1, 9, 17–18 '682 Patent Claims 1, 9 '683 Patent Claims 1, 5, 9 		
"part of the game space"		
 '385 Patent Claims 1, 9, 17–18 '682 Patent Claims 1, 9 '683 Patent Claims 1, 5, 9 		

Because the parties' arguments and proposed constructions with respect to these terms are related, the Court addresses the terms together.

The Parties' Positions

Plaintiff submits: The meanings of these terms are readily apparent in the context of the surrounding claim language. Read in context, the "area" terms may be within the game space, but the area is not necessarily smaller than the game space. In fact, some claims are expressly directed

to areas that are "part of the game space," though claims that recite "at least part of the game space" would plainly cover all of the game space. '071 Case Dkt. No. 110 at 19–21; '200 Case Dkt. No. 75 at 19–22.

In addition to the claims themselves, Plaintiff cites the following **intrinsic evidence** to support its position: '594 Patent col.2 ll.5–10, col.4 ll.32–38, col.19 ll.49–60.

Defendant responds: The claims themselves dictate that the Area Terms refer to something smaller than the game space in that they are preceded by "a" or "an" in the claims, which means that there may be more than one "area" within the game space and thus the "area" must be smaller than the game space. And the '594 Patent and its progeny consistently describe the area as smaller than the game space. '071 Case Dkt. No. 120 at 12–14; '200 Case Dkt. No. 82 at 14–17.

In addition to the claims themselves, Defendant cites the following **intrinsic evidence** to support its position: '594 Patent figs.3A–3E, col.6 l.26 – col.7 l.15, col.7 ll.3–10, col.19 ll.49–60.

Plaintiff replies: The claim language allows but does not require more than one area within the game space. As such, it encompasses an area within a game space that takes up the entire game space. As Defendant has represented to the PTAB, the meanings of the Area Terms are apparent without construction. '071 Case Dkt. No. 122 at 14–16; '200 Case Dkt. No. 84 at 14–16.

Plaintiff cites further **extrinsic evidence** to support its position: Petition for Post-Grant Review, *Supercell Oy v. GREE Inc.*, PGR2018-00008 ('594 Patent) (P.T.A.B. Nov. 7, 2017), paper 1 (Plaintiff's Ex. A, '071 Case Dkt. No. 122-1) (Plaintiff's Ex. A, '200 Case Dkt. No. 84-1); Petition for Post-Grant Review, *Supercell Oy v. GREE Inc.*, PGR2018-00034 ('385 Patent) (P.T.A.B. Feb. 27, 2020), paper 1 (Plaintiff's Ex. E, '071 Case Dkt. No. 122-5) (Plaintiff's Ex. E, '200 Case Dkt. No. 84-5); Claypool '675 Patent PGR Decl. ¶ 49, *Supercell Oy v. GREE Inc.*,

PGR2018-00038 ('675 Patent) (P.T.A.B. Mar. 3, 2020), Exhibit 1012 (Plaintiff's Ex. C, '071 Case Dkt. No. 122-3) (Plaintiff's Ex. C, '200 Case Dkt. No. 84-3).

Analysis

The issue in dispute is whether these Area Terms refer to areas or spaces that are inherently smaller than entire game space. They do not.

To begin, the use of "a" or "an" to introduce an "area" limitation within the game space does not mandate that the "area" is necessarily smaller than the game space. The Federal Circuit has instructed that, "[a]s a general rule, the words 'a' or 'an' in a patent claim carry the meaning of 'one or more." OI Communique Lab., Inc. v. LogMeIn, Inc., 687 F.3d 1292, 1297 (Fed. Cir. 2012) (quoting TiVo, Inc. v. EchoStar Commc'ns. Corp.., 516 F.3d 1290, 1303 (Fed. Cir. 2008)). This means that a claim directed to "an" area is not necessarily limited to a single area. This does not mean, however, that every embodiment of such a claim necessarily supports more than one area. In essence, Defendant argues that because a claim does not exclude multiple areas, it necessarily excludes a singular area. This argument is premised on a misapplication of precedent. Indeed, in some instances the argument runs counter to express claim language. For example, Claim 1 of the '385 Patent recites: "at least one of a set of game contents arranged within at least a part of a game space." The plain reading of this limitation allows that the contents may be arranged within the entirety of the game space (which is "at least a part of a game space"). Defendant essentially proposes rewriting "at least a part of a game space" as "only a part of a game space." This would be improper.

Even if all the embodiments in the '594 Patent Family include an area that is smaller than the game space, this is not enough to read a smaller-than-the-game-space limitation into the Area Terms. *See Thorner*, 669 F.3d at 1366 ("It is likewise not enough that the only embodiments, or

all of the embodiments, contain a particular limitation. We do not read limitations from the specification into claims; we do not redefine words. Only the patentee can do that."); *SRI Int'l v. Matsushita Elec. Corp.*, 775 F.2d 1107, 1121 (Fed. Cir. 1985) (en banc) ("The law does not require the impossible. Hence, it does not require that an applicant describe in his specification every conceivable and possible future embodiment of his invention."). Nothing that Defendant identifies rises to the exacting standard for lexicography or disclaimer such that a smaller-than-the-game-space limitation is inherent to the Area Terms.

Accordingly, the Court rejects Defendant's proposed construction that every "area" term is necessarily a "portion of the game space that is smaller than the game space" and determines that these terms have their plain and ordinary meanings without the need for further construction.

A-4. "defining second positions"

Disputed Term	Plaintiff's	Defendant's
	Proposed	Proposed
	Construction	Construction
"defining second positions"	plain and ordinary meaning	defining one or more second
• '594 Patent Claim 1		positions

The Parties' Positions

Plaintiff submits: The meaning of this term is readily apparent in the context of the surrounding claim language. Claim 1 of the '594 Patent requires a template that defines "second positions" not "one or more positions." Defendant's proposal threatens to improperly broaden the scope of the claim. '071 Case Dkt. No. 110 at 21.

Defendant responds: Claim 1 requires a template that defines "second positions of one or more of the game contents" and thus allows for a singular second position of only one game content. '071 Case Dkt. No. 120 at 15–16.

Plaintiff replies: The claim requires "one or more game contents at the second positions." '071 Case Dkt. No. 122 at 16.

Analysis

The issue in dispute appears to be whether Claim 1 of the '594 Patent allows a singular second position when only one game content has a second position. It does.

In the context of the claim, "defining second positions" refers to second positions for individual game contents. Specifically, Claim 1 of the '594 Patent recites "a storage unit configured to store game contents arranged within a game space, first positions of the game contents within the game space, and a template defining second positions of one or more of the game contents." Thus, each game content is associated with a first position and "one or more of the game contents" are associated with a second position. In other words, not every game content is necessarily associated with a second position and the claims do not require that any individual game content is associated with more than one second position.

Accordingly, the Court addresses this dispute with the following construction:

• "defining second positions of one or more of the game contents" means "defining a second position for each of one or more of the game contents."

A-5. The Applying Terms

Disputed Term	Plaintiff's Proposed	Defendant's Proposed
	Construction	Construction
"applying the first template"	plain and ordinary	caus[e/ing] [a/the]
• '675 Patent Claims 1, 3–4, 11, 14–15, 22	meaning	[plurality of] game contents to change position on the display
"apply the first template"'675 Patent Claims 12	plain and ordinary meaning	in real time during game play

Disputed Term	Plaintiff's Proposed Construction	Defendant's Proposed Construction
"applying the second template"	plain and ordinary meaning	0012011011
• '675 Patent Claim 8		
"apply the second template"	plain and ordinary meaning	
• '675 Patent Claim 19	meaning	
"applying"	plain and ordinary meaning	
• '675 Patent Claim 10	meaning	
"apply"	plain and ordinary meaning	
• '675 Patent Claim 21	meaning	
"apply the template"	plain and ordinary meaning	
 '676 Patent Claims 13, 18–19, 24 '677 Patent Claims 13, 17 '347 Patent Claims 10, 19 	meaning	
"applying the template"	plain and ordinary meaning	
 '677 Patent Claims 3, 7, 12, 15, 19 '347 Patent Claims 1, 6, 8, 15, 17, 24, 26, 30 	meaning	
"applying a template"	plain and ordinary meaning	
• '978 Patent Claim 1	meaning	
"apply a template"	plain and ordinary	
'676 Patent Claim 1, 7'978 Patent Claims 7, 13	meaning	
"applying the selected one of the plurality of templates"	plain and ordinary meaning	
• '675 Patent Claims 23, 27		
"applying the selected one of the created templates"	plain and ordinary meaning	
• '677 Patent Claims 15, 19		

Because the parties' arguments and proposed constructions with respect to these terms are related, the Court addresses the terms together.

The Parties' Positions

Plaintiff submits: The meaning of "applying" is readily apparent without construction. As with the "moving" term, there is no need or justification to import an "in real time during game play" limitation. '200 Case Dkt. No. 75 at 22–23.

Defendant responds: As explained by Plaintiff during Post Grant Review of the '594 Patent, templates are applied "at precisely the needed time." This means that it is applied in real time during game play. Similarly, Plaintiff explained during prosecution of the '677 Patent that the claimed invention was distinct over the prior art because the prior art did not "disclose the use of the templates by users during game play." Thus, the claims are directed to applying the template during game play. '200 Case Dkt. No. 82 at 17–18.

In addition to the claims themselves, Defendant cites the following **intrinsic evidence** to support its position: Patent Owner's Response at 33, 34, 44, 45, *Supercell Oy v. GREE Inc.*, PGR2018-00008 ('594 Patent) (P.T.A.B. July 3, 2018), paper 24 (Defendant's Ex. C, '200 Case Dkt. No. 82-4 at 37–38, 48–49); Crane '594 Patent PGR Decl. 13–14, *Supercell Oy v. GREE Inc.*, PGR2018-00008 ('594 Patent) (P.T.A.B. July 3, 2018), Exhibit 2004 (Defendant's Ex. G, '200 Case Dkt. No. 82-8 at 4–5).

Plaintiff replies: This issue in dispute is the same as for the "moving" terms and the arguments against Defendant's proposed constructions there apply equally to the Applying Terms. '200 Case Dkt. No. 84 at 16–17.

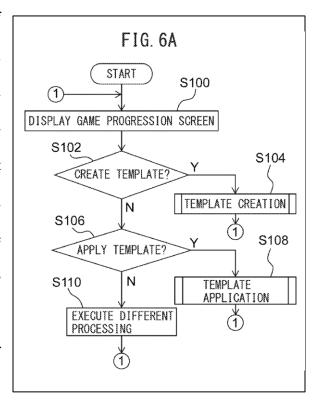
Plaintiff cites further **extrinsic evidence** to support its position: Claypool '675 Patent PGR Decl. ¶ 64, *Supercell Oy v. GREE Inc.*, PGR2018-00038 ('675 Patent) (P.T.A.B. Mar. 3, 2020),

Exhibit 1012 (Plaintiff's Ex. C, '200 Case Dkt. No. 84-3); Petition for Post-Grant Review, *Supercell Oy v. GREE Inc.*, PGR2018-00039 ('675 Patent) (P.T.A.B. Mar. 3, 2020), paper 2 (Plaintiff's Ex. F, '200 Case Dkt. No. 84-6); Petition for Post-Grant Review, *Supercell Oy v. GREE Inc.*, PGR2018-00039 ('676 Patent) (P.T.A.B. Mar. 4, 2020), paper 2 (Plaintiff's Ex. G, '200 Case Dkt. No. 84-7); Petition for Post-Grant Review, *Supercell Oy v. GREE Inc.*, PGR2018-00041 ('677 Patent) (P.T.A.B. Mar. 3, 2020), paper 2 (Plaintiff's Ex. H, '200 Case Dkt. No. 84-8).

Analysis

The issue in dispute appears to be whether application of a template necessarily entails movement of game contents "in real time during game play." For reasons set forth in the section on "moving" above, the Court rejects the "in real time" limitation. Further, with the understanding that "during game play" means during operation of the game as claimed, rather than during design of the game, the application occurs during game play.

The template is applied during operation of the game. As set forth above in the section on "moving," Plaintiff explained during prosecution of the '677 Patent that the templates of the '594 Patent Family are distinct from the prior art in that the templates of the '594 Patent Family are used "during gameplay" instead of during design of the game. '677 Patent File Wrapper, March 19, 2018 Amendment at 10–11, '071 Case Dkt. No. 120-5 at 10–11. This is set forth in the patents, for example, in Figure 6A of the '594 Patent,



reproduced here. The "apply template" process is shown and described as occurring after the game "start" command. *See*, *e.g.*, '594 Patent col.14 ll.15–63.

Accordingly, the Court addresses the issue in dispute by construing "apply" and "applying" in the above-listed claims as follows:

- "apply" means "apply . . . during game play"; and
- "applying" means "applying . . . during game play."

A-6. "game space"

Disputed Term	Plaintiff's	Defendant's
	Proposed	Proposed
	Construction	Construction
"game space"	plain and ordinary	game display
	meaning	portion of a display
• '385 Patent Claims 1–3, 9–11, 17–18		screen of a
• '675 Patent Claims 1, 3–4, 7–8, 11–12, 14–15,		particular portable
18–19, 22–23, 27		device
• '676 Patent Claims 1–3, 7–9, 13–15, 17–21,		
23–24		
• '677 Patent Claims 1–3, 7–9, 11–15, 17–19		
• '347 Patent Claims 1, 6–10, 15–19, 24–30		
• '682 Patent Claims 1–11, 14		
• '683 Patent Claims 1–12		
• '978 Patent Claims 1–3, 7–9, 13–15		

The Parties' Positions

Plaintiff submits: The meaning of this term is readily apparent without construction. In fact, Defendant represented as much to the PTAB during Post Grant Review of the '594 Patent by not seeking a construction of "game space." This readily apparent meaning does not require "a display screen of a particular portable device." Most of the claims do not recite a "portable device" and while the described embodiments contemplate application of the invention to a portable device, it

would be improper to read in a portable-device limitation. Similarly, nothing in the prosecution history warrants importing a portable-device limitation. '200 Case Dkt. No. 75 at 23–24.¹²

Defendant responds: The intrinsic record shows a distinction between "game space," which is the game display portion of a display screen of a portable device, and "area," which is a portion of the game space. '200 Case Dkt. No. 82 at 18–19.

In addition to the claims themselves, Defendant cites the following **intrinsic evidence** to support its position: '594 Patent fig.3E, col.6 l.26 – col.7 l.15.

Plaintiff replies: Defendant repeatedly represented to the PTAB that the meaning of "game space" in the claims is apparent without construction. '200 Case Dkt. No. 84 at 17.

Plaintiff cites further **extrinsic evidence** to support its position: Claypool '675 Patent PGR Decl. ¶ 64, *Supercell Oy v. GREE Inc.*, PGR2018-00038 ('675 Patent) (P.T.A.B. Mar. 3, 2020), Exhibit 1012 (Plaintiff's Ex. C, '200 Case Dkt. No. 84-3); Claypool '385 Patent PGR Decl. ¹³ ¶ 49, *Supercell Oy v. GREE Inc.*, PGR2018-00034 ('385 Patent) (P.T.A.B. Feb. 27, 2020), Exhibit 1005 (Plaintiff's Ex. B, '200 Case Dkt. No. 84-2); Petition for Post-Grant Review, *Supercell Oy v. GREE Inc.*, PGR2018-00034 ('385 Patent) (P.T.A.B. Feb. 27, 2020), paper 1 (Plaintiff's Ex. E, '200 Case Dkt. No. 84-5); Petition for Post-Grant Review, *Supercell Oy v. GREE Inc.*, PGR2018-00039 ('675 Patent) (P.T.A.B. Mar. 3, 2020), paper 2 (Plaintiff's Ex. F, '200 Case Dkt. No. 84-6); Petition for Post-Grant Review, *Supercell Oy v. GREE Inc.*, PGR2018-00039 ('676 Patent) (P.T.A.B. Mar. 4, 2020), paper 2 (Plaintiff's Ex. G, '200 Case Dkt. No. 84-7).

¹² Plaintiff cites the '675 Patent's file wrapper but did not provide the document as an exhibit to the opening brief.

¹³ Declaration of Mark L. Claypool, Ph.D. in Support of Petition for Post Grant Review of U.S. Patent No. 10,300,385.

Analysis

There appear to be two main issues in dispute. First, whether the "game space" is inherently larger than the Area Terms. As set forth above in the section on the Area Terms, it is not. Second, whether the "game space" is necessarily limited to a display screen of a portable device. It is not. Rather, the "game space" is the virtual space within which the game is played.

Defendant has not presented any argument or evidence sufficient to limit the "game space" to that displayed on a "display screen of a particular portable device" limitation. Rather, some claims recite "portable electronic device." *See, e.g.*, '978 Patent Claim 1. Other claims do not mention portable device. *See, e.g.*, '385 Patent Claim 1 (reciting a "user terminal"). This suggests that a claim should not be limited to a portable device unless such limitation is expressed in the claim. Further, the '594 Patent Family patents expressly state that they are not limited to a portable device. *See, e.g.*, '594 Patent col.2 II.12–14 ("The computer may be, for example, a portable device, a desktop device, a server, etc., as long as it can execute the above procedure."). Finally, the "game space" is not necessarily displayed. For example, the patents describe displaying various displays that are not the "game space," such as a "template selection" screen, a "template display" screen, and "area selection" screen, even while the "game space" continues to exist. *See, e.g.*, '594 Patent figs.3A–3E, col.6 1.26 – col.7 1.15. Indeed, at oral argument, Defendant suggested that the game space need only be capable of being displayed.

Ultimately, the Court is not convinced that the defining nature of "game space" is related to the display. Rather, the patents indicate that the defining nature of the "game space" is that it is a virtual space within which the game is played. For example, the patents provide:

Such known games include, for example, games (so-called "city building games") wherein *a player builds a city within a <u>virtual space</u> (hereinafter referred to as "game space") provided in the game program. In city building games, players can*

build various facilities (such as houses, streets, ports, train stations, airports, castles, training facilities, etc.) on desired positions and create a city after their liking.

'594 Patent col.1 11.27–34 (emphasis added).

Accordingly, the Court construes "game space" as follows:

• "game space" means "virtual space within which the game is played."

A-7. "increase a first number of the game contents" and "increase a second number of the game contents"

Disputed Term	Plaintiff's Proposed Construction	Defendant's Proposed Construction
 "increase a first number of the game contents" '385 Patent Claims 2, 10 '682 Patent Claim 2 '683 Patent Claims 2, 6, 10 	plain and ordinary meaning	at least one game content is added to the number of game contents already displayed
"increase a second number of the game contents"'683 Patent Claims 3, 7, 11	plain and ordinary meaning	

Because the parties' arguments and proposed constructions with respect to these terms are related, the Court addresses the terms together.

The Parties' Positions

Plaintiff submits: The meanings of these terms are readily apparent without construction. Notably, the claimed "increasing" is not limited to increasing contents over that "already displayed." '200 Case Dkt. No. 75 at 24–25.

Defendant responds: The claims express that contents "arranged" in a game space are increased. This means that there are more contents displayed than were displayed before the increase. '200 Case Dkt. No. 82 at 19–20.

Plaintiff replies: Defendant represented to the PTAB that the meaning of the "increase" term in the '385 Patent claims is apparent without construction. '200 Case Dkt. No. 84 at 17–18.

Plaintiff cites further **extrinsic evidence** to support its position: Claypool '385 Patent PGR Decl. ¹⁴¶ 49, *Supercell Oy v. GREE Inc.*, PGR2018-00034 ('385 Patent) (P.T.A.B. Feb. 27, 2020), Exhibit 1005 (Plaintiff's Ex. B, '200 Case Dkt. No. 84-2); Petition for Post-Grant Review, *Supercell Oy v. GREE Inc.*, PGR2018-00034 ('385 Patent) (P.T.A.B. Feb. 27, 2020), paper 1 (Plaintiff's Ex. E, '200 Case Dkt. No. 84-5).

Analysis

The issue in dispute appears to be whether game contents "arranged" within a game space are necessarily "displayed." They are not.

Defendant has not identified anything that meets the exacting standard required to interpret "arranged" to mean displayed. The claims themselves provide significant context for understanding these terms. For example, Claim 2 of the '683 Patent recites: "arranging a first set of game contents within a first game space to increase a first number of the game contents arranged within the first game space." Claim 3 of the patent similarly recites: "arranging a second set of game contents within a second game space to increase a second number of the game contents arranged within the second game space." In other words, game contents are arranged in a game space, and the number of these contents is increased. As set forth above, the game space is not necessarily displayed. Thus, the contents "arranged" in the game space are not necessarily displayed, either before or after the number of contents is increased. Ultimately, the "increase" terms are readily understandable in the context of the surrounding claim language.

Accordingly, the Court rejects Defendant's proposed construction and determines that these terms have their plain and ordinary meanings without the need for further construction.

¹⁴ Declaration of Mark L. Claypool, Ph.D. in Support of Petition for Post Grant Review of U.S. Patent No. 10,300,385.

A-8. "create," "creating," and "being created"

Disputed Term	Plaintiff's Proposed Construction	Defendant's Proposed Construction
 "create" '675 Patent Claims 12, 19, 23 '676 Patent Claims 1, 7 '677 Patent Claims 13–14, 17–18 '347 Patent Claims 16, 25 '978 Patent Claims 1, 7, 13 	plain and ordinary meaning	bring into existence / brought into existence
"creating" • '675 Patent Claims 1, 8, 27 • '677 Patent Claims 2 • '347 Patent Claims 7, 29 • '978 Patent Claims 1	plain and ordinary meaning	
"being created" • '677 Patent Claims 1 • '678 Patent Claims 1, 5, 9, 12 • '682 Patent Claims 10, 14 • '347 Patent Claims 28	plain and ordinary meaning	

Because the parties' arguments and proposed constructions with respect to these terms are related, the Court addresses the terms together.

The Parties' Positions

Plaintiff submits: The meanings of these terms are readily apparent without construction. Defendant's proposed constructions inject ambiguity in regard to the meaning of "existence." Further, Defendant's proposed construction threatens to improperly exclude from the scope of the claims a template created by modifying an existing template. '200 Case Dkt. No. 75 at 25–26.

In addition to the claims themselves, Plaintiff cites the following **intrinsic evidence** to support its position: '594 Patent col.2 ll.59–63, col.20 ll.24–26.

Defendant responds: There are two types of templates disclosed in the patents: (1) templates created by the user and (2) preexisting templates distributed by a server. This should be clarified for the jury. '200 Case Dkt. No. 82 at 20–21.

In addition to the claims themselves, Defendant cites the following intrinsic and extrinsic evidence to support its position: **Intrinsic evidence**: '594 Patent col.20 11.24–30. **Extrinsic evidence**: *The American Heritage Dictionary* at 427 (4th ed. 2000), "create" (Defendant's Ex. I, '200 Case Dkt. No. 82-10 at 4); *Webster's Third New International Dictionary* at 532 (2002), "create" (Defendant's Ex. J, '200 Case Dkt. No. 82-11 at 4), *IBM Dictionary of Computing* at 154 (International ed. 1994), "create" (Defendant's Ex. K, '200 Case Dkt. No. 82-12 at 4), *Merriam-Webster's Collegiate Dictionary* at 272 (10th ed. 1993), "create" (Defendant's Ex. L, '200 Case Dkt. No. 82-13 at 4).

Plaintiff replies: Defendant repeatedly represented to the PTAB that the meanings of these terms are apparent without construction. '200 Case Dkt. No. 84 at 18.

Plaintiff cites further **extrinsic evidence** to support its position: Claypool '675 Patent PGR Decl. ¶ 64, *Supercell Oy v. GREE Inc.*, PGR2018-00038 ('675 Patent) (P.T.A.B. Mar. 3, 2020), Exhibit 1012 (Plaintiff's Ex. C, '200 Case Dkt. No. 84-3); Claypool '678 Patent PGR Decl. ¶ 44, *Supercell Oy v. GREE Inc.*, PGR2018-00042 ('678 Patent) (P.T.A.B. Mar. 3, 2020), Exhibit 1012 (Plaintiff's Ex. D, '200 Case Dkt. No. 84-4); Petition for Post-Grant Review, *Supercell Oy v. GREE Inc.*, PGR2018-00039 ('675 Patent) (P.T.A.B. Mar. 3, 2020), paper 2 (Plaintiff's Ex. F, '200 Case Dkt. No. 84-6); Petition for Post-Grant Review, *Supercell Oy v. GREE Inc.*, PGR2018-00039 (Patent '676 Patent) (P.T.A.B. Mar. 4, 2020), paper 2 (Plaintiff's Ex. G, '200 Case Dkt. No.

¹⁵ Declaration of Mark L. Claypool, Ph.D. in Support of Petition for Post Grant Review of U.S. Patent No. 10,307,678.

84-7); Petition for Post-Grant Review, *Supercell Oy v. GREE Inc.*, PGR2018-00041 ('677 Patent) (P.T.A.B. Mar. 3, 2020), paper 2 (Plaintiff's Ex. H, '200 Case Dkt. No. 84-8); Petition for Post-Grant Review, *Supercell Oy v. GREE Inc.*, PGR2018-00042 ('678 Patent) (P.T.A.B. Mar. 3, 2020), paper 2 (Plaintiff's Ex. I, '200 Case Dkt. No. 84-9).

Analysis

The issue in dispute appears to be whether the claims exclude templates that are created by modifying existing templates. They do not.

While Defendant does not directly address the issue, its construction appears to exclude new templates made by modifying existing templates from the scope of "create." Such a limitation is not justified by Defendant's evidence. Indeed, the '594 Patent Family patents state the opposite. For example, the patents provide:

It should be noted that the present invention is not limited to the above-described embodiment. For example, in the above-described embodiment, in order to *combine multiple templates to create a single template*, it is assumed that a player applies multiple templates to predetermined areas within the game space, or multiple players apply a template each to predetermined areas within the game space, and then a template for a predetermined area that encompasses all these areas is created. However, a player may designate multiple templates or multiple players may designate a template each, and then *a template may be created by directly joining these templates*.

'594 Patent col.19 ll.49–60 (emphasis added). In other words, the patents expressly teach that a template may be created using existing templates.

Accordingly, the Court rejects Defendant's proposed construction and determines that these terms have their plain and ordinary meanings without the need for further construction.

A-9. "active allocation"

Disputed Term	Plaintiff's Proposed	Defendant's Proposed
	Construction	Construction
"active allocation"'676 Patent Claims 5, 11'978 Patent Claims 5, 11, 17	plain and ordinary meaning	game contents currently allocated within the game space

The Parties' Positions

Plaintiff submits: The meaning of this term is readily apparent without construction. Defendant's proposed construction does not clarify anything but instead improperly adds complexity. '200 Case Dkt. No. 75 at 26–27.

Defendant responds: The claims do not clearly specify "where the active allocation is provided" and the term should be construed as described in patents; namely, to clarify that the active allocation is within the game space. '200 Case Dkt. No. 82 at 21–22.

Plaintiff replies: The term "active allocation" does not limit "where the allocation is provided." Defendant represented to the PTAB that the meaning of the "active allocation" term in the '676 Patent's claims is apparent without construction. '200 Case Dkt. No. 84 at 18–19.

Plaintiff cites further **extrinsic evidence** to support its position: Claypool '675 Patent PGR Decl. ¶ 64, *Supercell Oy v. GREE Inc.*, PGR2018-00038 ('675 Patent) (P.T.A.B. Mar. 3, 2020), Exhibit 1012 (Plaintiff's Ex. C, '200 Case Dkt. No. 84-3); Petition for Post-Grant Review, *Supercell Oy v. GREE Inc.*, PGR2018-00039 ('676 Patent) (P.T.A.B. Mar. 4, 2020), paper 2 (Plaintiff's Ex. G, '200 Case Dkt. No. 84-7).

Analysis

The dispute appears to be whether an allocation of game contents being "active" means that the allocated game contents are currently within the game space. They are.

The claimed "allocation" of the game contents refers to the contents and their positions within the game space. For example, Claim 5 of the '676 Patent (including limitations from its parent claim, Claim 1, and with emphasis added) recites:

Arranging . . . a plurality of game contents within a game space; . . . create . . . a plurality of templates defining the plurality of game contents and respective positions of the plurality of game contents within the game space; . . . apply a template corresponding to the received selection to a game space . . . allocate the applied template as the first player's active allocation of the plurality of game contents.

According to the claims, templates represent game contents and their respective positions. In other words, each template represents potentially different arrangements of contents. A template is chosen and applied, and contents are allocated. While, "allocation" and "active" are not used outside the claim sets, the patent describes choosing and positioning contents within a game space (or region thereof) in response to application of a template. For example, the patents provide:

Provided is a method for controlling a computer that is provided with a storage unit configured to store game contents arranged within a game space, positions of the game contents, and a template defining positions of one or more of game contents, and that progresses a game by arranging the game contents within the game space based on a command by a player. The method includes when the template is applied to a predetermined area within the game space based on the command by the player, moving, by the computer, the game contents arranged within the game space to the positions of the game contents defined by the template.

'594 Patent col.1 l.66 – col.10 (emphasis added). In other words, the template represents a potential arrangement of game contents, an allocation. In the context of the claims, an "allocation" becomes "active" by applying the template. Thus, the "active allocation" refers to contents chosen and positioned (arranged) according to the applied template.

Accordingly, the Court construes "active allocation" as follows:

• "active allocation" means "game contents currently allocated within the game space."

A-10. "compare a number of the plurality of game contents included in the template with a number of the game contents allocated in the game space" and "comparing a number of the plurality of game contents included in the template with a number of the game contents allocated in the game space"

Disputed Term	Plaintiff's Proposed	Defendant's Proposed
	Construction	Construction
"compare a number of the plurality of game contents included in the template with a number of the game contents allocated in the game space" • '676 Patent Claims 15, 21	plain and ordinary meaning	compare how many game contents are defined within the template with the number of game contents currently allocated within the game space
"comparing a number of the plurality of game contents included in the template with a number of the game contents allocated in the game space" • '677 Patent Claim 9	plain and ordinary meaning	comparing how many game contents are defined within the template with the number of game contents currently allocated within the game space

Because the parties' arguments and proposed constructions with respect to these terms are related, the Court addresses the terms together.

The Parties' Positions

Plaintiff submits: The meanings of these terms are readily apparent without construction. Defendant's proposed constructions "essentially track[] the claim language" but change the wording of already clear language. '200 Case Dkt. No. 75 at 27–28.

Defendant responds: As described in the patents, the number of game contents in the template is compared with the number of game contents allocated in the game space in order to determine the relative number of game contents. '200 Case Dkt. No. 82 at 22–23.

In addition to the claims themselves, Defendant cites the following **intrinsic evidence** to support its position: '594 Patent fig.4, col.7 1.37 – col.8 1.29.

Plaintiff replies: Defendant represented to the PTAB that the meanings of these terms are apparent without construction. '200 Case Dkt. No. 84 at 19.

Plaintiff cites further **extrinsic evidence** to support its position: Claypool '675 Patent PGR Decl. ¶ 64, Supercell Oy v. GREE Inc., PGR2018-00038 ('675 Patent) (P.T.A.B. Mar. 3, 2020), Exhibit 1012 (Plaintiff's Ex. C, '200 Case Dkt. No. 84-3); Petition for Post-Grant Review, Supercell Oy v. GREE Inc., PGR2018-00039 ('676 Patent) (P.T.A.B. Mar. 4, 2020), paper 2 (Plaintiff's Ex. G, '200 Case Dkt. No. 84-7); Petition for Post-Grant Review, Supercell Oy v. GREE Inc., PGR2018-00041 ('677 Patent) (P.T.A.B. Mar. 3, 2020), paper 2 (Plaintiff's Ex. H, '200 Case Dkt. No. 84-8).

Analysis

The issue in dispute appears to be whether the claim language should be construed to clarify that it is the quantity of game contents that is compared. It should.

It is not clear whether there is a fundamental dispute over claim scope, but the claim language can possibly be read two ways when read in isolation. First, comparing the quantity ("a number") of contents in the template with the quantity ("a number") of contents allocated in the game space; i.e., comparing the number of the contents in the template with the number in the game space. Second, comparing some ("a number") of the contents in the template with some ("a number") of the contents allocated in the game space; i.e., comparing attributes of particular contents in the template with attributes of particular contents in the game space. Plaintiff does not appear to advocate for the second reading. And, in the context of the patents, the first reading is the correct reading. For example, Claim 15 of the '676 Patent later recites: "when the number of the plurality of game contents included in the template is equal to the number of the game contents allocated in the game space." See also '594 Patent col.11 ll.25–28 ("For each type of facility, the template

application unit 253 compares the number of facilities of this type within the game space and the number of facilities of this type within the template."); col.19 ll.3–9 ("For each type of facility, the second template application unit 254 compares the number of facilities of this type within the game space and the number of facilities of this type within the template"); col.22 ll.17–23 ("For each type of facility, the third template application unit 255 compares the number of facilities of this type within the game space and the number of facilities of this type within the template").

Accordingly, the Court construes these terms as follows:

- "compare a number of the plurality of game contents included in the template with a number of the game contents allocated in the game space" means "compare how many game contents are defined within the template with the number of game contents currently allocated within the game space"; and
- "comparing a number of the plurality of game contents included in the template with a number of the game contents allocated in the game space" means "comparing how many game contents are defined within the template with the number of game contents currently allocated within the game space."

B. Case No. 2:19-cv-161

B-1. "advisory information"

Disputed Term	Plaintiff's Proposed	Defendant's Proposed
	Construction	Construction
"advisory information"	plain and ordinary meaning	suggestion or recommendation
• '262 Patent Claims 1, 7, 11, 13, 19		alternatively, • information comprising a suggestion or recommendation

The Parties' Positions

Plaintiff submits: The meaning of this term is readily apparent without construction. There is nothing in the intrinsic record that suggests "advisory information" is used other than according to its customary, and apparent, meaning. '161 Case Dkt. No. 75 at 9–12.

In addition to the claims themselves, Plaintiff cites the following **intrinsic evidence** to support its position: '262 Patent fig.3, col.5 ll.23–31, col.7 ll.3–10.

Defendant responds: The '262 Patent "repeatedly and consistently" characterizes "advisory information" as providing a suggestion or recommendation. This is distinct from the customary meaning of "advisory" which "is something akin to a 'warning." "There is no support in the patent that 'advisory information' includes such warnings." '161 Case Dkt. No. 83 at 9–11.

In addition to the claims themselves, Defendant cites the following intrinsic and extrinsic evidence to support its position: **Intrinsic evidence**: '262 Patent, at [57] Abstract, col.1 II.53–58, col.2 II.2–4, col.2 II.30–35, col.5 II.21–28, col.10 II.1–3, col.10 II.7–9. **Extrinsic evidence**: *Webster's New College Dictionary* at 17 (3d ed. 2008), "advisory" (Defendant's Ex. C, '161 Case Dkt. No. 83-4 at 4); *The American Heritage Dictionary* at 13 (5th ed. 2012), "advisory" (Defendant's Ex. D, '161 Case Dkt. No. 83-5 at 4).

Plaintiff replies: The meaning of "advisory information" is clear given the surrounding claim language, which describes what the "advisory information" does. Given that the term is not ambiguous in the context of the intrinsic record, there is no reason to resort to Defendant's dictionary definitions. And in any event, the "warning" aspect of "advisory" appears in only some of the definitions, not all. The dictionaries also present definitions referring to providing "advice," which is how "advisory information" is used in the '262 Patent. '161 Case Dkt. No. 85 at 5–7.

Plaintiff cites further **extrinsic evidence** to support its position: *Webster's New College Dictionary* at 17 (3d ed. 2008), "advisory" (Defendant's Ex. C, '161 Case Dkt. No. 83-4 at 4); *The American Heritage Dictionary* at 13 (5th ed. 2012), "advisory" (Defendant's Ex. D, '161 Case Dkt. No. 83-5 at 4).

Analysis

The issue in dispute appears to be whether "advisory information" is necessarily limited to suggestions and recommendations. It is not, to the extent that "suggestions and recommendations" are meant to be narrower than "advice." But "advisory information" in the claims does not extend to simple notification of a problem or issue. In other words, "advisory information" is "information containing advice."

The "advisory information" is described in the '262 Patent as containing advice. Specifically, the patent explains that the invention does more than just provide a user with notice of a problem or issue. For example, the patent disparages the notice-only prior art and explains how the invention improves the art by advising the user:

In a conventional city building game, the user has numerous options, and the game has no final objective. Therefore, in order to further develop the city, the user does not always know what action to take next.

Such games include a *notification* function to prompt the user to respond to cases such as the occurrence of a problem in the city, for example an earthquake. This *notification*, *however*, *merely indicates the occurrence* of a problem and *does not contribute to development of the city*, which is the objective of the game, even if the user addresses the problem.

Accordingly, the present invention has been conceived in light of the above problems, and it is an object thereof to provide a communication system, a method for controlling a communication system, and a program that can prevent a situation in which the user does not know what to do by advising the user on what action to take next.

'262 Patent col.1 ll.42–58 (emphasis added). The invention provides "advisory information," which is described in an embodiment as including "measures to take" to address the problem or issue. For example, the patent explains as follows:

Based on the scoring information 131, the <u>advice selection</u> unit 12 selects advisory information 132 that suggests the next action for the city. In greater detail, the advice selection unit 12 determines which indicator has the lowest score based on the scoring information 131 and selects advisory information 132 that specifies the indicator with the lowest score and a <u>measure to take</u> in order to raise the score of the indicator. For example, when the score of the indicator "fun" is the lowest, the facility with the highest fun value 1307 is presented, and the user is encouraged to take the measure of installing the facility.

'262 Patent col.5 ll.21–31 (emphasis added). In other words, "advisory information" in the '262 Patent provides advice to address a problem, and not just notice of the problem.

The use of "advisory information" in the patent to denote information containing advice comports with the customary meaning of "advisory." For example, one dictionary of record defines "advisory" as "[c]ontaining advice, esp. a warning." *The American Heritage Dictionary* at 13 (5th ed. 2012), '161 Case Dkt. No. 83-5 at 4. Another dictionary of record defines "advisory" as "[o]f, relating to, or containing advice." *Webster's New College Dictionary* at 17 (3d ed. 2008), '161 Case Dkt. No. 83-4 at 4. In other words, "advisory" as customarily used as an adjective refers to advice.

Accordingly, the Court construes "advisory information" as follows:

• "advisory information" means "information containing advice."

B-2. "facility" and "object"

Disputed Term	Plaintiff's Proposed Construction	Defendant's Proposed Construction
"facility" • '262 Patent Claims 1, 7, 13, 19	plain and ordinary meaning	

Disputed Term	Plaintiff's Proposed	Defendant's Proposed
	Construction	Construction
"facilities"		type of structure[s] that can be built, installed or
• '262 Patent Claims 1, 7, 13, 19		established
"object"		alternatively,
• '318 Patent Claims 1, 2, 6–10, 13		• type of structure[s] that can be arranged or
"objects"		installed
• '318 Patent Claims 2, 10		

Because the parties' arguments and proposed constructions with respect to these terms are related, the Court addresses the terms together.

The Parties' Positions

Plaintiff submits: The meanings of these terms are readily apparent without construction. Defendant's proposed construction does not clarify anything and is inconsistent with other claim language. For instance, the claims of the '262 Patent expressly provide that a "facility" is or is not "arranged" without mention of "built, installed, or established." Nothing in the intrinsic record suggests limiting these terms as Defendant posits. '161 Case Dkt. No. 75 at 12–14.¹⁶

Defendant responds: The term "facility" and "object" are used in the '262 and '318 Patents in a way that differs from their common meanings. In the patents, the terms solely refer to structures. Specifically, the terms refer to types of structures rather than to individual units of a particular type of structure. '161 Case Dkt. No. 83 at 11–15.

In addition to the claims themselves, Defendant cites the following **intrinsic evidence** to support its position: '262 Patent fig.2, col.1 ll.26–27 col.4 ll.22–25.

¹⁶ Plaintiff cites a variety of file-wrapper records but did not provide these documents as exhibits to the opening brief.

Plaintiff replies: The "facilities" and "objects" of the claims do not refer to types of structures. Adopting Defendant's construction would improperly alter the scope of the claims. For example, altering Claim 1 of the '262 Patent from "make a determination of a facility which has not been arranged" to "make a determination of a type of structure which has not been arranged" would change the scope from determining whether a facility such as a house has been installed to determining whether a structure such as a building has been installed. This improperly broadens the scope of the claims. Further, the claims allow for multiple installations of one type of structure. For example, Claim 19 of the '262 Patent uses the "number of facilities already arranged" in its "determination of a facility which has not been arranged." '161 Case Dkt. No. 85 at 7–11.

Plaintiff cites further **intrinsic evidence** to support its position: '262 Patent figs. 2–3, col.7 ll.3–10.

Analysis

The issue in dispute is whether "facility" and "object" are necessarily types of structure that that can be built, installed or established (or arranged or installed). The Court understands the plain meanings of "facility" and "object" to refer to types of things rather than instances of things and the patents provide numerous examples of the types of things, all of which can be built, installed, arranged, or established, which suggests that facilities/objects are "structures" under a broad meaning of "structure" that is not limited to things that are constructed but includes things such as plants.

As used in the '318 and '262 Patents, a "facility" or "object" is a type of structure rather than an instance of a structure. For example, Figure 2 lists various facilities as types of structures and notes that there may be multiple instances of a particular type of structure. The number (or count)

of facilities of a given type (e.g., a bowling alley) is described as being used to generate advice for the user. For example, the patents provide:

The advice selection unit 12 preferably identifies a facility that the user has not installed based on the users' city information 130 and selects the advisory information 132 based on the result of identification and on the scoring information 131. In greater detail, the advice selection unit 12 selects the advisory information 132 that specifies a measure encouraging the user to install the facility with the highest fun value 1307 among the facilities that have not been installed. By thus identifying an action that the user has not yet taken and selecting advisory information 132 based on the result of identification, it is possible to prevent an action that the user has already taken from being shown as the measure, thereby improving the usefulness of the advisory information 132.

'318 Patent col.5 Il.29–42 (emphasis added). Notably, there is no suggestion in the patents that the "city information" includes available instances of various types of structures. Rather, the "structure count" of the "city information" refers to "a variety of structures that have been installed in the user's city." *Id.* at fig.2, col.3 l.5 – col.4 l.12. "The structure count 1303 is the number of business facilities, such as a shop, a bowling alley, or the like; decorative facilities such as an art object or the like; community facilities such as a post office; weeds, scrub brush, roads, and the like." *Id.* at col.4 ll.19–23. In this context, the advice unit identification of "a facility that the user has not installed based on the users' city information" suggests that the advice unit identifies a type of structure that has not been installed. For example, it may identify that the city lacks a bowling alley as opposed to lacking a specific instance of a bowling alley (such as the Lucky Strike bowling alley). This suggests that a facility is a "type" rather than an instance. On balance, the facilities and objects of the patents refer to types of structures.

Accordingly, the Court construes these terms as follows:

"facility" / "facilities" / "object" / "objects" mean "type of structure that can be built, installed, arranged, or established, such as game center, bowling alley, shop, art object, post office, library, weeds, scrub brush, and road"

B-3. "virtual space"

Disputed Term	Plaintiff's Proposed	Defendant's Proposed
	Construction	Construction
 "virtual space" '262 Patent Claims 1, 6– 7, 12–13, 18–19, 24 '318 Patent Claims 1–4, 7, 9–12 	plain and ordinary meaning	space that a user forms or develops by installing facilities, such as a city alternatively, • space that a user forms or develops, such as a city, by arranging or installing one or more facilities or objects

The Parties' Positions

Plaintiff submits: The meaning of "virtual space" is readily apparent without construction. Defendant's proposed construction complicates the clear term and injects limitations such as "facility" and "installing" that are not stated in all the claims at issue and are not supported by the intrinsic record. '161 Case Dkt. No. 75 at 14–16.¹⁷

Defendant responds: The term "virtual space" carries a specific meaning in the patents and should be construed to reflect that meaning. For example, the '262 and '328 Patents "consistently and repeatedly characterizes" the space as one that the user "forms or develops." And the claims require the forming is done by installing facilities (or, the equivalent term, "objects"). '161 Case Dkt. No. 83 at 15–18.

In addition to the claims themselves, Defendant cites the following **intrinsic evidence** to support its position: '262 Patent, at [57] Abstract, col.1 ll.24–27, col.1 ll.66–67, col.2 l.32, col.10 ll.14–21.

¹⁷ Plaintiff cites a variety of file-wrapper records but did not provide these documents as exhibits to the opening brief.

Plaintiff replies: The meaning of "virtual space" is plain in the context of the claims, "which relate to games that involve building virtual (i.e., not real) spaces." Defendant's construction does nothing to clarify this meaning. '161 Case Dkt. No. 85 at 11–12.

Analysis

The issue in dispute appears to be whether "virtual space" should be clarified to the jury, and, if so, whether Defendant's proposed construction is appropriate. While the term would benefit from some clarification, Defendant's proposed construction does not provide that clarification.

The "virtual space" of the patents refers to a simulated space. The '318 and '262 Patents are directed to technology for games like city-building simulation games. The patents explain these types of games as follows:

City building simulation games allow users to create a city environment within the game and develop the city. In such city building games, the user installs and develops a variety of facilities and buildings within the game and deals with problems such as earthquakes, environmental pollution, and the like (for example, see "SimCity", Wikipedia (NPL 1)).

'318 Patent col.1 ll.23–29. Thus, a city simulation includes more than "installing facilities" as Defendant's proposed construction suggests. It expressly includes developing facilities and dealing with problems of various sorts. The patents also explain that the games are not limited to city simulations:

In the above-described embodiment, an example of a city building simulation game was described, yet the present invention is not limited in this way. Instead of a city, the space that the user forms within the game may be any space within the game, such as a country, region, garden, ranch, farm, store, or the like.

'262 Patent col.10 ll.14–19. While the patents are directed to games, and not simulations generally, this is expressed in the claims. For example, Claim 1 of the '318 Patent recites "a virtual space in a game" and Claim 7 of the '262 Patent recites determining aspects of "a first

virtual space of a first user during a game." Ultimately, the "virtual space" is the space that is simulated in the game.

Accordingly, the Court construes "virtual space" as follows:

 "virtual space" means "computer-simulated space such as a city, country, region, garden, ranch, farm, store, or the like."

B-4. "at least two numerical parameters related to the first virtual space" and "at least two numerical parameters of the plurality of numerical parameters related to a first virtual space"

Disputed Term	Plaintiff's Proposed	Defendant's Proposed
	Construction	Construction
"at least two numerical parameters of the plurality of numerical parameters related to a first virtual space" • '318 Patent Claims 1, 7, 9	plain and ordinary meaning	at least two of the plurality of numerical parameters indicating the level of the virtual space, arrangement of structures, levels thereof, and/or values assigned thereto of a first virtual space
"at least two numerical parameters related to the first virtual space" • '318 Patent Claims 2, 10	plain and ordinary meaning	at least two numerical parameters indicating the level of the virtual space, arrangement of structures, levels thereof, and/or values assigned thereto of the first virtual space

Because the parties' arguments and proposed constructions with respect to these terms are related, the Court addresses the terms together.

The Parties' Positions

Plaintiff submits: The meanings of these terms are readily apparent without construction. Defendant's proposed construction simply imports limitations from the exemplary embodiments. '161 Case Dkt. No. 75 at 17–18.

In addition to the claims themselves, Plaintiff cites the following **intrinsic evidence** to support its position: '262 Patent col.4 ll.9–15.

Defendant responds: The description of the invention in the '318 Patent "teaches that the claimed 'parameters' are necessarily related to structures arranged in a user's space, and specifically, values or levels regarding those structures in the user's space, as well as a level of the user's space." The claims should be construed to clarify the nature of the parameters. '161 Case Dkt. No. 83 at 18–20.

In addition to the claims themselves, Defendant cites the following **intrinsic evidence** to support its position: '262 Patent fig.7, col.1 ll.53–57, col.3 l.64, col.4 ll.6–10, col.4 ll.12–15, col.4 ll.39–55, col.5 ll.21–36, col.8 ll.38–45.

Plaintiff replies: There is no definition or disclaimer in the intrinsic record that justifies narrowing the claims as Defendant proposes. Rather, the scoring parameters described in the '262 and '318 Patents are expressly exemplary. '161 Case Dkt. No. 85 at 12–13.

Plaintiff cites further **intrinsic evidence** to support its position: '262 Patent col.4 ll.9–15.

Analysis

The issue in dispute distills to whether the "parameters related to [a/the] first virtual space" should be limited to parameters "related to structures arranged in" the space. They should not.

The disclosures identified by Defendant do not meet the exacting standard required to limit the broad meanings of these terms as Defendant proposes. For example, the '318 Patent lists expressly exemplary parameters:

As <u>parameters</u> related to structures, the users' city information 1306 includes an income value 1306, a fun value 1307, a convenience value 1308, and a beauty value 1309. Specific examples of information used for scoring have been listed, yet the information included in the users' city information 130 is not limited to these examples. For example, the users' city information 130 may include information

such as the level or amount of capital of the user's city, the amount of material, the experience points necessary to raise the city's level, *or the like*.

'318 Patent col.4 ll.6–15 (emphasis added). Further, the claims specify broadly that the "parameters" are "related to" the "virtual space." Ultimately, Defendant's proposed construction improperly imports limitations.

Accordingly, the Court rejects Defendant's proposed constructions and determines that these terms have their plain and ordinary meanings without the need for further construction.

B-5. "ranking information ranking the plurality of users according to a numerical value indicating a status of each user"

Disputed Term	Plaintiff's Proposed Construction	Defendant's Proposed Construction
"ranking information ranking the plurality of users according to a numerical value indicating a status of each user" • '262 Patent Claims 2, 8, 14, 20	plain and ordinary meaning	information ranking the plurality of users according to a numerical value assigned to each user indicating the arrangement of structures in a predetermined area, levels of the structures, and/or values assigned to such arrangement and/or levels

The Parties' Positions

Plaintiff submits: The meaning of this term is readily apparent without construction. Defendant's proposed construction simply imports limitations from the exemplary embodiments. '161 Case Dkt. No. 75 at 19.

In addition to the claims themselves, Plaintiff cites the following **intrinsic evidence** to support its position: '262 Patent col.4 ll.9–15, col.5 ll.9–13.

Defendant responds: The '262 Patent "consistently and repeatedly describes that the ranking or scoring information of the 'status of each user' is based solely on the score for that user's space."

As described, the score for the user's space is "based on the structures in the user's space and

values assigned to those structures." As such, Defendant's construction is the "only construction that is supported by the specification." '161 Case Dkt. No. 83 at 20–23.

In addition to the claims themselves, Defendant cites the following **intrinsic evidence** to support its position: '262 Patent figs. 3, 4, col.4 ll.39–47, col.4 ll.50–55, col.6 l.54 – col.7 l.2, col.7 ll.11–22.

Plaintiff replies: There is no definition or disclaimer in the intrinsic record that justifies narrowing the claims as Defendant proposes. Rather, the scoring parameters described in the '262 and '318 Patents are expressly exemplary. '161 Case Dkt. No. 85 at 14.

Analysis

The issue in dispute distills to whether the claim-recited "numerical value indicating a status of each user" should be limited to a "numerical value assigned to each user indicating the arrangement of structures in a predetermined area, levels of the structures, and/or values assigned to such arrangement and/or levels." It should not.

This issue, and the argument and evidence presented by the parties, is similar to that for the "numerical parameter" terms addressed above. For the reasons stated above, Defendant has not identified anything that rises to the exacting standard required to limit the meaning of this term as Defendant proposes.

Accordingly, the Court rejects Defendant's proposed construction and determines that this term has its plain and ordinary meaning without the need for further construction.

C. Case No. 2:19-cv-237

C-1. "panel(s)"

Disputed Term	Plaintiff's Proposed	Defendant's Proposed
	Construction	Construction
"panel(s)"	plain and ordinary meaning	cards
• '346 Patent Claims 1–15		

The Parties' Positions

Plaintiff submits: The meaning of this term is readily apparent without construction. Defendant's proposed construction improperly imports a "card" limitation. And the '346 Patent describes that panels are not limited to "cards" but instead are meant to improve on the typical two-dimensional card. In fact, the patent uses "panel" and "card" distinctly, meaning that a panel is not necessarily a card. '237 Case Dkt. No. 54 at 11–13.

In addition to the claims themselves, Plaintiff cites the following **intrinsic evidence** to support its position: '346 Patent figs.5A, 5B, col.1 ll.37–47, col.5 ll.16–17, col.8 ll.33–36.

Defendant responds: In the '346 Patent, "panel" is used synonymously with the "card" of a card-battle game. This was confirmed by the PTAB in Post Grant Review proceedings involving related patents, in which the PTAB "characterized the claim limitation 'disposing a *panel* selection in a division' to be 'substantively indistinguishable from a game rule concerning a dealer or player selecting and disposing *cards* into their respective hands." '237 Case Dkt. No. 60 at 10–13 (Defendant's emphasis).

In addition to the claims themselves, Defendant cites the following **intrinsic evidence** to support its position: '346 Patent fig.12, col.1 ll.32–52, col.8 ll.33–36, col.10 ll.25–28; Final Written Decision at 24, *Supercell Oy v. GREE Inc.*, PGR2018-00047 (Patent No. 9,770,659¹⁸)

¹⁸ U.S. Patent No. 9,770,659 is related to the '346 Patent as a continuation parent.

(P.T.A.B. Sept. 6, 2019), Paper No. 39 (Defendant's Ex. C, '237 Case Dkt. No. 60-4 at 25); Final Written Decision at 24, *Supercell Oy v. GREE Inc.*, PGR2018-00029 (Patent No. 9,636,583¹⁹) (P.T.A.B. Aug. 14, 2019), Paper No. 45 (Defendant's Ex. D, '237 Case Dkt. No. 60-5 at 25).

Plaintiff replies: Nothing in the intrinsic record rises to lexicography or disclaimer that would equate "panel" to "card." Rather, a "card" may be a "panel" but not all cards are panels. "For example, a card that may be displayed as one or more moving characters in a game display screen may be an example of a 'panel' as claimed, whereas a card without those features (*e.g.*, a prior art two-dimensional card) would not." Further, the PTAB did not construe "panel" in the PGR proceedings over the related patents, and, in any event, applied a broadest reasonable construction to the claims and erred in its ultimate conclusions, which are the subject of pending appeals. Ultimately, the "panel" of the claims "can indicate one or more moving characters that may be dynamically placed and displayed within the game display screen" which is not necessarily captured by "card." '237 Case Dkt. No. 62 at 6–8.

Plaintiff cites further **intrinsic evidence** to support its position: '346 Patent col.1 ll.45–48, col.10 ll.25–28.

Analysis

The issue in dispute is whether the "panel" of the '346 Patent is necessarily a "card." It is not.

Rather than equating "panel" to "card," as Defendant suggests, the '346 Patent notes distinctions between panels and cards (in addition to similarities). For example, the patent explains some of the failings of prior-art cards as follows:

In recent years, with the spread of electronic apparatuses such as smart phones and tablets, games played on these electronic apparatuses have been actively developed.

¹⁹ U.S. Patent No. 9,636,583 is related to the '346 Patent through a series of continuation applications.

As an example of such a game, there is a card game in which the user plays against other users or against the computer using cards collected in the game.

Japanese Unexamined Patent Application Publication No. 2007-252696 discloses a technique regarding the card game described above. According to that technique, the user configures a deck with cards used in a play which is selected from a plurality of cards that the user owns, and plays a rock-paper-scissors game or the like with an opponent using the deck.

Such a card game system is familiar to many users today. However, since the use of a two-dimensional card in the battle scene is sometimes boring, there have been calls for improvement.

It could therefore be helpful to provide a storage medium storing a game program and a game processing method of a game that gives a user a high visual effect, and an information processing apparatus that controls the game.

'346 Patent col.1 ll.32–52 (emphasis added). The patent also explains that "panels" are not limited to certain shapes such as a card:

In addition, it is preferable that the shape of the panel be a rectangle. Panels can have various shapes such as a circle, a triangle, and a polygon, as well as the rectangle (including a square) such as a card in the related art.

'346 Patent col.8 ll.33—44 (emphasis added). These passages suggest that "panel" and "card" are not coextensive. Ultimately, whether a particular prior art or accused "card" is encompassed by the claimed "panel" is a factual issue of invalidity or infringement.

Accordingly, the Court rejects Defendant's proposed constructions and determines that "panel" has its plain and ordinary meaning without the need for further construction.

C-2. "divisions"

Disputed Term	Plaintiff's Proposed	Defendant's Proposed
	Construction	Construction
"divisions"	plain and ordinary meaning	defined area(s) of the display screen
• '346 Patent Claims 1–3, 6–10		1 33.33.3

The Parties' Positions

Plaintiff submits: In the context of the surrounding claim language, the meaning of "divisions" is readily apparent without construction. For instance, Claim 1 of the '346 Patent recites "selection of one or more divisions in which the one or more characters indicated in the selected one or more panels are to be displayed as one or more moving characters in a game display screen." Defendant's proposed construction does not clarify the meaning of "division" but rather injects ambiguity regarding, for example, the meaning of "defined areas." '237 Case Dkt. No. 54 at 13–14.

Defendant responds: The claims indicate that the "divisions" are portions of the display screen. The PTAB also reached this conclusion in Post Grant Review of related patents, quoting Plaintiff's expert's statement that the related patents have a "display screen containing a battle display region which is divided into a plurality of divisions referred to synonymously as divisions or frames." In the '346 Patent, these divisions are all "self-contained regions" and thus form "defined" areas. This "defined" nature comports with the customary meaning of "frame," which is synonymous with "division" in the patent. '237 Case Dkt. No. 60 at 13–16.

In addition to the claims themselves, Defendant cites the following intrinsic and extrinsic evidence to support its position: **Intrinsic evidence**: '346 Patent figs.3, 4, col.7 ll.32–54, col.8 ll.3–12; Final Written Decision at 66, *Supercell Oy v. GREE Inc.*, PGR2018-00047 (Patent No. 9,770,659) (P.T.A.B. Sept. 6, 2019), Paper No. 39 (Defendant's Ex. C, '237 Case Dkt. No. 60-4 at 67); Final Written Decision at 62, *Supercell Oy v. GREE Inc.*, PGR2018-00029 (Patent No. 9,636,583) (P.T.A.B. Aug. 14, 2019), Paper No. 45 (Defendant's Ex. D, '237 Case Dkt. No. 60-5

at 63); Crane PGR Dep.²⁰ 74:15–21, 75:9–10, 75:14 (Defendant's Ex. E, '237 Case Dkt. No. 60-6 at 10–11). **Extrinsic evidence**: *The American Heritage Dictionary* at 695 (5th ed. 2011), "frame" (Defendant's Ex. F, '237 Case Dkt. No. 60-7 at 4); *New Oxford American Dictionary* at 687 (3d ed. 2010), "frame" (Defendant's Ex. G, '237 Case Dkt. No. 60-8 at 4); *Concise Oxford English Dictionary* at 563 (12th ed. 2011), "frame" (Defendant's Ex. H, '237 Case Dkt. No. 60-9 at 4); *Webster's New College Dictionary* at 452–53 (3d ed. 2008), "frame" (Defendant's Ex. I, '237 Case Dkt. No. 60-10 at 4–5).

Plaintiff replies: The nature of the "division" in the claims is clear from the surrounding claim language. Further, Figure 11A of the '346 Patent depicts divisions that overlap, suggesting that they are not necessarily "defined" or "self-contained." '237 Case Dkt. No. 62 at 8–11.

Plaintiff cites further intrinsic and extrinsic evidence to support its position: **Intrinsic** evidence: '346 Patent fig.11A. **Extrinsic evidence:** Petition for Post Grant Review at 44–45, Supercell Oy v. GREE Inc., PGR2018-00047 (Patent No. 9,770,659) (P.T.A.B. Mar. 8. 2018), Paper No. 1 (Plaintiff's Ex. A, '237 Case Dkt. No. 62-1 at 54–55).

Analysis

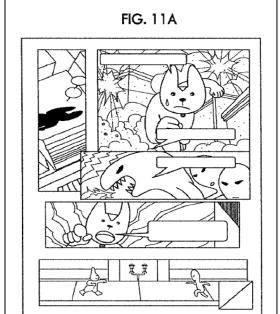
There appear to be two issues in dispute. First, whether the "divisions" are necessarily areas of the display screen. They are. Second, whether they are necessarily "defined." To the extent Defendant intends "defined" to mean separate and distinct from other divisions, the divisions are not necessarily "defined."

The "divisions" of the claims are necessarily divisions of the display screen. For example, Claim 1 of '346 Patent recites: "selection of one or more divisions in which the one or more

²⁰ Deposition of David Crane, Volume 1, *Supercell Oy v. GREE Inc.*, PGR2018-00029 & PGR2018-00047 (P.T.A.B. Feb. 12, 2019), Exhibit 1009.

characters indicated in the selected one or more panels are to be displayed as one or more moving characters in a game display screen including one or more regions formed by the one or more divisions." While it is relatively clear that the divisions form regions of the display screen, the claim language is somewhat convoluted in stating what the divisions are divisions of. In the description, the described relationship between divisions and display screen clarifies that the "divisions" refer to "divisions of a game display screen." *See, e.g.,* '346 Patent col.1 1.65 – col.2 1.1 ("the selection being for one or more panels indicating characters to be disposed in one or more *divisions of a game display screen* including a display region formed by the divisions" (emphasis added)), col.2 11.64–67 ("the selection being for one or more panels indicating characters to be disposed in one or more *divisions of a game display* screen including a display region formed by the divisions" (emphasis added)).

Defendant's proposed "defined" limitation suggests that overlap of divisions is not encompassed by the claims. Figure 11A of the '346 Patent (reproduced here), however, depicts an overlap of panels disposed in various divisions of the game display, and thus discloses an overlap of divisions. Nothing Defendant identified justifies construing "division" to exclude this embodiment.



Accordingly, the Court construes "divisions" as follows:

• "divisions" means "areas of the display screen."

C-3. "displaying the one or more moving characters according to the information of motion"

Disputed Term	Plaintiff's Proposed	Defendant's Proposed
	Construction	Construction
"displaying the one or more moving characters according to the information of motion"	plain and ordinary meaning	displaying characters as a time-based series of images
• '346 Patent Claims 1, 6–7		

The Parties' Positions

Plaintiff submits: The meaning of this term is readily apparent without construction. Defendant's construction improperly limits the claim language and injects ambiguity rather than clarifying scope. For example, it is not clear what a "time-based series of images" means. And there is nothing in the intrinsic record that limits the "information of motion" to a "time-based series of images." '237 Case Dkt. No. 54 at 14–15.

Defendant responds: The claims do not provide how the "information of motion" leads to displaying the moving characters. As explained in the '346 Patent, the motion is displayed as "a plurality of still images consecutively." '237 Case Dkt. No. 60 at 16–17.

In addition to the claims themselves, Defendant cites the following **intrinsic evidence** to support its position: '346 Patent col.2 ll.5–7, col.3 ll.3–5, col.3 ll.16–18, col.3 ll.38–41, col.4 ll.47–49, col.4 ll.65–67, col.8 ll.54–56.

Plaintiff replies: The claims do not have to describe all the details necessary to enable operation of the claim, so Defendant's attempt to incorporate detail as to how moving characters are displayed according to the information of motion is improper. Further, the described "animation that displays a plurality of still images consecutively" is a single embodiment and does not represent a clear restriction or exclusion of claim scope. Finally, the meaning of "time-base series of images" is not clear. '237 Case Dkt. No. 62 at 11–13.

Plaintiff cites further **intrinsic evidence** to support its position: '346 Patent col.8 11.55–56.

Analysis

The issues in dispute distill to whether "displaying the one or more moving characters according to the information of motion" is necessarily "displaying characters as a time-based series of images." It is not.

The claims are not limited to a "time-based series of images," by which the Court understands Defendant to mean a series of still images displayed sequentially in time. The description of a series of still images in the '346 Patent is a preferred embodiment, not an essential aspect of the invention that should be read into the claims. '346 Patent col.8 ll.54–56 ("*Preferably*, these panels display a movie when the panels are emphasized and displayed. The movie is an animation that displays a plurality of still images consecutively.") (emphasis added).

Further, the claims themselves do not need to explain how each step is done. Defendant's argument suggests that a method step is necessarily limited to the details disclosed in the description of the embodiments of the invention. This is the standard for step-plus-function claiming under 35 U.S.C. § 112(f), but Defendant has established neither that § 112(f) applies to the claims at issue nor that this standard should apply in the absence of § 112(f).

Accordingly, the Court rejects Defendant's proposed construction and determines that this term has its plain and ordinary meaning without the need for further construction.

C-4. "varying an attack ..." and "vary an attack ..."

Disputed Term	Plaintiff's Proposed Construction	Defendant's Proposed Construction
"varying an attack strength of a first unit among the plurality of units so that the attack strength of the first unit, in response to the first unit and a second unit among the plurality of units satisfying a first positional relationship by a movement of at least one of the first unit and the second unit, is decreased to be lower than the attack strength of the first unit when the first unit and the second unit do not satisfy the first positional relationship" • '689 Patent Claims 1, 5	plain and ordinary meaning	decreasing an attack strength of a first unit so that the attack strength of the first unit is lower than the characteristic attack strength of the first unit, wherein the decrease of attack strength is in response to the first unit satisfying a first positional relationship with a second unit by a movement of at least one of the first unit and the second unit
"vary an attack strength of a first unit among the plurality of units so that the attack strength of the first unit, in response to the first unit and a second unit among the plurality of units satisfying a first positional relationship by a movement of at least one of the first unit and the second unit, is decreased to be lower than the attack strength of the first unit when the first unit and the second unit do not satisfy the first positional relationship" • '689 Patent Claims 9	plain and ordinary meaning	decrease an attack strength of a first unit so that the attack strength of the first unit is lower than the characteristic attack strength of the first unit, wherein the decrease of attack strength is in response to the first unit satisfying a first positional relationship with a second unit by a movement of at least one of the first unit and the second unit

Because the parties' arguments and proposed constructions with respect to these terms are related, the Court addresses the terms together.

The Parties' Positions

Plaintiff submits: The meanings of these terms are readily apparent without construction. Defendant's constructions import limitations and inject ambiguity. Specifically, these terms include two limitations:

(1) that the attack strength of the first unit is varied when the "the first unit and second unit among the plurality of units *satisfy[]* a first positional relationship;" and (2) that the attack strength of the first unit is decreased to be lower than the attack strength of the first unit when "[] when the first unit and the second unit do not satisfy the first positional relationship" (Plaintiff's emphasis).

Defendant's proposed construction fails to account for the first limitation. Further, Defendant's "characteristic attack strength" is not found in the claim or in the description of the invention. '237 Case Dkt. No. 54 at 15–17.

Defendant responds: The claim language at issue includes a prepositional phrase in the middle of the term, namely the "in response to the first unit and a second unit among the plurality of units satisfying a first positional relationship by a movement of at least one of the first unit and the second unit" clause. Thus, there is only one situation when attack strength is varied; namely, when the first and second units satisfy a first positional relationship. The variance is set forth as a decrease below a specified baseline; namely, the "the attack strength of the first unit when the first unit and the second unit do not satisfy the first positional relationship." This plain reading of the claims is supported by the Plaintiff's explanation during prosecution of the '689 Patent. Finally, "characteristic attack strength" is one of several characteristics of units identified in the patent. '237 Case Dkt. No. 60 at 19–23.

In addition to the claims themselves, Defendant cites the following **intrinsic evidence** to support its position: '689 Patent col.5 ll.46–50; '689 Patent File Wrapper June 27, 2017 Office Action at 9–11 (Defendant's Ex. J, '237 Case Dkt. No. 60-11 at 11–13), Nov. 30, 2017 Office Action at 8–10 (Defendant's Ex. K, '237 Case Dkt. No. 60-12 at 10–12), March 15, 2018 Amendment with RCE at 5 (Defendant's Ex. L, '237 Case Dkt. No. 60-13 at 6), May 30, 2018 Office Action at 2–3 (Defendant's Ex. M, '237 Case Dkt. No. 60-14 at 4–5), July 18, 2018 Amendment at 2 (Defendant's Ex. N, '237 Case Dkt. No. 60-15 at 3).

Plaintiff replies: The terms claim varying the attack strength in two ways: "either when a positional relationship is satisfied (in which case the attack strength is decreased), or when the positional relationship is not satisfied (in which case the attack strength is not decreased)." '237 Case Dkt. No. 62 at 13–15.

Analysis

The issues in dispute primarily relate to the proper reading of the "in response to . . ." clause. The Court agrees with Defendant's reading but disagrees that "characteristic attack strength" should be read into the claims.

The Court agrees with Defendant's grammatical parsing of this phrase. Specifically, the "varying the attack strength" clause is "in response to" satisfaction of the first positional relationship and results in the attack strength being "decreased to be lower" than a baseline attack strength. Indeed, this is how Plaintiff explained this language during prosecution of the '689 Patent:

Independent claims 23, 27 and 31 recite, *inter alia* and in their respective terms, the following features: ...

(II) "varying an attack strength of a first unit among the plurality of units so that the attack strength of the first unit, *in response to* the first unit and a second unit among the plurality of units *satisfying a first positional relationship by a movement* of at least one of the first unit and the second unit, *is decreased to be lower* than the attack strength of the first unit when the first unit and the second unit do not satisfy the first positional relationship, ...

First, Takagi fails to teach varying the attack strength of a first unit so that the attack strength is <u>decreased in response</u> to the first unit and a second unit satisfying a first positional relationship by a movement that causes the second unit to be located within a first range of the first unit.

The independent claims recite that the attack strength is decreased "in response to" the first and second units satisfying a first positional relationship by a movement of at least one of the first and second units, and further recite that the first positional relationship is satisfied by the movement causing the second unit to be located within a first range of the first unit. The claimed "in response to" signifies a *causational relationship* between (i) the decrease of the attack strength and (ii) the

claimed positional relationship being satisfied in the claimed manner. *In other words, the attack strength is decreased as a response to the positional relationship being satisfied*.

'689 Patent File Wrapper July 18, 2018 Amendment at 6–7 (emphasis in original), '237 Case Dkt. No. 60-15 at 7–8.

The Court rejects Defendant's proposal to rewrite "the attack strength of the first unit when the first unit and the second unit do not satisfy the first positional relationship" as "characteristic attack strength of the first unit." Since the meaning of the claim language is readily apparent without construction, Defendant's proposal does not clarify anything. Instead, it raises questions about whether the "characteristic attack strength" is somehow different from "the attack strength of the first unit when the first unit and the second unit do not satisfy the first positional relationship." If there is a difference, then Defendant's construction is unjustified by the claim language or the teaching of the patent.

Accordingly, the Court construes these terms as follows:

"varying an attack strength of a first unit among the plurality of units so that the attack strength of the first unit, in response to the first unit and a second unit among the plurality of units satisfying a first positional relationship by a movement of at least one of the first unit and the second unit, is decreased to be lower than the attack strength of the first unit when the first unit and the second unit do not satisfy the first positional relationship" means "in response to the first unit and a second unit among the plurality of units satisfying a first positional relationship by a movement of at least one of the first unit and the second unit, varying an attack strength of a first unit among the plurality of units so that the attack strength of the first unit is decreased to be lower than the attack strength of the first unit when the first unit and the second unit do not satisfy the first positional relationship"; and

"vary an attack strength of a first unit among the plurality of units so that the attack strength of the first unit, in response to the first unit and a second unit among the plurality of units satisfying a first positional relationship by a movement of at least one of the first unit and the second unit, is decreased to be lower than the attack strength of the first unit when the first unit and the second unit do not satisfy the first positional relationship" means "in response to the first unit and a second unit among the plurality of units satisfying a first positional relationship by a movement of at least one of the first unit and the second unit, vary an attack strength of a first unit among the plurality of units so that the attack strength of the first unit is decreased to be lower than the attack strength of the first unit when the first unit and the second unit do not satisfy the first positional relationship."

C-5. "third unit"

Disputed Term	Plaintiff's Proposed	Defendant's Proposed
	Construction	Construction
"third unit" • '689 Patent Claims 1, 5, 9	plain and ordinary meaning	unit separate from the first unit, second unit, and stronghold

The Parties' Positions

Plaintiff submits: In the context of the surrounding claim language, the meaning of "third unit" is readily apparent without construction. Nothing in the intrinsic record supports limiting the third unit to necessarily be separate from the first unit, second unit, and stronghold. '237 Case Dkt. No. 54 at 17–19.

Defendant responds: The claims recite "first unit," "second unit," "third unit," and "stronghold" and these different terms should be given different meanings. Thus, the terms refer to distinct limitations. '237 Case Dkt. No. 60 at 23–24.

In addition to the claims themselves, Defendant cites the following **intrinsic evidence** to support its position: '689 Patent col.5 ll.8–9; '689 Patent File Wrapper July 18, 2018 Amendment at 7–8 (Defendant's Ex. N, '237 Case Dkt. No. 60-15 at 8–9).

Plaintiff replies: "[T]he claims at issue require three units and a stronghold." And the relationship among the units and the stronghold are clearly set forth in the claims. Defendant's construction would improperly exclude two units of the same type. '237 Case Dkt. No. 62 at 15–17.

Plaintiff cites further **intrinsic evidence** to support its position: '689 Patent col.6 ll.27–30.

Analysis

The issue in dispute appears to be whether the "third unit" is necessarily distinct from the "first unit," "second unit," and "stronghold" that are separately recited in the claims. It is. This is the plain import of separately reciting elements in a claim and Plaintiff has not established another meaning such that would allow, for example, that the third unit and the first unit to be the same singular unit. *Becton, Dickinson & Co. v. Tyco Healthcare Grp., LP*, 616 F.3d 1249, 1254 (Fed. Cir. 2010) ("Where a claim lists elements separately, the clear implication of the claim language is that those elements are distinct components of the patented invention." (quotation and modification marks omitted)). This does not mean, however, that two units cannot be of the same unit type.

Accordingly, the Court construes "third unit" as follows:

• "third unit" means "unit distinct from the first unit, second unit, and stronghold."

IV. CONCLUSION

The Court adopts the constructions above for the disputed and agreed terms of the Asserted Patents. Furthermore, the parties should ensure that all testimony that relates to the terms addressed

in this Order is constrained by the Court's reasoning. However, in the presence of the jury, the parties should not expressly or implicitly refer to each other's claim construction positions and should not expressly refer to any portion of this Order that is not an actual construction adopted by the Court. The references to the claim construction process should be limited to informing the jury of the constructions adopted by the Court.

SIGNED this 14th day of May, 2020.

ROY S. PAYNE

UNITED STATES MAGISTRATE JUDGE