Paper No. 10 Entered: May 12, 2016

# UNITED STATES PATENT AND TRADEMARK OFFICE

## BEFORE THE PATENT TRIAL AND APPEAL BOARD

UNIFIED PATENTS INC., Petitioner,

v.

NONEND INVENTIONS N.V., Patent Owner.

Case IPR2016-00174 Patent 8,090,862 B2

Before MICHAEL W. KIM, JENNIFER S. BISK, and DANIEL N. FISHMAN, *Administrative Patent Judges*.

FISHMAN, Administrative Patent Judge.

DECISION Institution of *Inter Partes* Review 37 C.F.R. § 42.108

## I. INTRODUCTION

Unified Patents Inc. ("Petitioner"), filed a Petition (Paper 2, "Pet.") for *inter partes* review of claims 1–20 of U.S. Patent No. 8,090,862 B2 ("the '862 Patent") (Ex. 1001) pursuant to 35 U.S.C. §§ 311–319. Nonend Inventions N.V. ("Patent Owner") filed a Patent Owner Preliminary Response (Paper 7, "Prelim. Resp."). We have authority to determine whether to institute a trial under 35 U.S.C. § 314, which provides that an *inter partes* review may be instituted only if "the information presented in the petition . . . 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."

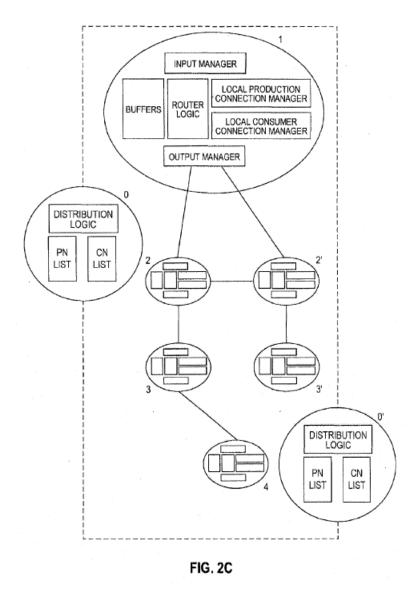
Petitioner challenges the patentability of claims 1–20 of the '862 Patent variously under 35 U.S.C. §§ 102 and 103. We are persuaded there is a reasonable likelihood that Petitioner would prevail in showing that claims 1–20 are unpatentable. Pursuant to 35 U.S.C. § 314, we institute an *inter partes* review as to claims 1–20 of the '862 Patent.

### A. The '862 Patent

According to the '862 Patent, "[s]ystems and methods are disclosed for streaming content over a network that enables communication between a first consumer node, a second consumer node, and a production node." Ex. 1001, Abstract. The method involves processing for play-back part of an item of content received over a first connection while another part of the item of content is being received over a second communication channel. *Id*. According to an embodiment, a first consumer node connects to a production node and commences receiving a stream. *See id*. at 7:26–35. A

second consumer node connects with the production node and connects with the first consumer node, tests whether the connection to the production node or to the first consumer node is the best, and selects the best node from which to receive the content. *See id.* at 7:44–48.

Figure 2C of the '862 Patent depicts such a configuration and is reproduced below.



In Figure 2C (above), consumer nodes 2 and 2' are connected to production node 1 and are connected also to each other. Consumer node 2

initially receives a stream from production node 1. When consumer node 2 connects with production node 1, it is informed of the existence of consumer node 2' and that consumer node 2' can provide the requested content. While receiving the stream, consumer node 2 tests the connection with other nodes, such as consumer node 2', to determine if there is another node that can better supply the same stream (i.e., faster, better quality, etc.). If consumer node 2 detects a better node from which to receive the stream, it receives the stream through that other connection. *See*, *e.g.*, Ex. 1001, 8:62–9:22.

### B. Real Parties in Interest

Petitioner identifies Unified Patents Inc. ("Unified") as the sole real party-in-interest for this Petition. Pet. 1. Petitioner also provides Voluntary Interrogatory Responses (Ex. 1007) in support of the assertion that Unified is the sole real party-in-interest.

Patent Owner argues the Petition should be denied because Petitioner has failed to identify other real parties-in-interest. Prelim Resp. 4–13. Patent Owner acknowledges a rebuttable presumption that Petitioner has named all real parties-in-interest in the Petition, but argues that it presents sufficient evidence to overcome that presumption. Prelim. Resp. 5–6. Specifically, Patent Owner argues that Petitioner receives fees from its members and seeks to protect "*strategic technologies* from NPE activity." Prelim. Resp. 8. Patent Owner then argues that, because Unified has no technology product or service that it sells to the public, it is not at risk of any lawsuit and, thus, its "only 'interest' in challenging the '862 Patent is to serve the beneficial interests of its members" that pay subscription fees. *Id*. Patent Owner further argues, in this case, "Unified has attempted to

negotiate a license to the '862 Patent on behalf of its members." *Id.* Based on these assertions (and various allegedly supporting evidence in Exs. 1007, 2008–2011), Patent Owner contends some or all members of Unified are additional real parties-in-interest because the members have funded *this* IPR (since Unified has no other source of funds) and Unified filed *this* IPR at the behest of the members (since Unified has no beneficial interest in *this* IPR other than the beneficial interest of the members). Prelim. Resp. 9–10.

Furthermore, Patent Owner argues Petitioner's Exhibit 1007 (Voluntary Interrogatory Responses) is insufficient to overcome Patent Owner's assertions and, thus, insufficient to carry the ultimate burden of Petitioner to identify all real parties-in-interest. Prelim. Resp. 11–13. Specifically, Patent Owner argues Exhibit 1007 fails to discuss how patents are selected for filing of a petition and thus "leave[s] open the possibility of communication between Unified and its members on the selection of which patent to challenge." Prelim. Resp. 11. Patent Owner further argues statements in Exhibit 1007 that *this* IPR is not funded by Unified's members refers only to *direct* funding but does not address the *indirect* funding through the subscription fees of its members. *Id.* at 12. Lastly, Patent Owner argues that Petitioner acknowledges that Unified has no beneficial interest in pursuit of any particular IPR other than the beneficial interests of its members. *Id.* 

Whether a particular entity is a real party-in-interest is a "highly fact-dependent question" that is assessed "on a case-by-case basis." Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48,759 (Aug. 14, 2012) (citing *Taylor v. Sturgell*, 553 U.S. 880, 893–95 (2008)). While multiple factors may be relevant to the inquiry, "[a] common consideration is whether

the non-party exercised or could have exercised control over a party's participation in a proceeding." *Id.*; *see also Zoll Lifecor Corp. v. Philips Elec. North Am. Corp.*, Case IPR2013-00609, slip op. at 10 (PTAB Mar. 20, 2014) (Paper 15). Patent Owner provides no evidence that any other entity is controlling this particular proceeding, or is providing direct financing for this particular proceeding. The mere possibility of communication between Unified and its members on the selection of which patent to challenge is not sufficient to bring into question Petitioner's identification of all real parties-in-interest.

Thus, we have considered the parties' arguments and, on the record before us and for purposes of this Decision, we are not persuaded that the Petition should be denied for failure to name all real parties-in-interest.

## C. Related Matters

Patent Owner identifies several matters in litigation relating to the '862 Patent, all in the Eastern District of Texas. Paper 6, 2–3. Petitioner identifies one related case (Pet. 1) that we presume, based on a similar case designation, is the same case Patent Owner identified as filed in the Eastern District of Texas involving Apple, Inc.<sup>2</sup>

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<sup>&</sup>lt;sup>1</sup> Paper 6 does not have page numbers. We treat the first page as page number 1 and number the pages consecutively from there. We request that, going forward, Patent Owner number pages of all submissions.

<sup>&</sup>lt;sup>2</sup> Furthermore, Patent Owner also indicates the '862 Patent is one of a family of ten related patents. Prelim. Resp. 13–16. In particular, Patent Owner has identified among this family of patents, US Patent Nos. 7,590,752, 7,779,138, and 8,099,513. Pet. 13 n.5. Though not identified by Patent Owner as related matters, we note the three above-identified patents were the subject of three respective petitions for *inter partes* review — namely,

### D. Illustrative Claim

Independent claim 1, reproduced below, is exemplary of the invention:

- 1. A method for receiving data packages of a streaming item of content at a receiving media player, using at least two communication channels, the method comprising:
  - receiving one or more data packages corresponding to at least a part of the item of content over a first communication channel operationally coupled to the receiving media player;
  - initiating a request for at least a part of the item of content over a second communication channel operationally coupled to the receiving media player;
  - receiving, in response to initiating the request, one or more data packages corresponding to at least a part of the item of content, over the second communication channel; and
  - making incoming content received over the first communication channel ready for processing and play-back at the receiving media player, such that part of the item of content is streamed to a stream target at the receiving media player, while another part of the item of content is being received by the receiving media player over the second communication channel.

IPR2016-00223, IPR2016-00224, and IPR2016-00225, respectively. All three of the above-identified *inter partes* reviews were dismissed prior to an institution decision based on a settlement reached between the parties thereto.

Independent claim 12 recites a similar method and independent claim 18 recites a device providing functionality similar to the method steps of claim 1.

## E. References Applied by Petitioner

Petitioner challenges the patentability of claims 1–20 based on the following items of art:

- U.S. Patent Application Publication No. 2002/0065922 A1; May 30, 2002. Ex. 1002 ("Shastri").
- U.S. Patent No. 6,195,680 B1; Feb. 27, 2001. Ex. 1004 ("Goldszmidt").
- U.S. Patent No. 6,377,996 B1; Apr. 23, 2002. Ex. 1005 ("Lumelsky").

F. Alleged Grounds of Unpatentability

The Petition sets forth the following grounds of unpatentability:

| Claims       | Basis for Challenge                           |
|--------------|---|
| 1–6 and 8–18 | § 102(e) anticipated by Shastri               |
| 1–20         | § 103(a) obvious over Goldszmidt <sup>3</sup> |
| 1–20         | § 103(a) obvious over Goldszmidt and Lumelsky |

Petitioner also relies on the Declaration of Dr. Charles Eldering (Ex. 1006) as support for various contentions.

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<sup>&</sup>lt;sup>3</sup> Although Petitioner does not list obviousness over Goldszmidt as a proposed ground of unpatentability in the headings of the section of the Petition related to obviousness, the content of that section contains a fully developed analysis of obviousness over Goldszmidt alone. *See*, *e.g.*, Pet. 37–42. Thus, we read the Petition as asserting obviousness over Goldszmidt alone or, in the alternative, over the combination of Goldszmidt and Lumelsky. *See*, *e.g.*, Pet. 42–44.

## II. ANALYSIS

### A. Claim Construction

In an *inter partes* review, a claim in an unexpired patent shall be given its broadest reasonable construction in light of the specification of the patent in which it appears. 37 C.F.R. § 42.100(b); *see In re Cuozzo Speed Techs.*, *LLC*, 793 F.3d 1268, 1278–79 (Fed. Cir. 2015) ("We conclude that Congress implicitly approved the broadest reasonable interpretation standard in enacting the AIA."), *cert. granted sub nom. Cuozzo Speed Techs.*, *LLC v. Lee*, 136 S.Ct. 890 (mem.) (2016).

Under the broadest reasonable construction standard, claim terms are given their ordinary and customary meaning, as would be understood by one of ordinary skill in the art in the context of the entire disclosure. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1862 (Fed. Cir. 2007). "[A] claim construction analysis must begin and remain centered on the claim language itself." *Innova/Pure Water, Inc. v. Safari Water Filtration Systems, Inc.*, 381 F.3d 1111, 1116 (Fed. Cir. 2004). "Though understanding the claim language may be aided by the explanations contained in the written description, it is important not to import into a claim limitations that are not a part of the claim." *SuperGuide Corp. v. DirecTV Enters., Inc.*, 358 F.3d 870, 875 (Fed. Cir. 2004).

Only terms which are in controversy need to be construed and only to the extent necessary to resolve the controversy. *See Wellman, Inc. v. Eastman Chem. Co.*, 642 F.3d 1355, 1361 (Fed. Cir. 2011); *Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999).

### "Streamed"

Independent claims 1, 12, and 18 each include a recitation relating to part of an item of content being "*streamed* to a stream target." Petitioner argues "streamed" should be interpreted as "passed from a software or hardware component to another software or hardware component." Pet. 9 (citing Ex. 1006 ¶ 29). Petitioner notes the '862 Patent does not clearly define "streamed" and points to column 5, lines 25–28, column 8, lines 32–36, and column 14, lines 1–35 as support for the proposed interpretation. *Id*.

Patent Owner argues Petitioner's interpretation of "streamed" is unreasonably broad and encompasses "any type of data transmission from one point to another, essentially re-writing the claims to change 'streamed' to 'transmitted." Prelim. Resp. 25. Patent Owner argues Petitioner's expert contradicts such a broad interpretation, because Dr. Eldering interprets "steaming content" as follows:

Streaming content, such as streaming media, is content that may be played by a receiver while being transmitted . . . The verb "stream" refers to the process of delivering content in this manner, and the noun "stream" refers to content that is has been [sic], is, or will be streamed. Delivering content via a stream allows a receiver to begin to play the content before the entire content file is transmitted.

Prelim. Resp. 26 (quoting Ex.  $1006 \, \P \, 10^4$ ). Patent Owner further contends "[a]s made clear from Dr. Eldering's own testimony, the ordinary and customary meaning of 'streamed' requires that the content is capable of being played while it is still being transmitted." *Id*. Furthermore, Patent

<sup>&</sup>lt;sup>4</sup> We note harmless error in that Patent Owner incorrectly cites paragraph 12 of Exhibit 1006 in quoting Dr. Eldering's testimony. The quoted material is in paragraph 10 of that Exhibit.

Owner cites a technical dictionary definition of "streaming media" as "audio or video files that can begin playing as they are being downloaded to a computer." *Id.* (citing Ex. 2012, 3). Patent Owner additionally cites the claim interpretation from a District Court Order in a related proceeding, that interprets "streamed" in the '862 Patent as "transmitted continuously and may be played by the receiver while the transmission is occurring." *Id.* (citing Ex. 1011, 5).

We agree with Patent Owner that Petitioner's proposed interpretation is unreasonably broad. Patent Owner argues (Prelim. Resp. 26), and we agree, Petitioner's citations to the Specification of the '862 Patent in support of their proposed interpretation fail to support Petitioner's broader interpretation of "streamed." Furthermore, Dr. Eldering's above-identified testimony, purportedly in support of Petitioner's interpretation, actually supports Patent Owner's proposed interpretation.

The Specification of the '862 Patent discloses,

[s]treaming video and streaming audio are known internet applications in which data packages with contents are transmitted from a server or station to clients or consumers. The special thing about these data packages is that the time sequence of the various packages is of importance: a radio broadcast, for instance, has a fixed time line. Additionally the continuity of the data flow is of importance, as otherwise the broadcast will falter. The general principles of such streaming internet application are known to the expert.

Ex. 1001, 7:8–16 (emphasis added). Thus, the act of streaming audio or video, consistent with the specification of the '862 Patent, encompasses an important feature of continuity of data flow (i.e., to avoid faltering of the broadcast). This important aspect (limitation) of the act of audio/video streaming (i.e., content that is "streamed") is not captured in Petitioner's

proposed interpretation. *See* Prelim. Resp. 27 ("[the petition] omits the requirement that the content is capable of being played while it is still being transmitted").

Regarding evidence concerning the ordinary and customary meaning of "streamed," we find a common technical dictionary defines the verb "stream" as "[t]o transfer data continuously, beginning to end, in a steady flow . . . [o]n the Internet, streaming enables user to begin accessing and using a file before it has been transmitted in its entirety." Microsoft Computer Dictionary Fifth Edition, p. 499 (2002) (Exhibit 3001). The claims use the term "streamed" as a verb. For example, independent claim 1 recites "such that part of the item of content is *streamed* to a stream target at the receiving media player, while another part of the item of content is being received." Thus, consistent with all of the above, on the record before us for purposes of this Decision, we determine that the broadest reasonable interpretation of "streamed" is "transmitted continuously such that the content may be played by the receiver while the transmission is occurring."

### Other Claim Terms

We determine that it is unnecessary to construe explicitly any other claim terms at this time.

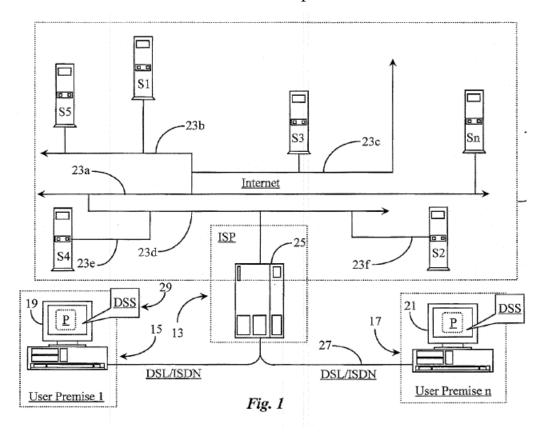
## B. Claims 1–6 and 8–18 Anticipated by Shastri

We have reviewed the Petition and the Preliminary Response, and determine that Petitioner has shown a reasonable likelihood that it would prevail in establishing that claims 1–6 and 8–18 are anticipated by Shastri.

## 1. Shastri (Ex. 1002)

Shastri discloses a system "for effecting a dynamic switch from an existing client-server connection established between a client node and a server node on a data-packet-network (DPN) to an alternate server-node connected to the network and accessible to the client node." Ex. 1002, Abstract.

Figure 1, reproduced below shows an exemplary network environment in which Shastri's invention operates.



Shastri's Figure 1 (above) shows user computer 15 coupled to the Internet through Internet Service Provider 13 ("ISP"). Ex. 1002 ¶ 27 ("user premise 1" is a media player including user computer 15). A plurality of multimedia servers (S1–Sn) are coupled to the Internet through various tree-structured backbone connections (23a–23f). *Id.* ¶¶ 24–25. User computer 15 includes

dynamic server selection ("DSS") module 29, where DSS 29 is software configured to measure quality of service ("QoS") during media play-back from a selected server, in each of the various connections between computer 15 and servers S1–Sn. Id. ¶ 33. "If there is a better-performing server available, under certain circumstances DSS 29 enables a dynamic switching to the better-performing server. A multimedia selection from a new server may begin streaming at the point left off at the original server without interruption." Id.

Shastri's Figure 4, reproduced below, broadly describes a method of Shastri's invention.

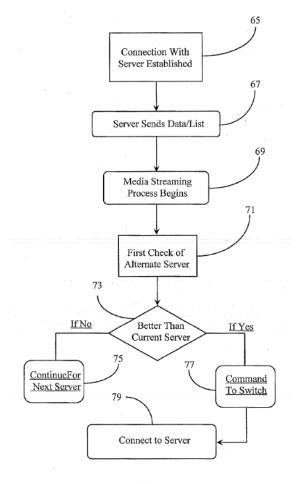


Fig. 4

The method of Shastri's Figure 4 discloses steps 65–69 establishing a connection between the user computer and a first server, and commencing the streaming of content from the first server to the user computer. Ex. 1002 ¶¶ 61–62. While streaming content from the first server, method steps 71–75 check for alternate servers that can better serve the content (i.e., better QoS). *Id.* ¶¶ 62–63. If a better server is found, steps 77 and 79 connect the user computer to the alternate server and the alternate server continues serving the media stream. *Id.* ¶¶ 63–64.

# 2. Analysis of Claims 1–6 and 8–18

Regarding independent claim 1, Petitioner maps the preamble and first three steps of claim 1 to teachings of Shastri. Pet. 13–18. Patent Owner does not challenge these mappings by Petitioner and we determine that Petitioner's mappings of these recitations appear credible for purposes of this Decision. We note in particular Petitioner's mapping of the second step (initiating a second connection with a second computer) and mapping the third step (receiving part of the content over the second connection), to Shastri's paragraph 48 (Pet. 17–18).

Specifically, Shastri's paragraph 48 discloses "[p]eriodically, separate connections are opened with alternate servers for the purpose of obtaining a sampling of QoS data by very briefly accepting the same media content from the second test server." On this record, we agree with Petitioner that Shastri discloses initiating a second connection ("separate connections are opened with alternate servers) and receiving some part of the desired content over the second connection ("sampling QoS data by very briefly accepting the same media content from the second test server").

The final step of claim 1 recites,

making incoming content received over the first communication channel ready for processing and play-back at the receiving media player, such that part of the item of content is streamed to a stream target at the receiving media player, while another part of the item of content is being received by the receiving media player over the second communication channel.

In particular, the last portion of this step recites, in essence, overlapping the processing and play-back of a first part of the content received over the first connection with receipt of another part of the same content received over the second connection. Petitioner maps these recitations to features of Shastri. Pet. 18–21.

Petitioner provides a mapping of this last step relying on paragraphs 36 and 48 of Shastri. Pet. 20–21. Specifically, Petitioner argues Shastri discloses receiving content from multiple servers. Pet. 20 (citing Ex. 1002 ¶ 36). Shastri paragraph 36 discloses "[i]n addition to receiving video and QoS data from a current server, module 31 has a capability of connecting to and receiving data from another servers [sic] at the same time with the aid of browser software." Petitioner further argues Shastri discloses concurrent play-back of a first part of the content while receiving another part of the content over the second connection. *Id.* (citing Ex. 1002 ¶ 48). Shastri paragraph 48 discloses "[p]eriodically, separate connections are opened with alternate servers for the purpose of obtaining a sampling of QoS data by very briefly accepting the same media content from the second test server." Thus, Petitioner contends, "by opening a separate connection to an alternate server and receiving a sample of the content item from the alternate server while streaming the content item from the initial server," Shastri discloses

overlapping the processing and play-back of a first part of the content received over the first connection with receipt of another part of the same content (a QoS sample) over the second connection (sampled from another server). *Id*.

Patent Owner does not address this second mapping of the last step of claim 1 to disclosures in paragraphs 36 and 48 of Shastri.<sup>5</sup>

We are persuaded by Petitioner's arguments that Shastri discloses the final step of claim 1 because Shastri discloses processing for play-back a part of a content stream received from a first server while periodically sampling (receiving) a part of the same content (Ex. 1002 ¶ 48) from another server over a second connection (Ex. 1002 ¶ 36). Thus, on this record and for purposes of this Decision, Petitioner has established a reasonable likelihood of prevailing in showing independent claim 1 is anticipated by Shastri.

Independent claims 12 and 18 recite features similar to independent claim 1. Petitioner similarly maps disclosures of Shastri to recitations of independent claim 12 (Pet. 26–29), independent claim 18 (Pet. 30–34), and dependent claims 2–6 and 8–17 (Pet. 21–25, 29–30). Patent Owner does not challenge any of these additional mappings of claimed features with disclosures of Shastri. We have reviewed Petitioner's arguments regarding

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<sup>&</sup>lt;sup>5</sup> We acknowledge that Petitioner presents another mapping of this feature to disclosures in Shastri that switch the source of a stream from a first server to another server without interruption. Pet. 18–20. Patent Owner argues this mapping by Petitioner relies on inherency and argues Petitioner does not adequately demonstrate such inherency in the disclosure of Shastri. Prelim. Resp. 29–37. In view of the alternative mapping by Petitioner, discussed *infra*, we need not address the "another" mapping of the final step of claim 1 at this time.

these additional challenged claims and, on this record and for purposes of this Decision, Petitioner has established a reasonable likelihood of prevailing in showing claims 2–6 and 8–18 are anticipated by Shastri.

# C. Claims 1–20 Obvious over Goldszmidt and Lumelsky

We have reviewed the Petition and the Preliminary Response, and determine that Petitioner has shown a reasonable likelihood that it would prevail in establishing that claims 1–20 would have been obvious over Goldszmidt alone, or, in the alternative, a combination of Goldszmidt and Lumelsky.

# 1. Goldszmidt (Ex. 1004)

Goldszmidt discloses "[a] client-based system for the fault tolerant delivery of real-time or continuous data streams, such as real-time multimedia streams, e.g., live audio and video clips." Ex. 1004, Abstract.

Goldszmidt Figure 1a, reproduced below, discloses an architecture for fault-tolerant, multimedia, stream delivery.

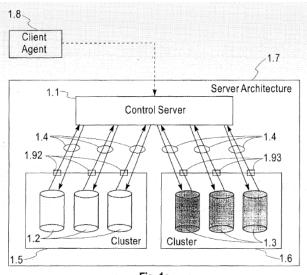
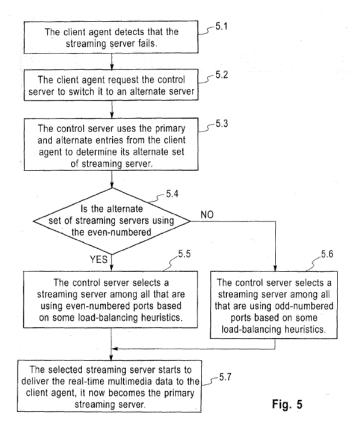


Fig. 1a

Figure 1a (above) shows client 1.8 coupled through control server 1.1 to clusters 1.5 and 1.6 of servers 1.2 and 1.3 for multimedia delivery. Ex. 1004, 4:27–33. Goldszmidt discloses "[t]he control server 1.1 redirects incoming client agent 1.8 requests to the streaming servers (1.2, 1.3), preferably while monitoring the workload of the streaming server." *Id.* at 5:32–34. An initial (first) connection is established with a primary server to stream requested content. *See id.* at 8:34–63, Figs. 2a–2c. After the initial connection begins streaming data (*see id.* Fig. 4), the client may detect a fault in the stream delivery and request the control server to switch the connection to an alternate server. Fig. 5 of Goldszmidt, reproduced below, describes the process of requesting a switch to an alternate server.



In Goldszmidt Fig. 5 (above), while receiving a stream from a primary server, the receiving client at step 5.1 detects a failure in delivery of the

stream. Ex. 1004, 10:6–7. At step 5.2, the client requests the control server to automatically locate an alternate server for the same content and initiate a switch to that alternate server. *Id.* at 10:28–31. At a selected one of steps 5.5 or 5.6, the control server selects an appropriate alternate server. *Id.* at 10:41–43. At step 5.7, the selected alternate server begins serving the stream to the client. *Id.* at 10:43–48.

## 2. Lumelsky (Ex. 1005)

Lumelsky generally discloses switching "a source of a streaming session between a primary server and its client, from the primary server to another server at arbitrary points during the progress of the streaming session." Ex. 1005, Abstract. More specifically, Lumelsky discloses "a seamless switch enabling migration of a streaming client across servers . . . at arbitrary points in a manner that appears seamless to the client with respect to the continuity and temporal progress of its streaming session." Ex. 1005, 3:19–23. Furthermore, Lumelsky discloses "[i]n a seamless switch, stream processing on the client-side of the application appears to remain unaffected . . . the client does not necessarily need to know which server, primary or auxiliary, is currently provisioning its content." *Id.* at 6:15–19.

# 3. Analysis of Claims 1–20

Regarding independent claim 1, Petitioner maps the preamble and first three steps of claim 1 to teachings of Goldszmidt. Pet. 37–40. Patent Owner does not challenge these arguments of Petitioner and we determine the mappings are credible for purposes of this Decision. In particular, Petitioner's maps the second step (initiating a second connection with a second computer) and maps the third step (receiving part of the content over

the second connection) to Goldszmidt's transmission of a message from the client to the control server requesting a switch to an alternate server and the control server responding by switching the server providing the stream to the client. *Id.* at 39 (citing Goldszmidt 9:10–22, Fig. 3c).

On this record, we agree with Petitioner that Goldszmidt discloses initiating a second connection as claimed and receiving a part of the content over the second connection.

As discussed *supra*, the last portion of the last step (making . . . ) recites, in essence, overlapping the processing and play-back of a first part of the content received over the first connection with receipt of another part of the same content received over the second connection. Petitioner argues this recitation is taught because "Goldszmidt discloses that the switch between servers is transparent to the client, and that the client continues to receive the multimedia content in an uninterrupted fashion during the switch." Pet. 42 (citing Ex. 1004, 2:30–35, 3:12–21). Petitioner argues an ordinarily skilled artisan "would recognize that the play-back is uninterrupted during the switch because packets of the multimedia stream have already been buffered by the client and continue to be rendered while the switch takes place." *Id.* (citing Ex. 1006 ¶¶ 165, 168; Ex. 1004, 12:20–27, 12:58–13:5, 13:64–14:19).

Patent Owner argues Goldszmidt discloses buffering "to maintain quality play-back, but not in the context of a server switch." Prelim. Resp. 39 n.8.

Patent Owner is correct that Goldszmidt does not expressly disclose buffering for purposes of continuity of a stream *during a server switch*. However, the test for obviousness is not whether the claimed invention is

expressly taught in the reference but rather what is suggested to the ordinarily skilled artisan by the disclosure of the reference(s). See In re Keller, 642 F.2d 413, 425 (CCPA 1981). Petitioner does not contend Goldszmidt expressly teaches buffering for purposes of a server switch. Instead, Petitioner argues Goldszmidt discloses buffering of stream data (to ensure continuous play-back) and discloses uninterrupted play-back when switching servers and, thus, based on Dr. Eldering's expert testimony, Petitioner argues Goldszmidt would have suggested to the ordinarily skilled artisan that uninterrupted play-back would have been recognized as achievable through use of such buffering. On this record and for purposes of this Decision, we agree with Petitioner. Goldszmidt discloses determining an amount of data to be pre-loaded to assure continuous play-back even "when streaming is not possible, because of congestion or insufficient bandwidth availability." Ex. 1004, 12:20–22. We are persuaded that congestion or insufficient bandwidth, for example, in a first connection with a primary server, would have suggested to the ordinarily skilled artisan a need to switch to an alternate server. We are further persuaded that Goldszmidt would have suggested data received from a first connection that is pre-loaded (e.g., already buffered when congestion is sensed) would have continued to be processed for play-back as streamed data from an alternate server was received.

Therefore, on the record before us and for purposes of this decision, Petitioner has established a reasonable likelihood of prevailing in showing claim 1 is obvious over Goldszmidt alone.

Petitioner also contends (in the alternative), to the extent it may be argued Goldszmidt fails to teach this latter recitation (overlapping

processing of a part of the content received over the first connection while receiving a part of content over the second connection), Lumelsky discloses this feature in combination with Goldszmidt. Pet. 42–43. Specifically, Petitioner argues Lumelsky discloses that while a stream is being received at the client from the primary server (a first connection), a determination is made to switch to a target server (coupled to the client via a second connection). *Id.* at 43 (citing Ex. 1005, 10:12–15). Petitioner contends Lumelsky's target server commences sending the stream to the client while the first connection continues sending content and, thus, the client starts receiving the same stream from two servers. *Id.* at 43–44 (citing Ex. 1005, 11:14–16). Petitioner further contends, the client searches for markers in the two streams to locate a common marker where the two streams overlap and, when such a marker is located in the streams, terminates streaming from the primary server and designates the target (alternate) server as the new primary server. *Id.* at 44 (citing Ex. 1005, 7:36–56, 11:17–22).

Petitioner argues it would have been obvious to the ordinarily skilled artisan to modify Goldszmidt to switch between streaming servers as taught by Lumelsky. *Id.* Petitioner contends the rationale for such a modification would have been "to ensure that the switch occurs seamlessly and without losing the continuity of the session." *Id.* (citing Ex. 1006 ¶ 173; Ex. 1005, 3:8–13, 4:35–39). Petitioner further contends the proposed combination involves only "a combination of old elements in which each element performed as expected to yield the predictable results of ensuring that the switch occurs seamlessly." *Id.* at 44–45 (citing Ex. 1006 ¶ 173). Dr. Eldering's analysis at paragraph 173 mirrors Petitioners analysis and adds that the combination would be obvious because "[s]eamless switching, as a

POSA would understand, is required to maintain the ability to utilize and view content (e.g. a movie)."

Patent Owner argues Lumelsky's teachings rely on use of redundant components in the client system (e.g., redundant buffers and network ports) and argues Petitioner fails to provide evidence that the ordinarily skilled artisan would have modified Goldszmidt by adding redundant components required by Lumelsky. Prelim. Resp. 38. Patent Owner further argues "combining *Lumelsky* with *Goldszmidt* requires modification of the media content data itself for the insertion of the segmentation markers that *Lumelsky* relies upon to perform the server switch." Prelim. Resp. 40–41 (citing Ex. 1005, 7:28–56, 8:4–59).

The test for obviousness does not require bodily incorporation of the references but, instead, looks to what would be suggested to the ordinarily skilled artisan by the combined references. *See Keller*, 642 F.2d at 425. Furthermore, even if such bodily incorporation of redundant components and/or segmentation markers in the data stream were required to combine Goldszmidt with the features of Lumelsky, on this record and for purposes of this Decision, we are not persuaded that the resulting arrangement would be "uniquely challenging or difficult for one of ordinary skill in the art" or "represented an unobvious step over the prior art." *See Leapfrog Enters.*, *Inc. v. Fisher-Price, Inc.*, 485 F.3d 1157, 1162 (Fed. Cir. 2007). As discussed *supra*, Dr. Eldering's analysis asserts the ordinarily skilled artisan would have been motivated to combine the references because continuity of a streamed movie is required and, thus, a seamless switch to another server is required. Ex. 1006 ¶ 173. On this record, Petitioner has shown a

sufficient rationale to combine Goldszmidt and Lumelsky in the manner indicated, and has shown that the combination meets the features of claim 1.

Thus, on this record and for purposes of this Decision, Petitioner has established a reasonable likelihood of prevailing in showing independent claim 1 is unpatentable over Goldszmidt alone, or, in the alternative, over the combination of Goldszmidt and Lumelsky.

Independent claims 12 and 18 recite features similar to independent claim 1. Petitioner maps the combined disclosures of Goldszmidt and Lumelsky to recitations of independent claim 12 (Pet. 51–54), independent claim 18 (Pet. 55–58), and dependent claims 2–11, 13–17, 19, and 20 (Pet. 45–50, 54–55, 58–60). Patent Owner does not challenge any of these additional mappings of claimed features with the combined disclosures of Goldszmidt and Lumelsky. We have reviewed Petitioner's arguments regarding these additional challenged claims and, on this record and for purposes of this Decision, Petitioner has established a reasonable likelihood of prevailing in showing claims 2–20 are unpatentable over Goldszmidt alone, or, in the alternative, over the combined teachings of Goldszmidt and Lumelsky.

### D. Conclusion

On this record, we are persuaded that there is a reasonable likelihood that Petitioner would prevail in showing that claims 1–20 of the '862 Patent are unpatentable. The Board has not made a final determination concerning patentability of any of the challenged claims.

## III. ORDERS

After due consideration of the record before us, and for the foregoing reasons, it is:

ORDERED that pursuant to 35 U.S.C. § 314, an *inter partes* review is hereby instituted as to claims 1–6 and 8–18 of the '862 Patent under 35 U.S.C. § 102(e) as anticipated by Shastri;

FURTHER ORDERED that pursuant to 35 U.S.C. § 314, an *inter* partes review is hereby instituted as to claims 1–20 of the '862 Patent under 35 U.S.C. § 103(a) as unpatentable over Goldszmidt;

FURTHER ORDERED that pursuant to 35 U.S.C. § 314, an *inter* partes review is hereby instituted as to claims 1–20 of the '862 Patent under 35 U.S.C. § 103(a) as unpatentable over Goldszmidt and Lumelsky;

FURTHER ORDERED that the trial is limited to the grounds of unpatentability listed above, and no other grounds of unpatentability are authorized for *inter partes* review; and

FURTHER ORDERED that pursuant to 35 U.S.C. § 314(a), *inter* partes review of the '862 Patent is hereby instituted commencing on the entry date of this Order, and pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4, notice is hereby given of the institution of a trial.

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