2016-2741, -2742, -2743, -2744

United States Court of Appeals for the Federal Circuit

PARALLEL NETWORKS, LLC,

Plaintiff—Appellant,

v.

SG INTERACTIVE INC.; BLIZZARD ENTERTAINMENT, INC.; KOG GAMES INC.; and RELOADED GAMES, INC.,

Defendants—Appellees.

Appeal from the United States District Court for the District of Delaware. Case No. 1:13-cv-00826 and Related Case Nos. 1:13-cv-00178, 1:13-cv-00827, and 1:13-cv-00828, Hon. Richard G. Andrews.

OPENING BRIEF FOR DEFENDANTS-APPELLEES BLIZZARD ENTERTAINMENT, INC.; SG INTERACTIVE INC.; KOG GAMES INC.; AND RELOADED GAMES, INC.

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APRIL 7, 2017

CERTIFICATE OF INTEREST

Counsel for the Defendant-Appellee Blizzard Entertainment, Inc. certifies the following:

1. The full name of every party or amicus represented by me is:

   Blizzard Entertainment, Inc.

2. The name of the real party in interest (Please only include any real party in interest NOT identified in Question 3) represented by me is:

   None.

3. Parent corporations and publicly held companies that own 10% or more of stock in the party:

   Blizzard Entertainment, Inc. is a wholly owned subsidiary of Activision Entertainment Holdings, Inc., a corporation organized under the laws of the State of Delaware.

   Activision Entertainment Holdings, Inc. is a wholly owned subsidiary of Activision Blizzard, Inc., a publicly traded corporation organized under the laws of the State of Delaware.

4. The names of all law firms and the partners or associates that appeared for the party or amicus now represented by me in the trial court or agency or are expected to appear in this court (and who have not or will not enter an appearance in this case) are:

   MORRIS, NICHOLS, ARSHT & TUNNELL LLP: Jack B. Blumenfeld, Eleanor G. Tennyson

   MORRIS JAMES LLP: Kenneth Laurence Dorsney

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Dated: April 7, 2017

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CERTIFICATE OF INTEREST

Counsel for the Defendants-Reloaded Games, Inc., KOG Games Inc., and SG Interactive, Inc. certifies the following:

1. The full name of every party or amicus represented by me is:

   Reloaded Games, Inc.

   KOG Games Inc.

   SG Interactive Inc.

2. The name of the real party in interest represented by me is:

   None.

3. Parent corporations and publicly held companies that own 10% or more of stock in the party:

   KOG Ltd. is the parent corporation of KOG Games Inc.

   SmileGate West, Inc. is the parent corporation of SG Interactive, Inc.

4. The names of all law firms and the partners or associates that appeared for the party or amicus now represented by me in the trial court or agency or are expected to appear in this court (and who have not or will not enter an appearance in this case) are:

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Dated: April 7, 2017

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STATEMENT OF RELATED CASES

The district court entered final judgment of non-infringement in four related cases. Parallel Networks, LLC ("Parallel") has appealed that judgment in four related appeals, which this Court has consolidated.[1] No appeal in any of the four cases below was previously before this Court or any other court.

Defendant Reloaded Games, Inc. previously appealed to this Court (Case No. 15-1915) the decision of the Patent Trial and Appeal Board (Case No. IPR2014-00136) regarding *inter partes* review of U.S. Patent No. 7,188,145, the patent at issue in this appeal. On May 4, 2016, Circuit Judges Moore, O'Malley, and Hughes entered summary affirmance pursuant to Federal Circuit Rule 36. The decision was not reported in the Federal Reporter, but is available in the Federal Appendix at 639 Fed. Appx. 640.

In addition, two related cases have been stayed by the district court pending termination of this appeal.[2] The Court's decision in this appeal will directly affect these two cases.

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[1] The four appeals are (1) *Parallel Networks, LLC v. SG Interactive, Inc.* (No. 16-2741); (2) *Parallel Networks, LLC v. Blizzard Entertainment, Inc.* (No. 16-2742); (3) *Parallel Networks, LLC v. KOG Games, Inc.* (No. 16-2743); and (4) *Parallel Networks, LLC v. Reloaded Games, Inc.* (No. 16-2744).

[2] The two stayed cases in the District of Delaware are (1) *Parallel Networks, LLC v. Riot Games, Inc.* (C.A. No. 13-183-RGA); and (2) *Parallel Networks, LLC v. Turbine, Inc.* (C.A. No. 13-184-RGA).

JURISDICTIONAL STATEMENT

The district court had jurisdiction under 28 U.S.C. §§ 1331 and 1338(a). The district court granted summary judgment of non-infringement on August 31, 2016 (Appx1-2), and entered final judgment on September 21, 2016. Appx5674-5677, Appx8067-8069. This Court has jurisdiction under 28 U.S.C. § 1295(a)(1).

STATEMENT OF ISSUES

1. Whether the district court correctly construed the phrases "re-allocating/re-allocate the cache storage of the content among the peers in the cache community" ("the 'reallocating' limitation"), which appear in every asserted claim of U.S. Patent No. 7,188,145 ("the '145 patent"), to mean "re-allocating/re-allocate the portions of the content to be stored by each peer's cache storage."

2. Whether the district court correctly determined that the accused content-delivery systems do not infringe the asserted claims of the '145 patent because the accused systems' users stored 100 percent of the content, and therefore the accused systems did not satisfy the "re-allocating" limitation.

STATEMENT OF THE CASE

The single patent at issue is directed to a system for "dynamic distributed data caching." In particular, the '145 patent is directed to the formation of cache communities wherein each peer in a community is responsible for caching (storing) a portion of particular content. Parallel Networks, LLC ("Parallel") alleges that the patent is infringed by video game download systems provided by Blizzard Entertainment, Inc. ("Blizzard"), SG Interactive, Inc. ("SG"), KOG Games, Inc. ("KOG"), and Reloaded Games, Inc. ("Reloaded") (collectively, "Defendants"). The question before the Court is whether the claims of the '145 patent, when properly construed, cover systems in which each user stores the entire content, rather than a portion thereof. They do not.

The district court agreed and granted summary judgment of non-infringement. The district court found that, when properly construed, the claims of the '145 patent require reallocation of the portions of the content to be stored by each peer's cache storage. The district court then correctly concluded that the accused content-delivery systems do not reallocate "portions," *i.e.* less than 100 percent, but rather deliver 100 percent of the game package content for storage by each user. Parallel's arguments to the contrary should be rejected for the same reasons relied upon by the district court.

A. The ’145 Patent

The ’145 patent is titled “Method and system for dynamic distributed data caching.” Appx24. The patent is generally directed to a method and system for distributed data caching within cache communities. Appx24 Abstract, Appx50 at 28:49-65. In particular, the patent describes the formation of cache communities in which clients join a community of peers, with each peer being responsible for caching a portion of the desired content. Appx24 Abstract. When a new client joins a cache community, a list of peers in the community is updated to include the newly joined client and each peer in the list is reallocated cache storage responsibilities for some portion of the content. *Id.*, Appx50 at 28:49-65.

1. The Specification

As the number of Internet users increased, the ’145 patent describes that the number of requests for content on the Internet increased and users began to experience increasingly longer delays due to bandwidth limitations. Appx37 at 1:12-19. The specification describes that several solutions emerged “to decreas[e] bandwidth usage and decreas[e] the delay experienced by the user.” *Id*. at 1:20-28.

a. The ’145 patent distinguishes prior art that cached 100% of the desired content at a particular location.

The specification describes that one of the “traditional solutions” to address bandwidth usage and delay “involved caching previously requested content at the user’s computer for faster retrieval.” *Id.* at 1:20-23; *see also* Appx45 at 17:26-29

("Previous caching systems have typically been limited to caching at a single computer, such as the caching performed by web browsers…."); Appx50 at 28:20-22 ("Traditionally, caching of Internet content has been done only at an individual user's computer."). In this solution, each user would cache the entire requested content on her local computer.

The specification describes a second prior art solution that "involved caching previously requested content for multiple users at a **single** cache server." Appx37 at 1:23-25 (emphasis added); *see also* Appx45 at 17:26-29 ("Previous caching systems … have concentrated caching efforts at a single firewall or proxy server."). As with the first solution, the entire requested content in the second solution is stored at a single, but remote, location. The specification states that both traditional solutions "often failed" and describes the invention as solving bandwidth limitations by distributing cache storage responsibilities among multiple clients within a cache community. *See* Appx37 at 1:39-41.

b. The '145 patent teaches that peers in a distributed caching community receive portions—i.e., less than 100%—of the desired content.

The specification then describes that, in the patented system, "[e]ach peer has an associated first content **portion** (511) indicating content to be cached by the respective peer." Appx24 Abstract (emphasis added). When a new client joins the

cache community,[3] the peer list, which "indicates the peers in the cache community," is updated to include the client. *Id.* "A respective second content **portion** (511) is associated with each peer based on the addition of the client." *Id.* (emphasis added). "**The second content portion is distinct from the first content portion**." Appx37 at 1:52-53 (emphasis added); *see also id.* at 1:66-67.

The specification further describes that the "present invention … reallocates the data to be cached by particular members of the distributed cache community based on the addition and subtraction of members to the distributed cache community." Appx38 at 4:32-34. It makes clear that when a new peer is added, the storage responsibilities are reallocated such that each peer (including the new peer) is responsible for caching a subset (or portion) of the content:

> Master 410 then communicates to members 412 that a new member 412 is joining community 402 by communicating an updated peer list 426 which includes client 404. Dynamic cache application 428 then reallocates the content 460 to be cached by particular members 412 and master 410 so that the newly added client 404 is responsible for **some subset of content 460** cached in community 402.

Appx47 at 21:7-13 (emphasis added). The reallocation occurs to incorporate the additional storage (caching) capacity provided by the new peer. Appx49 at 25:17-25 ("More specifically, the distribution of content 460 to be cached within

[3] Contrary to Parallel's assertion (*see* Br. at 5), the '145 patent does not refer to a "cache community" of peers as a "swarm."

community 402 is adjusted to include the additional capacity provided by client 404.").

2. The Prosecution History

Prosecution of the '145 patent involved five Office Actions over six years. In response, the applicants distinguished the claims of the '145 patent from several prior art references with respect to various claim elements.

One of the references that the applicants distinguished—with respect to the "reallocating" limitation—was U.S. Patent No. 5,864,854 ("Boyle"). Boyle teaches a data distribution system using a cache look-up table (or indexing array) that "minimizes requests for data items outside each group and minimizes the service load on servers having popular data items." Appx392 (quoting Boyle at 2:14-17). "The group cache look-up table includes an entry corresponding to each data item cached by any member of the group." Appx408-409 (quoting Boyle at 3:24-26). To overcome the examiner's rejection based on Boyle, the applicants amended claims 1 and 16.[4] Appx293, Appx296, Appx307. Specifically, the applicants replaced "allocating the first content portion and the second content portion among the peers" with "re-allocating the cache storage of the content among the peers." Appx293, Appx296. In support of the amendments, the applicants distinguished a system that provides for the "distribution of requested

[4] Claim 16 in the application issued as asserted claim 15.

data" (*i.e.*, a downloading system) as and emphasized that the amended claims addressed "how to allocate the cache storage of data" among peers. Appx307. Parallel now argues that the '145 patent addresses a "download issue." *See* Br. at 20 ("The method and system [of the '145 patent] are not, ultimately, intended to address a storage issue, but rather a download issue ….").

To provide supporting disclosure for the claim amendments, the applicants cited "page 44, lines 13-19" of the specification (Appx307), which corresponds to the following language:

> Master 410 then communicates to members 412 that a new member 412 is joining community 402 by communicating an updated peer list 426 which includes client 404. Dynamic cache application 428 then reallocates the content 460 to be cached by particular members 412 and master 410 so that the newly added client 404 is responsible for **some subset of content 460** cached in community 402.

Appx47 at 21:7-13 (emphasis added). The applicants expressly tied the "reallocating" limitation to the requirement that each peer (including newly added peers) be "responsible for **some subset of content 460** cached in community 402." *See id*. (emphasis added).

3. The Asserted Claims

Parallel asserted independent claims 1 and 15 and dependent claims 2, 4, 9, 14, 16, 18, 23, and 28. Appx6383. Each asserted claim requires "re-allocating/re-allocate the cache storage of the content among the peers in the cache community in response to allowing the client to join the community." Appx50 at 28:63-65,

Appx51 at 30:1-3.

> Claim 1 of the ’145 patent is representative of the asserted claims:
>
> 1. A method for dynamic distributed data caching comprising:
>
> providing a cache community on a first side of a point of presence, the cache community comprising at least one peer, the cache community being associated with content obtained from a second side of the point of presence, the content being cached by the at least one peer;
>
> allowing a client to join the cache community;
>
> updating a peer list associated with the cache community to include the client, the peer list indicating the peers in the cache community;
>
> associating the content with the client based on joinder of the client;
>
> **re-allocating the cache storage of the content among the peers in the cache community** in response to allowing the client to join the community.

Appx50 at 28:49-65 (emphasis added).

B. The Accused Systems

The Defendants sell and distribute video games. Appx7, Appx10. Blizzard distributed video games from 2007 to early 2015 using the Blizzard Downloader. Appx10, Appx7295. From 2008 to early 2014, Reloaded, KOG, and SG (collectively, “the Reloaded Defendants”) distributed video games through the Pando system. Appx7, Appx3272. Parallel accused the Blizzard and Reloaded Defendants of infringing the ’145 patent, identifying the Blizzard Downloader and Pando systems as the accused systems. Appx7, Appx10. The accused systems are similar, but not identical. Appx7.

1. Blizzard Downloader

The Blizzard Downloader was based on the BitTorrent protocol. Appx6387. The BitTorrent protocol is a communications protocol that allows for the downloading of data using peer-to-peer file sharing among connected computers. Appx7301-7303.

To deliver video games to users, Blizzard divided the game packages into pieces and placed them onto content delivery network ("CDN") servers. Appx11. Blizzard created a torrent file for each game package that included: a list of all the pieces to be downloaded, unique identifiers for each piece, and a list of the direct download addresses for each piece allowing users to download them from the CDN servers. *Id.*

When a user began downloading a game from Blizzard, the associated torrent file was loaded into the user's Blizzard Downloader ("the BDL client"). *Id*. After receiving the torrent file and confirming sufficient storage capacity to receive the full game content, the user could begin downloading game pieces from CDN servers. *Id.*, Appx6390, Appx6404. If the user had enabled peer-to-peer sharing, the BDL client sent an "announce message" to Blizzard's tracker server, including an identification of the torrent file and the BDL client. Appx11.

The tracker server then sent an "announce response" to the BDL client. *Id*. The announce response included a subset of clients downloading the same game

package from which the BDL client could obtain copies of the game pieces.[5] *Id.*, Appx6388-6389.

The BDL client then tried to connect to some or all of the other BDL clients within the subset. Appx11. If a connection was established, the BDL clients exchanged Bit Field Messages listing the stored game pieces of each BDL client. Appx12. After a BDL client received a Bit Field Message, it selected which piece, if any, to download over the established connection. *Id.* After successfully downloading a piece from another BDL client, the BDL client sent a "Have Message" to its established connections informing them that it had a new piece. *Id.*

The BDL client used a "Rarest-First Algorithm."[6] *Id*. That algorithm directed a BDL client to determine the rarest piece within a particular Bit Field Message and to try to download that piece. Appx10.

[5] The entire list of clients downloading the same game package who had established peer-to-peer sharing is referred to as the "swarm." Appx11; Appx7297.

[6] Because Blizzard agreed not to present any non-infringement arguments based on differences among the various versions of the BDL client, the district court found that Blizzard was precluded from making any non-infringement arguments based on the priority system or the BDL client's failure to implement the rarest-first algorithm. Appx12. For purposes of this appeal only, Blizzard does not dispute that each version of the BDL client utilized the rarest-first algorithm.

As Parallel concedes, the goal of the Blizzard system was to deliver 100 percent of the game package to each customer. Br. at 12 ("The download process is intended to continue until the Blizzard Client accumulates every piece in the Game Package."); *see also* Appx6363 (Parallel conceding in its motion for summary judgment that "a client who wanted the Game Package would endeavor to download all of the Pieces"). If a user remained in the swarm, the user downloaded all pieces (100%) of the game package. Appx12. The downloaded pieces were stored on the user's hard drive. Appx19-20, Appx6390, Appx7280 at 114:15-23. Each game was a given size and each user must have available storage space on its hard drive equal to or greater than that to download the game. Appx19, Appx6390.

2. Reloaded's Pando System[7]

When a user began downloading a game using Pando, the user downloaded the Pando Game Downloader, if not already installed. Appx8. The Pando Game Downloader, in turn, downloaded and installed the Pando Media Booster (the "PMB client"), if needed. *Id*. The PMB client connected to a tracker server, which

[7] Parallel's opening brief attempts to inject irrelevant arguments posed as disputed facts regarding the Pando system. For example, Parallel asserts that "[d]ownloading every [p]iece takes a substantial amount of time." Br. at 14. But Parallel's downloading argument is immaterial and was rejected by the district court. *See* Appx18 (noting that the claims are directed at "a reallocation of storage, not a re-ordering of downloads" (quoting Appx3818-3819)).

maintained a list of active PMB clients downloading the same game. *Id.* Before downloading the game, a PMB client sent an "Announce Message" to the tracker server. *Id.* After the tracker server received the Announce Message, it added the PMB client to the list of active PMB clients. *Id.* During the download process, the PMB client also sent Announce Messages at regular intervals. *Id.*

In response to the Announce Message, the tracker server sent the PMB client a partial list of active clients (the "Selected List"). *Id.* In response to each Announce Message, the tracker server sent the PMB client a new Selected List, which the PMB client merged with previously received Selected Lists to create a "Merged List." Appx8-9.

The PMB client attempted to connect with some or all of the PMB clients in the Merged List. Appx9. A successful connection was referred to as an "established connection." *Id.* After establishing a connection, the PMB client and the connected PMB client exchanged "Bit Field Messages." *Id.* A Bit Field Message indicated which pieces a PMB client possessed. *Id.* When a PMB client successfully downloaded a new piece, it sent a "Have Message" to each of its established connections, thereby informing them that it had a new piece. *Id.*

When a PMB client received a Bit Field Message or a Have Message, it independently determined which piece to request from the established connection, if any. *Id.* For purposes of summary judgment, the district court accepted that

Pando used the rarest-first algorithm. Appx9-10. Using the rarest-first algorithm, each PMB client generated a list of pieces that it had not requested from its established connections and a list of pieces possessed by each established connection. Appx10. The PMB client then determined the rarest piece and downloaded it. *Id.* If there were several equally-rare pieces, it downloaded one of them. *Id.*

As Parallel concedes, the goal of the Pando system is to deliver 100 percent of the game package to each user. Br. at 14; *see also* Appx10 ("The downloading process continued until a PMB client obtained 100 percent of the game package."), Appx3273 ("The goal of each PMB Client that participated in a Swarm was to successfully download and store 100% of the Game Package – *i.e.*, copies of all Blocks for all Pieces of the Game Package."). The game could not be played until the entire game package was downloaded. Appx10, Appx3273.

C. District Court Proceedings

Parallel sued KOG in February 2013 and Blizzard, SG, and Reloaded in May 2013, alleging infringement of the '145 patent.[8] Appx56, Appx70, Appx86, Appx100.

[8] Parallel also alleged infringement of U.S. Patent No. 7,730,262 ("the '262 patent"). Appx5687; Appx5691-5693. In May 2015, the United States Patent and Trademark Office invalidated all claims of the '262 patent on *inter partes* review. Appx6383. Parallel then withdrew its claims of infringement of the '262 patent. *Id.*

On December 23, 2014, Parallel served Blizzard with infringement contentions for the ’145 patent. Appx75. For the “reallocating” limitation, Parallel contended that the Blizzard Downloader system “allows users to download large files […] using a peer-to-peer protocol.” Appx8149. Parallel further alleged that the Blizzard Downloader “reallocates the cache storage by, for example, storing the requested content on the client’s computer as it is downloaded.” *Id*.

On December 23, 2014, Parallel served the Reloaded Defendants with infringement contentions for the ’145 patent. Appx62, Appx91, Appx106. For the “reallocating” limitation, Parallel contended that the accused Pando system infringes because it “reallocates the cache storage by, for example, storing the requested content on the client’s computer as it is downloaded.” Appx8777. Parallel further asserted that the “client receives the requested content (for example, the files necessary for the installation of the *CrossFireEurope* video game) from the peers in the cache community, or from the CDN.” Appx8777-8778.

1. Claim Construction

Defendants asked the district court to construe the “reallocating” limitation. Appx2977. Parallel proposed that the “reallocating” limitation did not require construction because a person of ordinary skill would understand the limitation with sufficient clarity. Appx2977-2978.

Blizzard argued that the "reallocating" limitation should be construed to mean "reassigning/reassign the portions of the content to be stored by each peer's cache storage." Appx2981. Based on the claim language and specification, Blizzard urged that the "reallocating" limitation must mean that only a portion—less than 100 percent—of the content is stored by each peer upon the joining of a new peer. Appx2981-2983. If every peer received all of the content, there would be no "re-allocation." *Id.*

At the *Markman* hearing on August 17, 2015, the district court construed the "reallocating" limitation to mean "re-allocating/re-allocate the portions of the content to be stored by each peer's cache storage."[9] Appx22, Appx3248 at 116:2-8. The district court noted that "the primary dispute, which the parties have argued, is whether each peer can cache 100 percent of the content." Appx3247 at 115:4-6; *see also* Appx3174-3175 at 42:19-43:2 (noting that the "major issue" between the parties is "whether this ["reallocating"] phrase should be construed in such a way that the peers are getting a portion or a share or something less than

[9] At the *Markman* hearing, Blizzard agreed to substitute the term "reassigning/reassign" in its proposed construction for the term "re-allocating/re-allocate" as found in the claims. Appx3196 at 64:6-22.

everything that's being reallocated").[10] The district court adopted Blizzard's proposed construction and explained: "I do not think that each peer can [cache 100 percent of the content] pursuant to the claims. I think each peer caches a portion of data or the cache content." Appx3247 at 115:6-9.

Contrary to Parallel's suggestion (Br. at 18), the district court provided a full explanation of its reasoning and support for its construction at the *Markman* hearing. The district court relied on the specification: "And in the section of the summary of the invention described in the claims, each peer is associated with a content portion. I think that the summary makes clear that each peer receives some but not all of the content." Appx3247 at 115:10-14. Referencing the '145 patent's discussion of "traditional solutions," the district court explained that "if each peer had all the data, the invention would face the same problems that existed in the prior art." *Id.* at 115:15-17. The district court also explained that, if the "reallocating" limitation "involved only giving all the data to one peer" (as Parallel urged), then "there [would] be no re-allocation among the peers." *Id*. at 115:17-23.

2. Summary Judgment

After the district court construed the "reallocating" limitation, Parallel served supplemental infringement contentions. Appx65, Appx80. For the "re-

[10] The district court also observed at the *Markman* hearing that the "reallocating" limitation refers to using a physical place to store content. Appx3198-3199 at 66:24-67:23.

allocating" limitation, Parallel's new contentions conceded that "each peer may end up with all the pieces," but alleged that "for a significant period of time a peer will only have a portion of the entire set of pieces." Appx1204, Appx1701. The new contentions alleged, for the first time, that the "reallocating" limitation is satisfied by altering the order in which game pieces are downloaded. Appx1701; *contrast* Appx8149 (presenting infringement theory in initial contentions based on each peer's **storage** of the requested content).

The parties cross-moved for summary judgment on the "reallocating" limitation. Appx5. Defendants argued that the accused systems did not infringe the "reallocating" limitation because cache storage responsibilities of each client was not reallocated, as required by the district court's construction. Appx6385-6386, Appx3299-3300. Specifically, Defendants argued that the accused systems did not infringe because each user would receive 100 percent of the content. Appx6385-6386, Appx3299-3300.

Parallel moved for partial summary judgment of infringement on the "reallocating" limitation. Appx5. Parallel argued that the rarest-first algorithms used in the accused systems satisfied the "reallocating" limitation by changing the order content pieces were downloaded when a new peer joined the swarm. Appx15-16. Parallel conceded that "a client who wanted the Game Package would endeavor to download all of the Pieces." Appx6363; *see also* Appx3283 ("[A]

client who wanted the Game Package would ultimately download all of the Pieces."), Appx5649 ("Parallel admits that the goal of every PMB Client was to obtain a hundred percent, because, as you'll recall, this user has purchased the game, and now he wants the game, he wants to play the game. Ultimately, he wants the entire game."), Appx8013 at 9:8-11 ("Parallel readily admits that a Blizzard client joins the Blizzard swarm [and] does so with the goal of downloading a hundred percent of the content, such as a game package. We don't dispute that.").

The district court agreed with Defendants, reasoning that "[t]he use of 'portions' in the construction [of the "reallocating" limitation] is important." Appx16. Referring to its reasoning from the *Markman* hearing, the district court explained the significance of its construction:

> At the *Markman* hearing, I noted that the "primary dispute" between the parties was "whether each peer [could] cache 100 percent of the content." I concluded that each peer could not, and stated that "each peer receives some but not all of the content." "[I]f each peer had all the data, the invention would face the same problems that existed in the prior art."

Appx16 (citations omitted). The district court further reasoned that "[w]hen the '145 patent recites reallocation, it envisions some degree of divided responsibility for portions of content." Appx17 (citing Appx47 at 21:10-13 and Appx38 at 4:32-34). "The claimed invention requires that a new peer's entry into the swarm causes the particular portions of content that each peer is responsible for storing to

change." *Id.* Because each Pando and Blizzard Download client "constantly progresses toward its goal of receiving 100% of the content," the district court agreed with Defendants that there could be no infringement of "reallocating" limitation. Appx17, Appx19.

The district court found that "Parallel's infringement theory is fatally flawed." Appx16. If "the 'portions of content to be stored' by each [] client are never altered," then "the portions of the content to be stored are never reallocated, or, indeed, altered in any way" as required by the asserted claims. *Id.*

The district court addressed Parallel's rarest-first argument: "While the Rarest-First Algorithm may alter the order in which certain pieces are downloaded, it does not alter the portions of the content to be stored by each user in the swarm." Appx20. The district court noted that the rarest-first algorithm only affects "which piece the [] client should copy from another [] client at that instant. The [] client, from the moment it joined the swarm, always sought to download that piece. In other words, the [] client would have downloaded that piece regardless of whether a new [] client ever joined the swarm and sent a Have Message." Appx18. "To put it succinctly, a reordering is not a reallocation" because "[t]he '145 patent does not require a reallocation 'of the order the [p]ieces will be downloaded;' it requires a reallocation of the 'portions of the content to be stored' among the peers." *Id*. In other words, the claims are directed to a reallocation of **storage**, not a reordering of

downloads. Therefore, the district court granted summary judgment of non-infringement.[11] Appx1-2, Appx20.

Parallel appealed.

[11] Blizzard also moved for summary judgment of non-infringement on the "associating/associate" limitations of claims 1 and 15, which the district court did not reach in light of its ruling on the "reallocating" limitation. Appx19.

SUMMARY OF THE ARGUMENT

The district court's final judgment should be affirmed.

First, the district court correctly construed the "reallocating" limitation to mean "re-allocating/re-allocate the portions of the content to be stored by each peer's cache storage." Appx22. The district court's construction is consistent with the plain meaning of the "reallocating" limitation and the claim language as a whole. When a new client joins the community, the specification teaches that storage of "portions" of the content are reallocated among the peers; and that 100 percent of the content is not stored by any peer. Indeed, the specification discloses that the claimed caching system addressed problems with a prior solution that taught caching 100 percent of the content at each user's computer.

Second, summary judgment of non-infringement should be affirmed because there were no genuine issues of material fact. The undisputed evidence demonstrated that the accused systems were designed to deliver 100 percent of the game package. The download order of game pieces is immaterial to the infringement analysis. "To put it succinctly, a reordering is not a reallocation" as required by the asserted claims. Appx18. The district court correctly concluded that the "reallocating" limitation requires a change in what each peer ultimately seeks to store. The undisputed evidence established that the accused content-delivery systems did not satisfy this limitation.

STANDARD OF REVIEW

While this Court reviews "the ultimate question of the proper construction of patent claims and the evidence intrinsic to the patent" *de novo*, "the district court's determination of subsidiary facts based on extrinsic evidence is reviewed for clear error." *Fenner Investments, Ltd. v. Cellco P'ship*, 778 F.3d 1320, 1322 (Fed. Cir. 2015) (citing *Teva Pharm. USA, Inc. v. Sandoz, Inc.*, — U.S. —, 135 S. Ct. 831, 841 (2015)).

This Court reviews summary judgment decisions under the law of the regional circuit. *Classen Immunotherapies, Inc. v. Elan Pharm., Inc.*, 786 F.3d 892, 896 (Fed. Cir. 2015). The Third Circuit reviews a district court's grant of summary judgment *de novo*. *Nicini v. Morra*, 212 F.3d 798, 805 (3d Cir. 2000) (en banc). "Summary judgment is proper where the pleadings, depositions, answers to interrogatories, admissions, and affidavits show there is no genuine issue of material fact and that the moving party is entitled to judgment as a matter of law." *Id.* at 805-06 (citing Fed. R. Civ. P. 56(c)); *see also Scott v. Harris*, 550 U.S. 372, 380 (2007) ("[T]he mere existence of *some* alleged factual dispute between the parties will not defeat an otherwise properly supported motion for summary judgment; the requirement is that there be no *genuine* issue of *material* fact." (quoting *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 247-48 (1986))). A grant of summary judgment of non-infringement is proper when no reasonable factfinder

could find that the accused product contains each and every claim limitation or its equivalent. *PC Connector Sols., LLC v. SmartDisk Corp.*, 406 F.3d 1359, 1364 (Fed. Cir. 2005); *see Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 29, 39 n.8 (1997).

ARGUMENT

A. The District Court Correctly Construed the "Reallocating" Limitation.

The district court correctly construed the "reallocating" limitation as "re-allocating/re-allocate the portions of the content to be stored by each peer's cache storage." Appx22. The district court properly rejected Parallel's proposed construction of "ordinary meaning" as failing to address the parties' fundamental dispute. Because the district court's construction follows from the claim language and the specification, this Court should affirm.

1. The District Court Properly Rejected Parallel's "Ordinary Meaning" Proposal And Construed The "Reallocating" Limitation.

Parallel argues that the district court should not have construed the limitation and simply given the "reallocating" limitation its "ordinary meaning." Br. at 23-26. This Court has held that "[w]hen the parties present a fundamental dispute regarding the scope of a claim term, it is the court's duty to resolve it." *O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008). The ultimate duty to resolve the scope of a disputed claim term is on the district court. *Teva,* 135 S. Ct. at 842 ("[T]he ultimate question of construction [is] a legal question."); *see also O2 Micro,* 521 F.3d at 1360 ("When the parties raise an actual dispute regarding the proper scope of [the] claims, the court, not the jury, must resolve that dispute."); *Every Penny Counts, Inc. v. Am. Express Co.*, 563 F.3d

1378, 1383 (Fed. Cir. 2009) ("[T]he court's obligation is to ensure that questions of the scope of the patent claims are not left to the jury."). "In order to fulfill this obligation, the court must see to it that disputes concerning the scope of the patent claims are fully resolved." *Every Penny Counts*, 563 F.3d at 1383 (citing *O2 Micro*, 521 F.3d at 1361-62).

a. The district court properly construed the "reallocating" limitation to resolve the parties' dispute regarding the asserted claims' scope.

With regard to the "reallocating" limitation, the district court found that the parties disputed "whether each peer can cache 100 percent of the content." Appx3247 at 115:4-6; *see also* Appx3174-3175 at 42:19-43:2. The critical dispute at claim construction concerned the scope of the "reallocating" limitation, not simply the meaning of its words. As a result, "claim construction require[d] the court to determine what claim scope is appropriate in the context of the ['145 patent]." *See O2 Micro*, 521 F.3d at 1361. The district court fulfilled its obligation by construing the "reallocating" limitation. Appx22, Appx3247-3248 at 115:4-116:8.

Parallel's argument that the district court should have simply adopted the "ordinary meaning" is contravened by this Court's recent opinion in *Eon Corp. IP Holdings v. Silver Spring Networks*, 815 F.3d 1314 (Fed. Cir. 2016). In *Eon Corp.*, this Court concluded that a district court erred by giving terms their "plain and

ordinary meaning." *Id.* at 1319. The parties had "actively" disputed the scope of the "portable" and "mobile" terms in the asserted claims. *Id.* During claim construction, the critical question was whether the terms should have been construed broadly enough to cover "fixed or stationary products that are only theoretically capable of being moved." *Id.* This Court concluded that, "[b]y determining only that the terms should be given their plain and ordinary meaning, the [district] court left this question of claim scope unanswered, leaving it for the jury to decide. This was legal error." *Id.* (citing *O2 Micro*, 521 F.3d at 1362). This Court reiterated that "a district court's duty at the claim construction stage is, simply, the one that we described in *O2 Micro* and many times before: to resolve a dispute about claim scope that has been raised by the parties." *Id.* (citing *O2 Micro*, 521 F.3d at 1360). In the present case, the district court avoided this error by resolving the parties' dispute over the scope of the "reallocating" limitation.

Parallel's reliance on *Summit 6, LLC v. Samsung Elecs. Co., Ltd.*, 802 F.3d 1283, 1291 (Fed. Cir. 2015), is misplaced. Br. at 26. In *Summit 6*, the district court expressly rejected the defendant's argument that a disputed term required "ongoing activity," which was at "the heart of the parties' disagreement." 802 F.3d at 1291. The district court then declined to construe the term because it was a "straightforward term." *Id.* In other words, the district court resolved the parties'

dispute by expressly rejecting the defendant's proposed construction. Here, the district court resolved the parties' dispute by construing the "reallocating" term.

b. The district court correctly construed the "reallocating" limitation in light of the intrinsic evidence.

In urging its "ordinary meaning" construction, Parallel attempts to "improperly restrict[] the role of the specification in claim construction." *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1320 (Fed. Cir. 2005).[12] Parallel contends that the district court could only reject its "ordinary meaning" construction by invoking the "lexicographer" or "disclaimer" exceptions. Br. at 24 (citing *Thorner v. Sony Computer Entm't Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012)). This Court recently rejected the same argument in *Trustees of Columbia Univ. in City of N.Y. v. Symantec Corp.*, 811 F.3d 1359, 1364 (Fed. Cir. 2016). There, one party argued that "the presumption of plain and ordinary meaning can be overcome in only two circumstances: when the patentee has *expressly* defined a term or has *expressly* disavowed the full scope of the claim in the specification and the prosecution history." *Id.* (emphasis in original) (quotation marks omitted). This Court rejected that argument, "[a]s our en banc opinion in *Phillips* made clear, 'a claim term may be clearly redefined without an explicit statement of redefinition' and '[e]ven when guidance is not provided in explicit definitional format, the

[12] *See also infra* at pp. 34-39 (describing the proper use of the specification in construing claims).

specification may define claim terms by implication such that the meaning may be found in or ascertained by a reading of the patent documents.'" *Id.* (quoting *Phillips*, 415 F.3d at 1320–21). A district court may construe a term in light of the patent's context without relying on an express lexicography or disclaimer exception. *See id.* at 1363 (citing *Phillips*, 415 F.3d at 1316) (stating that the law is clear that "[t]he only meaning that matters in claim construction is the meaning in the context of the patent"). Here, the district court properly construed the "reallocating" limitation with its ordinary meaning in the context of the asserted claims and the specification.

2. The District Court's "Reallocating" Construction Requiring "Portions Of The Content To Be Stored By Each Peer's Cache Storage" Aligns With The Claim Language.

The district court's construction aligns with the claims. "Claim construction begins with the words of the claim, which 'must be read in view of the specification, of which they are a part.'" *Wi-Lan, Inc. v. Apple, Inc.*, 811 F.3d 455, 462 (Fed. Cir. 2016) (quoting *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-15 (Fed. Cir. 2005)).

The relevant claim language recites "re-allocating/re-allocate the cache storage of the content among the peers in the cache community in response to allowing the client to join the community." Appx50 at 28:63-65, Appx51 at 30:1-3. This identifies "what" is to be reallocated ("cache storage of the content"),

"when" it should occur (upon "joinder of the client"), and "how" it should occur ("among the peers in the cache community"). The "what," "when," and "how," in combination, make it clear that the "reallocating" limitation requires each peer have responsibility for storing a portion of the content. *See Phillips*, 415 F.3d at 1314 ("To begin with, the context in which a term is used in the asserted claim can be highly instructive.").

The district court's construction gives effect to all the terms in the "reallocating" limitation. For example, if each peer received 100 percent of the content, then the words "reallocate" and "among" would have no effect. Each existing peer would still store 100 percent of the content and the new peer would store the same. There would be no change in the cache storage responsibilities of the peers. *See* Appx3247 at 115:17-23 (district court noting that if the "reallocating" limitation "involved only giving all the data to one peer, there will be no re-allocation among the peers."); *see also Becton, Dickinson & Co. v. Tyco Healthcare Gp., LP*, 616 F.3d 1249, 1257 (Fed. Cir. 2010) ("Claims must be 'interpreted with an eye toward giving effect to all terms in the claim.'" (quoting *Bicon, Inc. v. Straumann Co.*, 441 F.3d 945, 950 (Fed. Cir. 2006)).

3. The Specification Confirms That The "Reallocating" Limitation Requires That Each Peer Stores A Portion Of The Content.

The specification's repeated and consistent disclosure that "portions" of content are reallocated supports the district court's construction. "[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.'" *Phillips v. AWH Corp.*, 415 F.3d 1303, 1315 (Fed. Cir. 2005) (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)).

a. The specification consistently describes the "reallocating" limitation as distributing content portions among the peers.

As the district court observed, the specification consistently describes the claimed invention as a distributed cache system "envision[ing] some degree of divided responsibility for portions of content." Appx17 ("When the '145 patent recites reallocation, it envisions some degree of divided responsibility for portions of content."). When a new client joins the community, "[d]ynamic cache application 428 then **reallocates the content 460** to be cached by particular members 412 and master 410 so that the newly added client 404 is responsible for **some subset of content 460** cached in community 402." Appx47 at 21:7-13 (emphasis added); *see also* Appx307 (applicant citing the specification at 21:7-13 during prosecution in support of its claim amendments adding the "reallocating" limitation).

The Summary of the Invention explains that each peer is associated with a content portion. The specification describes that the cache community is initially established so that "[e]ach peer has an **associated first content portion** indicating content to be cached by the respective peer." Appx37 at 1:45-47. When a new

client joins, the community "associat[es] a **respective second content portion** with each peer based on the addition of the client. The second content portion is distinct from the first content portion." Appx37 at 1:47-53; *see also id.* at 1:54-63. Thus, each peer of the community stores a portion (less than 100 percent) of the content, which changes when a new peer joins. *See* Appx3247 at 115:10-14 ("I think that the summary makes clear that each peer receives some but not all of the content.")

Parallel argues that the district court's construction improperly imports limitations from the specification into the claims. Br. at 27-31. But Parallel's characterization is inaccurate. "Instead, the district court properly followed the invocation that claims must be read in view of the specification, of which they are a part." *See SciMed Life Sys. v. Advanced Cardiovascular Sys.*, 242 F.3d 1337, 1340 (Fed. Cir. 2001) (citation and quotation marks omitted). The district court correctly construed the "reallocating" limitation in view of the specification.

Parallel mistakenly relies on this Court's decision in *U.S. Ethernet Innovations, LLC v. Acer, Inc.*, 646 Fed. Appx. 929 (Fed. Cir. 2016). *See* Br. at 30-31. In *USEI*, the district court construed the term "buffer memory" as "a memory for temporary storage of data." 646 Fed. Appx. at 932. On appeal, USEI argued that the "buffer memory" element requires the buffer to store an entire Ethernet frame. *Id.* at 933. USEI relied on preferred embodiments described in the

specification. *Id.* at 933. The Court noted, however, that construction could not "be decided by reading the first column and a half of the patent and ignoring what the claims actually recite." *Id.* at 935. USEI's arguments were "unconvincing" because "[o]n its face, the claim says nothing about a buffer's minimum storage capacity." *Id.* at 933-34. In short, USEI "failed to bridge the significant gap between the claim language and the teaching of the specification." *Id.* at 935. In contrast, the district court's construction here is fully supported—and, indeed, required—by the claim language and the specification.

b. The specification repeatedly discloses that portions of content are reallocated.

The specification repeatedly emphasizes that the claimed invention is directed at "dynamic distributed data caching" with "content portions" distributed among community peers. Appx24 at Abstract, Appx37 at 1:42-47, 1:54-61, 2:1-3, 2:8-10, 2:16-18, 2:25-26, 2:35-37, 2:43-45, 2:52-54, Appx38 at 3:13-15, 3:27-29, 3:36-38, 3:55-57, 4:3-7, 4:22-24.

The specification distinguishes storing portions of content from the prior art where 100 percent of the content was stored at a single computer. For example, the Background of the Invention discloses that "[o]ne traditional solution to decreasing bandwidth usage and decreasing the delay experienced by the user has involved **caching previously requested content at the user's computer** for faster retrieval." Appx37 at 1:20-23 (emphasis added); *see also* Appx45 at 17:24-29

("System 10 provides the capability to create a **distributed caching system** using standard personal computers and the cache module software. **Previous caching systems have typically been limited to caching at a single computer** …." (emphases added)). The specification continues, "[t]raditionally, caching of Internet content has been done **only at an individual user's computer**." Appx50 at 28:20-22 (emphasis added).[13]

To overcome shortcomings of these "traditional solutions," the specification explains that the claimed invention "provides the ability to cache large amounts of content" by distributing it among peers in the cache community. *See* Appx50 at 28:18-20. As the district court found, "if each peer had all the data," then "the invention would face the same problems that existed in the prior art." Appx3247 at 115:15-17; *see also Irdeto Access, Inc. v. Echostar Satellite Corp.*, 383 F.3d 1295, 1303 (Fed. Cir. 2004) ("And while the specification does not contain any statements of explicit disavowal or words of manifest exclusion, it repeatedly,

[13] Similarly, the specification discloses that a "related traditional solution" stored 100 percent of the content at a server: "A related traditional solution has involved caching previously requested content for multiple users at a single cache server." Appx37 at 1:23-25; *see also* Appx45 at 17:26-29 ("Previous caching systems have typically been limited to caching at a single computer, such as the caching performed by web browsers, or have concentrated caching efforts at a single firewall or proxy server.").

consistently, and exclusively uses 'group' to denote fewer than all subscribers, manifesting the patentee's clear intent to so limit the term.").

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In sum, the claim language and the specification make clear that the "reallocating" limitation means "re-allocating/re-allocate the portions of the content to be stored by each peer's cache storage." This Court should accordingly affirm the district court's construction.

B. The District Court Properly Granted Summary Judgment Of Non-Infringement.

The district court granted summary judgment of non-infringement because the users of the accused systems downloaded 100 percent of the game and therefore did not satisfy the "reallocating" limitation. Appx18-20. Because the undisputed evidence supports that conclusion, summary judgment of non-infringement should be affirmed. *See Athletic Alts., Inc. v. Prince Mfg., Inc.*, 73 F.3d 1573, 1578 (Fed. Cir. 1996) ("Where, as here, the parties do not dispute any relevant facts regarding the accused product but disagree over which of two possible meanings of Claim 1 is the proper one, the question of literal infringement collapses to one of claim construction and is thus amenable to summary judgment.").

1. The Accused Systems Do Not Infringe Because Users Downloaded 100 Percent Of The Content—Not Only "Portions" Thereof.

Because of the "reallocating" limitation, "[t]he claimed invention requires that a new peer's entry into the swarm causes the particular portions of content that each peer is responsible for storing to change." Appx17. "The use of 'portions' in the construction [of the "reallocating" limitation] is important." Appx16. Each Blizzard Downloader and Pando client "constantly progresses toward its goal of receiving 100% of the content." Appx17; *see also* Br. at 14 ("As with the Blizzard System, the goal of the Reloaded System is to deliver 100% of the Game Package to each Reloaded customer."); Appx6363 (Parallel conceding that "a [Blizzard] client who wanted the Game Package would endeavor to download all of the Pieces"). "That is, every user utilizes the same amount of space to store the exact same data." Appx19. As a result, there is no "divided responsibility" and, thus, there can be no infringement of the "reallocating" limitation. *Id.*

Parallel argues that the district court's summary judgment is "unsupported" because "[n]ot every Blizzard or Reloaded customer that entered the Swarm would download 'every piece of the game package.'" Br. at 38. Parallel's argument misses the mark. It is immaterial whether a user downloaded the entire game. The asserted claims, as construed by the district court, require "re-allocating the portions of the content to be stored by each peer's cache storage." Appx22. In order to download the game (and join the Swarm), the accused systems confirmed

that the user had sufficient storage capacity to receive the entire game package. Appx6390 ("Each user must have available storage space on his hard drive equal to or greater than the torrent size to download and store the game package."), Appx6404 (Parallel not disputing this fact). When a new user joined a swarm, no users changed their allocation of cache storage (*i.e.*, each user in the swarm still allocated the entire amount of storage required for the game package). Appx10, Appx12; *see also* Appx19 ("[E]very user utilizes the same amount of space to store the exact same data."). Each customer still proceeded toward the goal of downloading the entire game. On this record, the district court properly granted summary judgment. *See Nicini*, 212 F.3d at 805-06 ("Summary judgment is proper where the pleadings, depositions, answers to interrogatories, admissions, and affidavits show there is no genuine issue of material fact and that the moving party is entitled to judgment as a matter of law.").

2. The District Court Correctly Rejected Parallel's "Rarest-First Argument" Because Reordering Of The Content Pieces Did Not Infringe The "Reallocating" Limitation.

Parallel contends that the district court improperly found non-infringement because use of the rarest-first algorithms satisfied the "reallocating" limitation. Br. at 36-39. Parallel argues that infringement occurs "once the new client downloads its first game piece and sends a message to its peers … because that message changes other peers' selection of what to download and store next." Br. at 38-39.

But as the district court correctly found, "[t]he claimed invention requires that a new peer's entry into the swarm causes the particular portions of content that each peer is responsible for storing to change." Appx17. Furthermore, in the accused systems "the 'portions of the content to be stored' by each [] client are never altered." Appx16. "In other words, each [] client will download every piece of the game package, regardless of the order in which those pieces are downloaded." Appx16. Each client will download every piece of the game package, regardless of whether a new client ever joins the swarm. Appx18. Because "the portions of the content to be stored are never reallocated, or, indeed, altered in any way," the district court properly rejected Parallel's argument. "To put it succinctly, a reordering is not a reallocation" and infringement did not occur. Appx18.

The district court's rejection of Parallel's argument is supported by the specification of the '145 patent. "When the '145 patent recites reallocation, it envisions some degree of divided responsibility for portions of content." Appx17. The specification explains that when a peer joins the cache community, the "[d]ynamic cache application 428 … reallocates the content 460 to be cached by particular members 412 and master 410 so that the newly added client 404 is **responsible for some subset of content 460** cached in community 402." Appx47 at 21:10-13 (emphasis added); *see also* Appx38 at 4:32-34 ("The present invention also reallocates the data **to be cached** by particular members of the distributed

cache community based on the addition and subtraction of members to the distributed cache community." (emphasis added)). Based on these teachings, the district court concluded that the "reallocating" limitation requires that "each peer receives some portion, but not all of the content." Appx17. "The '145 patent does not require a reallocation 'of the order the pieces will be downloaded;' it requires a reallocation of the 'portions of the content to be stored' among the peers." Appx18. Because clients in the accused system did not change their storage allocation and each client "constantly progress[ed] toward its goal of receiving 100% of the content" (Appx17, Appx19), the accused systems did not infringe.

Parallel argues that the asserted claims include the word "comprising" in the preamble, allowing for additional, unclaimed steps. Br. at 40 (quoting *David Netzer Consulting Eng'r LLC v. Shell Oil Co.*, 824 F.3d 989, 998 (Fed. Cir. 2016)). It essentially argues that there is an ephemeral infringement at a point in time when a user has received less than all of the content. This argument misses the mark because the accused systems did not satisfy the "reallocating" limitation and infringement never occurred. As this Court has explained, "each claimed step must nevertheless be performed as written" to find infringement. *David Netzer Consulting Eng'r*, 824 F.3d at 998; *see also Dippin' Dots, Inc. v. Mosey*, 476 F.3d 1337, 1343 (Fed. Cir. 2007) ("[The] enumerated steps must … all be practiced as recited in the claim for a process to infringe. The presumption raised by the term

'comprising' does not reach into each of the six steps to render every word and phrase therein open-ended ….").

The asserted claims as construed by the district court require reallocating the cache storage of content among peers. Parallel's expert conceded that "to be" as used in the district court's construction "is prospective in nature." Appx3818-3819. Reallocation thus requires "a change in what each peer ultimately seeks to store." Appx18 (quoting Appx3818-3819). The users' goal in the accused systems was to store 100% of the content. *See* Appx6363 (Parallel stipulating that "a client who wanted the Game Package would endeavor to download all of the Pieces"); *see also* Br. at 14 (similar). This is not the accused systems performing an additional step, but rather their failure to practice an essential limitation of the asserted claims.

3. Summary Judgment Was Properly Granted Based On The District Court's Construction Of The "Reallocating" Limitation.

Parallel argues that the district court changed its own construction of the "reallocating" limitation in granting summary judgment. Br. at 18 ("[T]he district court, it turns out, did not know what it meant by "portions."), 25-26 ("The district court's difficulty in interpreting its own construction of the Reallocation Limitation is the best evidence that the construction was flawed."). Parallel's characterization of the summary judgment opinion is inaccurate. In its summary judgment opinion, the district court applied the same construction, identified the same dispute

regarding claim scope, and provided the same reasoning. Appx16-17 (quoting its own reasoning and explanation from the *Markman* hearing). Parallel's own expert disagreed with this argument, stating that the district court's "discussion of [the "reallocating"] construction on the record **made clear** that by a 'portion' [the district court] meant 'some but not all.'" Appx7112 (emphasis added). The district court's opinion made plain what was already "clear" to Parallel's expert and should have been obvious to Parallel after the *Markman* hearing. *See Mformation Techs., Inc. v. Research in Motion Ltd.*, 764 F.3d 1392, 1398 (Fed. Cir. 2014) ("The district court's post-verdict elaboration on this point only clarified what was inherent in the construction. Doing so was not error; it merely made plain what ... should have been obvious to the jury.").[14]

Although Parallel contends that a "potential reading" of the district court's construction requires reallocation to "*every* peer," this argument is immaterial. Br. at 35-36. The disputed issue at claim construction was whether the peers in the

[14] Parallel cites *Every Penny Counts, Inc. v. Am. Express Co.*, 563 F.3d 1378, 1383 (Fed. Cir. 2009), to support its contention that the district court improperly "needed to interpret its own interpretation." Br. at 25. In *Every Penny Counts*, this Court found that "there was nothing improper about the fact that the [district] court interpreted EPC's (quite slippery) proposed construction." *Id.* at 1383. The Court further stated that "there are times when 'we need to interpret interpretations more than to interpret things.'" *Id.* (quoting Jacques Derrida, *Structure, Sign and Play in the Discourse of the Human Sciences, in Writing and Difference* 278 (Alan Bass, trans. 1980)).

cache community can store 100 percent of the content. The district court properly resolved this dispute and correctly found that in the asserted claims *no* peer can store 100 percent of the content. Whether the "reallocating" involves each and every user or a subset of users, does not alter the non-infringement conclusion.

Parallel mistakenly contends that the district court's construction (and subsequent grant of summary judgment) was based on a "duplication" restriction. *See* Br. 31-34. At summary judgment, the parties disputed whether the "reallocating" limitation required removal of content from each peer, rather than duplication. Appx17 n.15. "In other words does reallocation require moving a piece from peer A to peer B, or can it simply be copying that piece, such that peer A and B both have a copy?" *Id.* The district court resolved this dispute in Parallel's favor, finding that the '145 patent allowed for duplication.[15] *Id.* More importantly, the district court concluded that Parallel's "duplication" argument was

[15] The district court is correct as to content distribution within an existing community. *See* Appx44 at 16:41-50; *see also* Appx29 at Fig. 4 (indicating "secondary distribution" is negotiated the "primary distribution"). Similarly, Figure 5 illustrates an exemplary distribution within an existing community for "increased reliability" and "to decrease the impact of the failure of clients." Appx44 at 15:58-63, 16:3-4. In contrast, the specification provides that, when the community reallocates content based on the joinder or removal of a peer, the content is reallocated among the peers such that each peer is responsible for a discrete portion. *See* Appx47 at 21:10-13. In other words, "the distribution of content 460 to be cached within community 402 is adjusted to include the additional capacity provided by client 404." Appx49 at 25:23-25.

immaterial to the ultimate infringement issue. *Id.* ("Although the parties contest this issue at length, I do not think it is material to the outcome here."). As the district court correctly concluded, "[w]hether or not there is some overlap in that divided responsibility—i.e., some level of data duplication between peers in the cache community—does not alter the necessary conclusion that 'each peer receives some portion, but not all of the content.'" Appx17 (quoting Appx3247 at 115:10-14).

CONCLUSION

The district court's final judgment, construction of the "reallocating" limitation, and grant of summary judgment of non-infringement should be affirmed.

Dated: April 7, 2017

Respectfully submitted,

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United States Court of Appeals
for the Federal Circuit

Parallel Networks, LLC v. SG Interactive Inc.,
2016-2741, -2742, -2743, -2744

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