

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

BUNGIE, INC.,
Petitioner,

v.

ACCELERATION BAY, LLC,
Patent Owner.

Case IPR2017-01601
Patent 6,829,634 B1

Before SALLY C. MEDLEY, MARC S. HOFF, and
LYNNE E. PETTIGREW, *Administrative Patent Judges*.

PETTIGREW, *Administrative Patent Judge*.

DECISION

Denying Institution of *Inter Partes* Review
35 U.S.C. § 314(a); 37 C.F.R. § 42.108

I. INTRODUCTION

Petitioner, Bungie, Inc., filed a Petition for *inter partes* review of claims 19–24 of U.S. Patent No. 6,829,634 B1 (Ex. 1001, “the ’634 patent”).

Paper 2 (“Pet.”). Patent Owner, Acceleration Bay, LLC, filed a Preliminary Response. Paper 6 (“Prelim. Resp.”).¹ As authorized by the Board in this proceeding (Paper 9), Petitioner filed a Reply to the Preliminary Response. Paper 10.

Institution of an *inter partes* review is authorized by statute when “the information presented in the petition . . . and any response . . . shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” 35 U.S.C. § 314(a); see 37 C.F.R. § 42.108. Having considered the Petition and Preliminary Response, we conclude the information presented does not show a reasonable likelihood that Petitioner would prevail in establishing the unpatentability of any of claims 19–24 of the ’634 patent.

A. Related Matters

The parties identify the following pending judicial matters as relating to the ’634 patent: *Acceleration Bay LLC v. Activision Blizzard, Inc.*, Case No. 1:16-cv-00453 (D. Del., filed June 17, 2016); *Acceleration Bay LLC v. Electronic Arts Inc.*, Case No. 1:16-cv-00454 (D. Del., filed June 17, 2016); and *Acceleration Bay LLC v. Take-Two Interactive Software, Inc.*, Case No. 1:16-cv-00455 (D. Del., filed June 17, 2016). Pet. 26; Paper 3, 1.

In 2015, Activision Blizzard, Inc. and other petitioners (“the prior petitioners”) filed two petitions for *inter partes* review of claims 1–18 of the

¹ Patent Owner filed a Motion to Seal, seeking entry of the Proposed Stipulated Protective Order found in the Office Patent Trial Practice Guide (Ex. 2013) and seeking to seal portions of the Preliminary Response and Exhibits 2004–2010. Paper 7. Patent Owner also filed redacted versions of the Preliminary Response (Paper 8) and Exhibits 2006–2010.

'634 patent. *See Activision Blizzard, Inc. v. Acceleration Bay, LLC*, Cases IPR2015-01964 and IPR2015-01996. Bungie was joined as a petitioner in those two proceedings. *See Bungie, Inc. v. Acceleration Bay, LLC*, Cases IPR2016-00963 and IPR2016-00964. The Board entered Final Written Decisions in those cases, determining in IPR2015-01996 that claims 1–9 of the '634 patent are unpatentable. *Activision Blizzard, Inc. v. Acceleration Bay, LLC*, Case IPR2015-01996 (PTAB Mar. 29, 2017) (Paper 101). Those decisions are currently on appeal to the United States Court of Appeals for the Federal Circuit. *See* Paper 3, 1.

In 2016, the prior petitioners filed a separate petition for *inter partes* review of claims 19–24 of the '634 patent. *See Activision Blizzard, Inc. v. Acceleration Bay, LLC*, Case IPR2016-00727. Bungie was not a party to that petition. The Board denied institution in that proceeding. *Activision Blizzard, Inc. v. Acceleration Bay, LLC*, Case IPR2016-00727 (PTAB Sept. 9, 2016) (Paper 13).

B. The '634 Patent

The '634 patent relates to a “broadcast technique in which a broadcast channel overlays a point-to-point communications network.” Ex. 1001, 4:29–30. The broadcast technique overlays the underlying network system with a graph of point-to-point connections between host computers or nodes through which the broadcast channel is implemented. *Id.* at 4:49–52.

Figure 1 of the '634 patent is reproduced below:

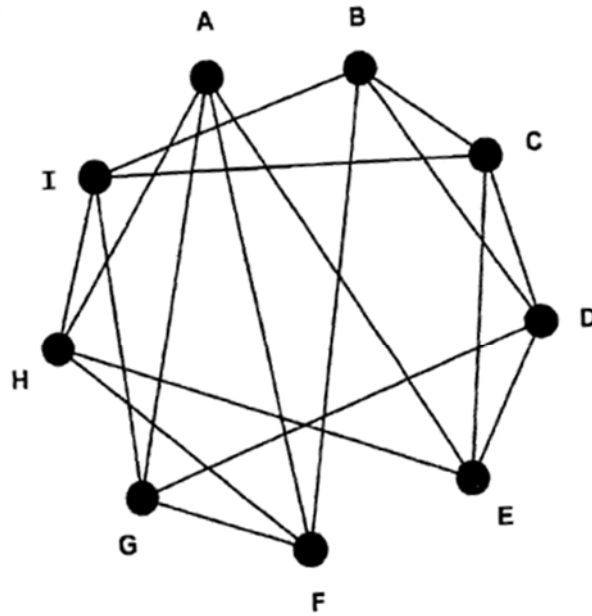


Fig. 1

Figure 1 illustrates a broadcast channel represented by a “4-regular, 4-connected” graph. *Id.* at 5:7–8. The graph of Figure 1 is “4-regular” because each node is connected to exactly four other nodes (e.g., node A is connected to nodes E, F, G, and H). *Id.* at 4:64–65, 5:8–12. A node in a 4-regular graph can only be disconnected if all four of the connections to its neighbors fail. *Id.* at 4:65–5:1. Moreover, the graph of Figure 1 is “4-connected” because it would take the failure of four nodes to divide the graph into two separate sub-graphs (i.e., two broadcast channels). *Id.* at 5:1–5.

The '634 patent describes a process for adding nodes, or participants, to a broadcast channel. *Id.* at 5:45–7:53. The computer seeking connection to the network locates and contacts a portal computer that is fully connected to the network. *Id.* at 5:62–67. The portal computer then directs the identifying of computers to which the seeking computer will connect, i.e.,

computers that will be the seeking computer's neighbors. *Id.* at 5:67–6:3. The seeking computer then connects to each of the identified neighbors. *Id.* at 6:3–5.

C. Illustrative Claim

Petitioner challenges claims 19–24 of the '634 patent. Claim 19 is independent and is illustrative of the claimed subject matter:

19. A non-routing table based computer-readable medium containing instructions for controlling communications of a participant of a broadcast channel within a network, by a method comprising:

locating a portal computer;

requesting the located portal computer to provide an indication of neighbor participants to which the participant can be connected;

receiving the indications of the neighbor participants; and

establishing a connection between the participant and each of the indicated neighbor participants, wherein a connection between the portal computer and the participant is not established, wherein a connection between the portal computer and the neighbor participants is not established, further wherein the network is m -regular and m -connected, where m is the number of neighbor participants of each participant, and further wherein the number of participants is at least two greater than m thus resulting in a non-complete graph.

Id. at 30:20–39. Each of claims 20–24 depends directly from claim 19.

D. Asserted Ground of Unpatentability

Petitioner asserts that claims 19–24 are unpatentable under 35 U.S.C. § 103(a) over the combination of Gilbert² and Francis.³

II. DISCUSSION

A. Claim Construction

In an *inter partes* review, we construe claim terms in an unexpired patent according to their broadest reasonable construction in light of the specification of the patent in which they appear. 37 C.F.R. § 42.100(b); *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2144–46 (2016) (upholding the use of the broadest reasonable interpretation standard). Consistent with the broadest reasonable construction, claim terms are presumed to have their ordinary and customary meaning as understood by a person of ordinary skill in the art in the context of the entire patent disclosure. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007).

Neither party proposes a construction for any term recited in the challenged claims. See Pet. 32; Prelim. Resp. 11. We determine that, for purposes of this decision, no claim terms require express construction.

² U.S. Patent No. 6,490,247 B1, filed June 26, 1996, issued Dec. 3, 2002 (Ex. 1021) (“Gilbert”).

³ Paul Francis, *Yallcast: Extending the Internet Multicast Architecture*, NTT Information Sharing Platform Laboratories (Sept. 30, 1999) (Ex. 1005) (“Francis”).

B. Asserted Obviousness over Gilbert and Francis

Petitioner contends claims 19–24 are unpatentable under 35 U.S.C. § 103(a) as obvious over the combination of Gilbert and Francis. Pet. 40–66. Relying on the testimony of Dr. Nicholas Bambos, Petitioner explains how the references allegedly teach or suggest all of the claim limitations and contends that a person having ordinary skill in the art would have been motivated to combine the references. *Id.* (citing Ex. 1003). Patent Owner counters that the asserted combination fails to disclose certain limitations of independent claim 19. Prelim. Resp. 29–46.

1. Summary of Gilbert

Gilbert describes a “ring-ordered dynamically reconfigurable computer network” comprising a plurality of nodes operatively coupled to a switch. Ex. 1021, 3:6–11. Figure 10, reproduced below, illustrates the logical data flow of the network disclosed in Gilbert:

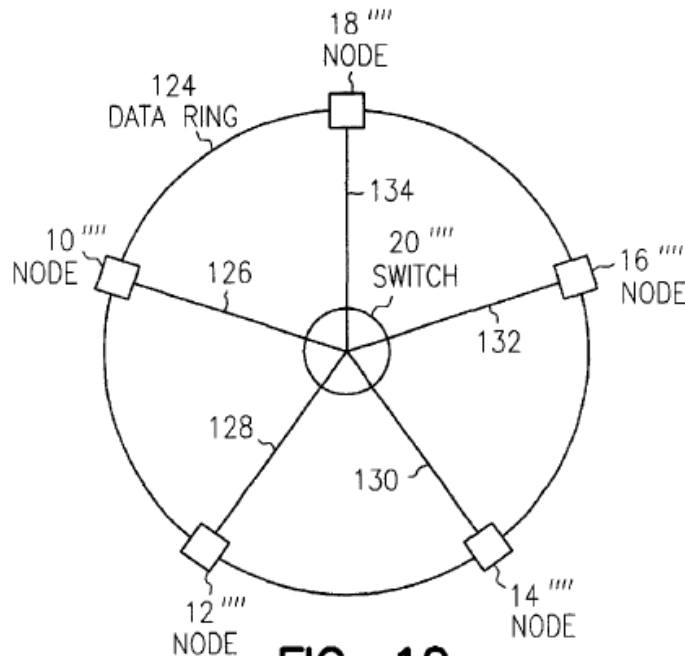


FIG. 10

As shown in Figure 10 of Gilbert, data ring 124 represents the logical data flow within the network, which is organized in a ring topology. *Id.* at 8:19–32. In the network described in Gilbert, each node is connected to two other nodes. *Id.* at 3:25–36. Gilbert also describes a network manager, which establishes the network, facilitates communication among nodes, and dynamically reconfigures the network. *Id.* at 3:59–63. The network manager is contained within each node or within a single node selected as a master node. *Id.* at 3:63–4:3.

Gilbert describes a process for dynamic addition of a node to the network. *Id.* at 5:66–7:24, Figs. 6, 7. To join the network, “an additional node contacts two adjacent nodes in the network.” *Id.* at 6:30–31. In one embodiment, “the additional node first contacts a node it knows to be already connected on the network,” and that node in turn provides to the additional node information regarding an adjacent node. *Id.* at 6:33–42. In another embodiment, in which a primary node receives all incoming calls from nodes wishing to join the network, the primary node may identify a different node on the network for the additional node to contact in order to enter the network. *Id.* at 6:52–59. Once two adjacent nodes have been identified, they drop connection to one another, and the additional node connects with each of the adjacent nodes. *Id.* at 7:7–14.

2. *Summary of Francis*

Francis describes an architecture for so-called “yallcast” multicasting that attempts to unify prior server-based and IP multicast approaches. Ex. 1005, 2. Yallcast features a topology management protocol that allows a group of hosts to dynamically auto-configure into two topologies: (1) a tunneled shared tree topology for efficient multicast distribution of

application content; and (2) a tunneled mesh topology for robust broadcast distribution of various information, including control information and, where appropriate, application content. *Id.* at 5. Each group of hosts has one or more rendezvous hosts associated with it. *Id.* “Rendezvous hosts are not attached to the tree-mesh—rather, they serve as a discovery or bootstrap mechanism for allowing hosts joining a group to find other hosts already in the tree-mesh.” *Id.* A host seeking to join a group contacts a rendezvous host associated with the group. *Id.* The rendezvous host maintains a list of some or all group members and informs a new group member of several current members. *Id.* at 5–6, 11.

3. Analysis

Petitioner contends that “Gilbert alone teaches or suggests every element of claim 19.” Pet. 40 (citing Ex. 1003 ¶ 112). Nevertheless, Petitioner asserts that “Francis also teaches or suggests essentially all of these elements, and thus Gilbert in view of Francis renders obvious claim 19 as a whole.” *Id.* (quoting Ex. 1003 ¶ 112).

For the first step of claim 19, “locating a portal computer,” Petitioner argues that Gilbert discloses various alternatives of a “portal computer.” *Id.* at 45–46. For instance, Petitioner cites Gilbert’s disclosure of a node wishing to join the network first contacting a node it knows to be connected to the network. *Id.* at 45 (citing Ex. 1021, 6:33–34). Petitioner also cites Gilbert’s description of a primary node on the network that receives all incoming calls from other nodes wishing to enter the network. *Id.* (citing Ex. 1021, 6:53–55, 6:61–7:6). In addition, Petitioner contends that Francis’s rendezvous host accomplishes the function of a “portal computer.” *Id.* at 46–47.

The second step of claim 19 recites “requesting the located portal computer to provide an indication of neighbor participants to which the participant can be connected.” Petitioner contends Gilbert discloses this limitation because in some of Gilbert’s “alternative portal computer embodiments,” a node contacting the portal computer about joining the network requests an indication of two adjacent nodes (i.e., neighbor participants) to which the joining node can be connected. *Id.* at 47–50. Petitioner also argues that Francis discloses this limitation. *Id.* at 50. Specifically, Petitioner cites Francis’s disclosure of a new member learning of current group members from a rendezvous host as well as a different passage explaining that each member in a mesh topology “maintains a small number of neighbors solely for the purpose of insuring that there is a non-partitioned topology over which frames can be broadcast.” *Id.* at 48, 50 (citing Ex. 1005, 11, 14).

We agree with Patent Owner that Petitioner fails to demonstrate that Gilbert in view of Francis teaches “requesting the located portal computer to provide an indication of neighbor participants to which the participant can be connected,” as required by claim 19. *See* Prelim. Resp. 41–44. First, contrary to Petitioner’s argument, the various “portal computer” embodiments in Gilbert relied on by Petitioner do not describe a joining node requesting the portal computer to provide an indication of two adjacent nodes (i.e., the claimed “neighbor participants”) to which the joining node can connect. In the first example cited by Petitioner, *see* Pet. 47, a new node contacts a node it knows to be already on the network, which Petitioner alleges is the claimed “portal computer.” Ex. 1021, 6:33–34. That node then provides information regarding an adjacent node. *Id.* at 6:40–42. Thus,

as Patent Owner correctly points out, the alleged portal computer identifies only a single adjacent node. *See* Prelim. Resp. 41. Although Gilbert describes a joining node contacting two adjacent nodes in the network and then connecting to those two nodes, the “two adjacent nodes” are the alleged portal computer and one of its adjacent nodes, not two nodes adjacent to the portal computer, as Petitioner suggests. *See* Ex. 1021, 6:32–49, Fig. 7. Thus, the node seeking to join the network does not request the portal computer to provide an indication of neighbor *participants* to which it can be connected, as required by claim 19, but instead only requests an indication of one neighbor participant.

In the second Gilbert example cited by Petitioner, *see* Pet. 47–48, the joining node contacts a primary node, which then identifies another node on the network for the joining node to contact. Ex. 1021, 6:52–59. Here, too, the node wishing to join the network is requesting the portal computer to provide an indication of only one neighbor participant to which it can be connected. As Petitioner acknowledges, the node identified by the primary node in turn identifies a node adjacent to it. *See* Pet. 48 (citing Ex. 1021, 6:40–49). Thus, although the joining node ultimately is connected to two adjacent nodes, it does not request the primary node (the alleged portal computer) to provide an indication of more than one node to which it can be connected.

Petitioner also suggests that Gilbert describes another embodiment in which a “network manager” is a portal computer that is already on the network. Pet. 49–50 (citing Ex. 1021, 3:63–4:3, 6:28–30, 7:19–20). According to Petitioner, “the portal computer is contacted so that it can, in turn, contact two adjacent nodes on the network, causing them to identify

themselves and connect to the joining node.” *Id.* at 49. As Patent Owner observes, however, Gilbert’s network manager is not a node itself but instead is a functional component contained within each node or in a master node. *See* Prelim. Resp. 42 (citing Ex. 1021, 3:59–4:3). Thus, Gilbert’s disclosure that the steps for adding another node to the network “are executed by a joiner module within the network manager” is not a separate embodiment but instead further describes the other embodiments already discussed. Ex. 1021, 6:29–30. As explained above, the alleged portal computer in those embodiments does not provide an indication of neighbor *participants* as required by claim 19.

Finally, Francis does not cure the deficiencies of Gilbert with respect to this limitation. Petitioner asserts that Francis’s rendezvous host is the claimed portal computer. Pet. 48. Although Francis discloses that the rendezvous host informs a new member of several current members, Petitioner does not cite any disclosure in Francis identifying those members as neighbor participants to which new members can be connected. *See id.* (citing Ex. 1005, 11). Petitioner cites a separate section of Francis explaining that each member of the mesh topology establishes a small number of other members as neighbors. *Id.* (citing Ex. 1005, 14). As Patent Owner asserts, however, Francis discloses that these “mesh neighbors” are randomly selected using a random walk process. Prelim. Resp. 43 (citing Ex. 1005, 14). Petitioner does not explain how the cited disclosures from Francis teach a new node requesting the rendezvous host (allegedly the claimed portal computer) to provide an indication of neighbors to which the new node can be connected. *See* Pet. 48, 50.

For at least these reasons, Petitioner has not shown sufficiently that the combination of Gilbert and Francis teaches or suggests all of the limitations of independent claim 19. Accordingly, we determine the information presented does not show a reasonable likelihood that Petitioner would prevail in establishing that any of claims 19–24 would have been obvious over Gilbert and Francis.

C. Motion to Seal

Patent Owner's Preliminary Response (Paper 6) was accompanied by a Motion to Seal (Paper 7) its Preliminary Response and Exhibits 2004–2010, along with a redacted version of the Preliminary Response and redacted versions of Exhibits 2006–2010. As we do not rely on the material that Patent Owner seeks to seal, we decline to address the merits of the Motion to Seal. Patent Owner is authorized to file a motion to expunge any material that it seeks to keep confidential within thirty (30) days of this decision, or within thirty (30) days of a decision on rehearing if rehearing is requested.

III. CONCLUSION

For the foregoing reasons, we determine that the information presented does not establish a reasonable likelihood that Petitioner would prevail in showing that claims 19–24 of the '634 patent are unpatentable on the ground asserted in the Petition.

IV. ORDER

Accordingly, it is:

ORDERED that the Petition is denied as to all challenged claims, and no trial is instituted.

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