

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE LLC,
Petitioner,

v.

SANDPIPER CDN, LLC,
Patent Owner.

Case IPR2025-00969
Patent No. 8,478,903

PETITIONER'S REPLY TO PATENT OWNER'S RESPONSE

TABLE OF CONTENTS

I.	Introduction.....	1
II.	<i>Kenner’s</i> Content Delivery Network Is the Exact Type Claimed in the ’903 Patent	1
III.	Patent Owner’s Primary Arguments Are Rooted in Incorrect Claim Constructions	3
A.	“Alias Name” Need Not Be or Include a “Host Name”	3
B.	An Alias Name “Associated with” a Repeater Server Need Not Expressly Identify the Repeater Server.....	6
C.	“Requests Directed to the ... Shared Repeater Server” Need Not Be Originally Directed Only to the Shared Repeater Server	7
D.	“Content Providers Authorized to Have Resources Delivered” Does Not Require the System to Perform an Additional “Check”	8
IV.	<i>Kenner’s</i> Video ID Is the Claimed “Alias Name”	9
A.	<i>Kenner’s</i> Video ID Need Not Include a “Host Name”; It Must Correspond to Content Providers	10
B.	<i>Kenner’s</i> Video ID Is “Associated With” a Repeater Server (IM).....	10
C.	<i>Kenner’s</i> Content Requests Are “Directed to” a Repeater Server Based on the Alias Name	12
D.	<i>Kenner’s</i> Virtual URL Does Not Prevent Its Video ID from Being an “Alias Name”	16
V.	<i>Kenner</i> Discloses the Claimed “Table Listing ... Alias Names Corresponding to Content Providers Authorized to Have Resources Delivered ... via the at Least One Shared Repeater Server”.....	16
VI.	<i>Kenner</i> Discloses at Least One Shared Repeater Server <i>Addressable Using the First Alias Name and the Second Alias Name</i> (Claim 2).....	20

VII.	<i>Kenner-Rekimoto</i> Renders Obvious an Alias Name as a Domain Name and Resolving the Alias Name using DNS (Claim 34)	22
VIII.	Conclusion	24

I. Introduction

Patent Owner only challenges *Kenner*'s disclosure of an "alias name," as used in all claims, and its combination with *Rekimoto* for claim 34. Its only disputes rest on overly narrow interpretations of the challenged claims that improperly inject extraneous embodiment-specific requirements for reflector URLs, host names, DNS-style identifiers, and explicit server identification from the specification. The Board already rejected many of these interpretations at institution, and Patent Owner presents no new evidence or argument that merits a different conclusion now. Under the proper interpretation of the '903 patent and its claims, *Kenner* renders obvious the claimed "alias name" as used in the challenged claims and its combination with *Rekimoto* for claim 34 improves the system by enabling DNS and reducing latency. The Board should reject Patent Owner's arguments and find the challenged claims unpatentable.

II. *Kenner*'s Content Delivery Network Is the Exact Type Claimed in the '903 Patent

None of the concepts claimed in the '903 patent are novel and non-obvious. Patent Owner paints *Kenner* as having a "disparate technical architecture and operation" that lacks allegedly novel aspects of the '903 patent's system. Resp., 1. But *Kenner* provides the claimed content delivery network: a distributed system with multiple content providers and users accessing the network simultaneously.

Patent Owner touts the '903 patent's alleged advancements through delivering resources from multiple content providers. Resp., 7. *Kenner* provides this same functionality. Pet., 8-12. *Kenner*'s system relies on a system of index managers ("IMs") distributed across different regions that maintain and deliver local copies of video clips. *Kenner*, 40:24-28. Like the '903 patent, *Kenner*'s system delivers resources from multiple content providers because each content provider may be associated with a different source IM where that provider's clips are first uploaded. *Id.*, 45:25-31. And users may subscribe to individual content providers, allowing the users to view only those providers' content. *Id.*, 35:11-16, 51:20-24, 52:31-53:7.

Patent Owner also praises the '903 patent's use of a reflector 108 that constructs a URL for redirecting requests for an origin server to the reflector. Resp., 8-11. But these functions are absent from the challenged claims. See EX-1001, claims 3-10, 18-20 (excluded from Petition). Nor do the claims reflect the allegedly "novel use of the claimed 'alias name'" that Patent Owner asserts provides "common identification" for a repeater server that services multiple origin servers. Resp., 11-14. Rather, the *table listing a plurality of alias names corresponding to content providers*—as actually claimed—is taught by *Kenner*'s clip database listing video IDs (*alias names*) that include the content provider account number. Pet., 18-19. And *Kenner* discloses *analyz[ing], using the table, an alias name received with a client request ... to determine a content provider associated with the*

particular resource because *Kenner*'s IMs consult the clip database to determine the source IM where a content provider uploaded a clip. *Id.*, 24-25.

Patent Owner diminishes *Kenner* as a mere "video retrieval system" (Resp., 1, 23-26), but the '903 patent expressly contemplates "video content" among the resources it delivers (EX-1001, Abstract). And regardless, *Kenner*'s system "may be employed in many different applications" and "would also perform well for ... other data types." *Kenner*, 54:2-7. It is "not limited to video clips." *Id.*

The '903 patent claims the same form of content delivery network disclosed in *Kenner*.

III. Patent Owner's Primary Arguments Are Rooted in Incorrect Claim Constructions

Patent Owner states that "no term requires express construction beyond its plain and ordinary meaning" (Resp., 23), but then hinges its arguments, at least for the independent claims, solely on narrow constructions for "alias name," "associated with," "directed to," and "authorized to have resources delivered to client machines." Under the proper plain and ordinary meaning of the claims, *Kenner* indisputably teaches the claims.

A. "Alias Name" Need Not Be or Include a "Host Name"

Patent Owner attempts to construe "alias name" to require that the alias name expressly include a "host name." Resp., 11-14. Nothing in the claims imposes or supports this requirement. *See Chimie v. PPG Indus., Inc.*, 402 F.3d 1371, 1377

(Fed. Cir. 2005). Claim 1, for example, recites *at least one table listing a plurality of alias names* where first and second alias names are *associated with said at least one shared repeater server*, and *analyz[ing], using the table, an alias name received with a client request for a particular resource to determine a content provider associated with the particular resource*. EX-1001, 25:48-51. This merely requires that alias names be received with the request and analyzed using a table to determine a content provider. The claims do not demand any particular format for the alias name.

To the contrary, principles of claim differentiation counsel against limiting the alias name to host names. Dependent claim 25 further limits the *first alias name* to *a domain name*. *Id.*, 27:9-16. As Patent Owner acknowledges, the terms “domain name” and “host name” are used interchangeably. Resp., 53, n.1. This narrowing of alias names to domain names in the dependent claim demonstrates the term’s broader scope. *RF Delaware, Inc. v. Pacific Keystone Technologies, Inc.*, 326 F.3d 1255, 1264 (Fed. Cir. 2003) (“An independent claim usually covers a scope broader than the preferred embodiment, especially if the dependent claims recite the precise scope of the preferred embodiment.”); *Environmental Designs, Ltd. v. Union Oil Co. of California*, 713 F.2d 693, 699 (Fed. Cir. 1983) (“It is improper for courts to read into an independent claim a limitation explicitly set forth in another claim.”).

To support its argument, Patent Owner relies on examples in the specification, like “wr1.example.com” and “wr2.example.com.” Resp., 12, 34. However, as Patent Owner recognizes, these are merely *examples*. *Id.*, 12. This listing of example alias names as host names is insufficient to demonstrate a clear intent to limit the claims in this way. *See, e.g., Decisioning.com, Inc. v. Federated Dep’t Stores, Inc.*, 527 F.3d 1300, 1314 (Fed. Cir. 2008) (“Th[e] description of a preferred embodiment, in the absence of a clear intention to limit claim scope, is an insufficient basis on which to narrow the claims.”); *Thorner v. Sony Comp. Entm’t Am. LLC*, 669 F.3d 1362, 1366-68 (Fed. Cir. 2012) (“The standard for disavowal of claim scope is ... exacting. ... [D]isclosing embodiments that all use the term the same way is not sufficient to redefine a claim term.”). The Federal Circuit has cautioned against limiting claims based on examples absent a specific showing of intent. *See, e.g., Silicon Graphics, Inc. v. ATI Techs., Inc.*, 607 F.3d 784, 792 (Fed. Cir. 2010). Patent Owner has not demonstrated this clear intent. *Id.*

Patent Owner further argues that the alias name must be a host name because the same at least one shared repeater server may be associated with multiple alias names. Resp., 13-14. This too is agnostic to the alias name’s format. The claimed table need only correlate both the first and second alias names with the same repeater server (e.g., in separate rows). The Board properly rejected this narrowing at institution, rejecting Dr. Shenoy’s explanation that an alias name is “an alternative

address for a repeater server that contains the URL of a resource” (see Paper 7, 32, 35) and finding that “[n]either Dr. Shenoy nor Patent Owner ... explain why that description would either be the plain meaning of ‘alias’ or an express definition of ‘alias’ set forth in the ’903 patent.” Paper 14, 13. Patent Owner presents no new argument or evidence to undermine this preliminary finding.

The proper plain and ordinary meaning of “alias name” does not require a “host name.”

B. An Alias Name “Associated with” a Repeater Server Need Not Expressly Identify the Repeater Server

Patent Owner also attempts to import a narrow, limiting meaning to an *alias name* being ***associated with*** said at least one shared repeater server as requiring the alias name itself to expressly identify the repeater. Resp., 33 (arguing an alias name (video ID) is not associated with a repeater server (PIM) when “nothing in the video ID identifies the specific PIM”); 36-37. The plain and ordinary meaning of “associated with” is not so limited and the claims themselves prove it.

The claims do not impart any special meaning to “associated with.” Claim 1 also uses “associated with” referring to *resources associated with ... content providers*. EX-1001, 25:18-24. The resources (e.g., videos) themselves surely are not required to expressly identify the content providers. Claim 16 recites *a location associated with a client machine*. *Id.*, 26:42-45. Again, this does not require the

location to expressly identify the client machine. Claim 28 refers to *an origin server associated with the particular resource* (*id.*, 27:51-56), but this does not mean the origin server must be named to expressly identify every particular resource it stores. Nor does Patent Owner contend “associated with” carries the same requirement for any of these uses of the term.

The term “associated with” is consistently used in the claims according to its plain meaning that requires some association, correlation, or relation between two items, not that one item expressly identifies the other.

C. “Requests Directed to the ... Shared Repeater Server” Need Not Be Originally Directed Only to the Shared Repeater Server

Patent Owner argues that requests *directed to the at least one shared repeater server, based at least in part on said first alias name* must: 1) identify a specific repeater server based on the alias name (Resp., 39, 41); and 2) direct the *original request* to the specific repeater server (Resp., 38, 42). Both requirements depart from the plain and ordinary meaning by injecting unrecited limitations into the claim.

First, requiring the request (which includes the alias name) to identify a specific repeater server is the same as requiring the alias name to identify a specific repeater server. That is not a requirement of the claims because the “alias name” need not include or be the “host name” identifying a specific server. *Supra*, §III.A.

Second, neither the claims nor the specification require that the request be initially sent from the client machine to the ultimate repeater server storing the requested content. The '903 specification itself acknowledges that the request is routinely received and processed by several servers. For example, the '903 patent envisions “repeaters [that] ‘peer’ with one another and make copies of resources” (EX-1001, 3:54-58) such that “[i]f a resource is not cached locally, the cache can query its ‘peer caches’ to see if one of them contains the resource” (*id.*, 10:48-53).

The proper plain and ordinary meaning of *requests directed to ... the shared repeater server* does not require identification of the specific repeater server or that the original request be sent only to the specifically identified repeater server. Rather, it is broad enough to allow for receipt by multiple servers and processing along its route, so long as the direction is *based at least in part on said ... alias name*.

**D. “Content Providers Authorized to Have Resources Delivered”
Does Not Require the System to Perform an Additional “Check”**

Patent Owner interprets *content providers authorized to have resources delivered to client machines* as requiring the repeater server to “check whether a ‘content provider’ is authorized to provide the requested content.” Resp., 43-44. The claim’s plain and ordinary meaning does not require a separate verification step. Claim 1 requires only that a table list *alias names corresponding to content providers* and that these content providers be *authorized to have resources delivered to client*

machines. EX-1001, 25:14-51. The specification likewise is silent about any “check” or separate verification step for content providers.

Under the plain and ordinary meaning, any content providers that are authorized (e.g., by being assigned a content provider ID) meet the limitation. The plain and ordinary meaning does not require a separate “check” or verification process.

IV. *Kenner*’s Video ID Is the Claimed “Alias Name”

The independent claims require that the alias name 1) “correspond[] to content providers” [1.b]; 2) be “associated with ... at least one shared repeater server” [1.c], [1.e]; 3) facilitate “requests ... from said client machines [to be] directed to the at least one shared repeater server” [1.d], [1.f]; and 4) be “received with a client request for a particular resource” [1.g]. EX-1001, 25:14-51. Patent Owner disputes requirements 2 and 3¹ based on its flawed interpretation of the claim; there is no claimed requirement that the alias name include a host (or domain) name. *See* §III.A. Under a proper interpretation of the claim, *Kenner*’s video ID is the claimed alias name because it corresponds to a content provider, is used to identify the appropriate IM to source the requested video content (associated with a repeater server), and because requests for content are directed to the appropriate repeater server based at

¹ Patent Owner does not dispute that *Kenner*’s video ID meets requirements 1 and 4.

least in part on the video ID. Pet., 19-22. Although *Kenner* uses different terminology than the '903 patent, it performs the same claimed routing, association, and content-provider identification functions.

A. *Kenner's* Video ID Need Not Include a "Host Name"; It Must Correspond to Content Providers

Patent Owner's overly narrow construction adds the requirement that the claimed alias name include a "host name" for a server. Resp., 34-35. But this construction is incorrect as explained in Section III.A. The plain and ordinary meaning requires that the alias names *correspond[] to content providers*, not particular servers. EX-1001, 25:18-24. As the Petition explains, *Kenner's* video ID corresponds to content providers because it refers to the particular content provider that uploaded a video clip by including that "content provider's account number." Pet., 19 (citing Mowry, ¶80; *Kenner*, 36:32-37:6). Patent Owner does not dispute that *Kenner's* video ID corresponds to a content provider; its assertion that the alias name must include a host (or domain) name is wrong. *Supra*, §III.A

B. *Kenner's* Video ID Is "Associated With" a Repeater Server (IM)

Patent Owner mistakes the claimed *alias name being associated with said at least one repeater server* as requiring the alias name to explicitly identify the repeater server in the alias name itself. That is not required. *Supra*, §III.B. As the Petition explains, *Kenner's* video ID (*alias name*) is associated with an IM (*repeater server*) in at least two ways: (1) in a clip database maintained at each IM indicating

which clips are stored on its extended SRUs, and (2) through a second database maintained at each IM indicating other IMs likely to store a desired clip based on content coordinate data. Pet., 20-21.

Patent Owner's arguments do not address the clip database association mappings under the appropriate interpretation of the claim and the reference. It instead argues that *Kenner's* video ID cannot correspond to the claimed alias name because the video ID itself does not identify the PIM (Resp., 32-33) and that *Kenner's* content coordinate data identifies the type of clip not the particular clip. *Id.*, 33-34. These arguments fail.

First, Patent Owner wrongly requires that the association be reflected within the contents of the alias name itself. *Id.*, 33 (arguing that “nothing in *Kenner's* video ID associates the video ID with a repeater server”). This requirement is divorced from the language of the claims. *Supra*, §III.B. By listing the video ID within the clip database for an IM that stores the clip, *Kenner* teaches the claimed association. Pet., 21. The Board considered and rejected Patent Owner's argument at institution, and Patent Owner has not provided any additional argument or evidence to undermine the earlier finding. Paper 14, 11 (finding Patent Owner's argument “unavailing” because “Petitioner does not assert that *Kenner's* ID identifies a repeater server, relying instead on *Kenner's* clip database”).

Second, Patent Owner wrongly focuses on the **content** of the video ID rather than how it is used, arguing that the video ID is not associated with an IM because “the video ID includes content coordinate data that generally identifies the types of *files* found in IMs rather than IMs.” Resp., 33. As explained in the Petition, the association between the video ID and IM is reflected in the *database*’s correlation between an IM and the “content coordinates of all audio-video files that [the IM] maintains.” Pet., 21 (quoting *Kenner*, 38:3-8). As Patent Owner acknowledges, this correlation (i.e., association) indicates a likelihood the clip will be stored in an IM. Resp., 33-34. A clip identified by a video ID and correlated in the database with an IM as likely storing the clip reflects an association with that IM. Mowry, ¶87.

Dr. Mowry’s deposition testimony supports this position. Dr. Mowry confirmed that an IM uses the content coordinate data to identify other IMs that are likely to have the clip, based on the database correlation. EX-2017, 126:5-12. That the PIM could identify multiple IM candidates storing a clip, as Patent Owner argues (Resp. 33-34 (quoting EX-2017, 126:5-12)), simply proves that each is associated with the clip and the video ID (*alias name*).

C. *Kenner*’s Content Requests Are “Directed to” a Repeater Server Based on the Alias Name

As the Petition explains, *Kenner* also discloses directing requests to an IM based on the video ID. Pet., 21-22. Patent Owner’s opposition focuses only on the

initial request to PIM 64,² wrongly requiring 1) identifying a specific repeater server based on the alias name (Resp. 39, 41); and 2) directing the *original request* to the specific repeater server (Resp. 38, 42). Both are based on flawed interpretations of the claims. *Supra*, §III.C. The claims merely require that the alias name be used in directing requests to the at least one shared repeater server. *Id.*

Kenner's video ID (*alias name*) is used in directing requests to an IM (*repeater server*) storing the requested clip for two reasons:

- 1) *Kenner*'s local SRU "intercepts a video ID" (*alias name*) "which is stored within the EMBED field in the Web page ... [and] passes this video ID along to the PIM." *Kenner*, 36:22-26. Thus, the SRU directs the request to the PIM 64 *based at least in part on* the video ID, which it locates in the request. *Id.*, 36:22-26, 37:7-10. If the video ID were not present, it would not forward it to PIM 64. Mowry, ¶89.
- 2) If *Kenner*'s IM that receives the initial content request does not store the requested clip, it uses content coordinate data included in the video ID

² Patent Owner also argues that *Kenner* does not teach directing requests based on an alias name "because *Kenner*'s video ID is not an alias name" and is not "associat[ed] with a repeater server." Resp., 39. But these fail for the reasons explained above. *Supra*, §§III.A, III.B.

(*alias name*) (*Kenner*, 36:28-31) to “determine which IMs are likely to have the desired clip, and query only those IMs” (*id.*, 41:1-5). The IM receiving the initial content request thus determines where (i.e., which IM) to direct requests based on the alias name.

For the first reason—the initial request to PIM 64 that Patent Owner disputes—the antecedent basis does not require “an identification of the PIM 64 specifically from among other IMs,” as Patent Owner argues. Resp., 39, 41 (“[t]here is no examination of the content of the video ID to determine that PIM 64 (from among other IMs) should receive a particular client request.”). Claim 1 recites that *requests for the first resource ... are directed to **the** at least one shared repeater server*. EX-1001, 25:35-37 (emphasis added). Patent Owner’s argument that the word “the” alone requires selection of a particular repeater server from among a plurality of servers is incorrect. Resp., 37-39. The Federal Circuit has rejected similar theories. *Am. Calcar, Inc. v. Am. Honda Motor Co.*, 651 F.3d 1318, 1342 (Fed. Cir. 2011) (finding that “the” in the term “prompting ... to select *the* option” “simply refers back to the prior phrase ‘*an* option’” and rejecting district court’s interpretation to require selecting “‘only that’ option.”) (emphases in original). Moreover, Patent Owner relies only on Dr. Shenoy’s declaration for this assertion (Resp., 37-39), which merely repeats the Response’s arguments and is entitled to little weight. *See, e.g., Xerox Corp. v. Bytemark, Inc.*, IPR2022-00624, Paper 9,

15-17 (P.T.A.B. Aug. 24, 2022) (precedential). The antecedent basis here simply means the requests are directed to the same repeater server that is *constructed and adapted to replicate at least some of the resources associated with a first content provider*. EX-1001, 25:18-21. The Petition is consistent with this understanding: the SRU directs requests to PIM 64, which is at least one of the IMs (repeater servers) relied upon for other elements of the claims—it need not be the **only** component of the system to receive the content request. *See* Pet., 21-22.

For the second reason—directing requests to neighboring IMs—Patent Owner wrongly demands that the claims require that “directed to” only allow for the “original handling of a request received from a client machine.” Resp., 42. But the claims do not require any form of “original handling” of the request. *Supra*, §III.C; EX-1001, 25:14-51. Rather, they require that the requests directed to the shared repeater server be requests *from client machines* through which content providers are authorized to have resources delivered, allowing for down-the-line processing to route the content request to the shared repeater server based, in part, on the alias name. *Supra*, §III.C. *Kenner* teaches this. After receiving a request that originated from a client machine, a neighboring IM queries the IM (*at least one shared repeater server*) to determine whether that IM is appropriate to handle the request based on whether it stores the requested video clip identified in the video ID (*alias name*).

Kenner, 40:29-33. If so, the neighboring IM passes the request to the appropriate IM that is likely storing the requested clip. *Id.*, 41:1-5.

D. *Kenner’s* Virtual URL Does Not Prevent Its Video ID from Being an “Alias Name”

Separate from its video ID, *Kenner* discloses a virtual URL that a local SRU uses to “pass[] the video ID to the PIM” in response to a request. *Kenner*, 37:7-10. Patent Owner argues that *Kenner’s* video ID cannot be an alias name because *Kenner’s* virtual URL, not the video ID, “identif[ies] at least one shared repeater server.” Resp., 35-36. The alias name *identifying* at least one shared repeater server is not a requirement of the independent claims, as explained in Section III.C. EX-1001, 25:14-51; 27:25-56; 28:38-29:4; 29:11-34; 30:5-26. Whether *Kenner’s* virtual URL performs this additional function is irrelevant.

V. *Kenner* Discloses the Claimed “Table Listing ... Alias Names Corresponding to Content Providers Authorized to Have Resources Delivered ... via the at Least One Shared Repeater Server”

Kenner discloses the claimed *at least one table* because the primary IM maintains a clip database (*table*) storing information on the video clips stored on its extended SRUs. Pet., 18. This clip database reflects *content providers authorized to have resources delivered ... via the at least one shared repeater server* because *Kenner’s* video ID includes the account number of a content provider that delivers content via the IM. *Id.*, 18-20. Patent Owner argues: 1) *Kenner’s* content providers are not authorized (although Patent Owner admitted this in its POPR); and

2) *Kenner*'s IM "does not check whether a '*content provider*' is authorized" (not a requirement of the claims). Resp., 43-48.

First, Patent Owner distracts from the true inquiry—whether *Kenner*'s table lists alias names corresponding to **authorized content providers**—arguing that Petitioner's cited portions of *Kenner* describe "checking an end user's or recipient's subscription rights." Resp., 46-47. The Petition cited these passages of *Kenner* to draw comparison to the '903 patent's description of determining whether a "requester is authorized to access the resource"—the only use of the word "authorize" or similar root words in the specification. Pet., 19. These portions nonetheless demonstrate that *Kenner*'s system selectively controls which content from which content providers may be delivered to which users. *Kenner*, 37:17-20, 52:31-53:7.

Focusing on the content provider rather than the user, a **content provider** in *Kenner* would have been *authorized to have resources delivered ... via the at least one shared repeater server* by virtue of its content being available on the PIM. *Kenner* explains that content providers must be registered to use the system, and *Kenner*'s video ID (*alias name*) includes "the content provider's account number as provided by the organization running the subscription service." *Id.*, 36:32-37:5. A content provider identified by account number in *Kenner*'s video ID and with its

content being hosted on *Kenner*'s IMs is a *content provider[] authorized to have resources delivered*, as claimed.

Patent Owner even conceded that *Kenner*'s content providers are authorized, stating in its preliminary response that "all content providers are authorized to use the PIM in *Kenner*." Paper 7, 37-38. And at institution, the Board agreed. Paper 14, 10 (finding Patent Owner's arguments about user authorization were "undercut by its admission that 'all content providers are authorized to use the PIM in *Kenner*.'").

Patent Owner now criticizes the Board's prior finding, characterizing it as a new "theory to correct deficiencies in *Kenner*." Resp., 48. This is incorrect. The Petition cites to the inclusion of "the content provider's account number," demonstrating that the content provider must be registered, and thus authorized, to use the system's IMs. Pet., 19. This is not a new theory—it relies on the same disclosure in the same reference as the Petition. *See Apple Inc. v. Andrea Elecs. Corp.*, 949 F.3d 697, 706 (Fed. Cir. 2020) ("[Petitioner]'s legal ground did not change in its reply—its reply still asserted that claims ... would have been obvious over [the same prior art references]. Moreover, [Petitioner]'s reply relies on the same algorithm from the same prior art reference to support the same legal argument."). This is, at most, an allowable expansion on the previously presented invalidity theory in response to Patent Owner's arguments. *Chamberlain Grp. Inc. v. One World*

Techs. Inc., 944 F.3d 919, 925 (Fed. Cir. 2019) (“Parties are not barred from elaborating on their arguments on issues previously raised.”); *see also Anacor Pharms., Inc. v. Iancu*, 889 F.3d 1372, 1380-81 (Fed. Cir. 2018) (“[Petitioner] may introduce new evidence after the petition stage if the evidence is a legitimate reply to evidence introduced by the patent owner ...”).

Second, Patent Owner argues that *Kenner* does not disclose the claimed table because *Kenner*’s IM “does not check whether a ‘*content provider*’ is authorized to provide the requested content.” Resp., 43-44. Patent Owner invents this additional affirmative step of “check[ing] whether a ‘*content provider*’ is authorized.” *Id.*, 43-44, 47 (“[T]he only permissions checked in *Kenner* are the access permissions of end users.”), 48 (“*Kenner* does not discuss checking or using the authorization status of a content provider at all when determining whether to deliver resources to client machines”). The claims do not require it. *Supra*, §III.D. And the Board already rejected this assertion at institution, finding that “Claim 1 does not require the table to list authorizations, only that the table list ‘alias names corresponding to content providers authorized to have resources delivered to client machines via the at least one shared repeater server.’” Paper 14, 10. Patent Owner presents no new evidence or argument to overcome the Board’s preliminary finding.

VI. *Kenner* Discloses at Least One Shared Repeater Server *Addressable Using the First Alias Name and the Second Alias Name* (Claim 2)

The Petition explains that *Kenner*'s PIM is addressable using the first and second alias names because *Kenner*'s virtual URL addresses the PIM and the video ID is used to generate the virtual URL. Pet., 26. The PIM is thus addressed using the video ID. *Id.* Patent Owner disputes this, largely repeating its earlier "host name" arguments. Resp., 49-52. These fail for similar reasons to those discussed above. *Supra*, §IV.A.

First, Patent Owner argues that *Kenner* does not disclose at least one shared repeater server being "addressable using the first alias" because "*Kenner*'s video ID is not a host name." Resp., 50-51. As explained above, neither the claims nor the specification impose this requirement. *Supra*, §§III.A, IV.A. Claim 2 is no different, requiring that the shared repeater server be *addressable using the first alias name and the second alias name*. EX-1001, 25:52-54. In other words, the first and second alias names must both be used in addressing the same shared repeater server. Pet., 25-26; Mowry, ¶¶97-98.

Kenner teaches this. Its SRU constructs a "virtual URL" ... in the form 'http:' plus the Internet address of the PIM 64 ... plus the video ID," and uses this virtual URL to direct a request to the primary IM. *Kenner*, 37:7-17. The SRU thus addresses the request to the IM *using* the video ID: it includes the video ID in the URL. *Id.*

This would be the same whether the alias name is the first alias name (for a first resource) or the second alias name (for a second resource). Pet., 26; Mowry, ¶98.

Patent Owner's citations to the '903 patent do not support its requirement that the alias name be "resolvable to an address." Resp., 49-50. Rather, this portion of the '903 patent generally describes how files are accessed using URLs. EX-1001, 6:45-61. To access a file, a program "first locates the computer (i.e., a server computer) specified by the host name" by identifying "an actual computer network address for that server computer" in the form of an "Internet Protocol (or IP) address" and "then use[s] the actual address to access the remote (server) computer." *Id.* This merely explains that host names are resolvable to IP addresses. *Id.* Nothing in this passage dictates that the alias name itself be a host name. Nor does listing example alias names in the form of host names (Resp., 50) impose such a requirement in the claims, as explained above. *Supra*, §III.A.

Second, Patent Owner, again assuming that the alias name must be an internet address, argues that "*Kenner*'s virtual URL already includes an 'Internet address' corresponding to an IM" and thus "it would be nonsensical to also resolve a video ID to identify another address." Resp., 51. But as explained, Patent Owner is wrong that an alias name must be an "internet address." *Supra*, §III.A. As Patent Owner acknowledges, *Kenner*'s SRU addresses requests to the PIM by constructing the

virtual URL **using the video ID (*alias name*)** that is included in the virtual URL.

Kenner, 37:7-10

VII. *Kenner-Rekimoto* Renders Obvious an Alias Name as a Domain Name and Resolving the Alias Name using DNS (Claim 34)

Kenner's video ID is not a domain or host name, but it would have been obvious to structure *Kenner*'s video ID as a domain name to provide the DNS resolution advantages described in *Rekimoto*. Pet., 57-59. Patent Owner misinterprets Petitioner's combination, asserting that (1) it introduces an "internal conflict" with *Kenner*'s virtual URL (Resp., 52-54), and (2) there would be no motivation to combine the references (Resp., 54-56). Both of these challenges fall short.

First, Patent Owner alleges that the *Kenner-Rekimoto* combination "introduces an internal conflict with how *Kenner*'s system operates" because *Kenner*'s "virtual URL already includes an 'Internet address.'" Resp., 53-54. This ignores the actual combination proposed in the Petition. Petitioner's proposed combination **does not** "generate a virtual URL including both the 'Internet address' and another IP address derived from applying DNS resolution to the video ID," as Patent Owner alleges. Resp., 54. Rather, the proposed combination reformats *Kenner*'s virtual URL and video ID into *Rekimoto*'s format to take advantage of DNS resolution. Pet., 55-60. There is no inconsistency as the video ID and virtual

URL would be combined. *Rekimoto* discloses generating a URL such as “hanaya@ipd.sony.co.jp,” which embeds various information such as “user name, a host name, an organization name, an organization attribute,” etc. *Rekimoto*, 18:3-12. And, as the Petition explains, *Kenner*’s video ID embeds similar information. Pet., 58-59. Under the proposed combination, it would have been obvious to structure *Kenner*’s video ID like the URL disclosed in *Rekimoto*. *Id.* Thus, when resolving requests, this video ID, formatted as the virtual URL, would be provided to the DNS server. *Id.*, 59.

Second, Patent Owner’s argument that *Kenner*’s virtual URL “already sufficiently identifies a server without the need for additional DNS resolution” likewise ignores the proposed combination above. Resp., 53-54. When formatting the video ID as the URL, the system would indeed rely on DNS resolution, as the ’903 patent recognizes. EX-1001, 6:45-61 (explaining that “to locate the server ‘www.uspto.gov,’” a program would “access a Domain Name Server (DNS), providing the DNS with the host name (www.uspto.gov)”).

Third, Patent Owner challenges the motivation to combine *Kenner* and *Rekimoto* for the same reason, arguing “*Kenner*’s virtual URL already identifies a specific IM.” Resp., 55. As explained in the Petition, a POSITA would have been motivated to combine *Rekimoto* and *Kenner* to reduce latency in the network. Pet., 55-56. And in the combined *Kenner-Rekimoto* system, when a clip is not

available on the local SRUs, the IM will direct the client request to the DNS server, as described in *Rekimoto*, to identify the closest IMs (and associated remote SRUs) for handling the request. Pet., 58. Patent Owner's dispute does not address the combination. *Kenner*'s virtual URL controls only the direction of the request from the SRU to the IM; it does not enable DNS or reduce latency. *Kenner*, 37:7-17. On the other hand, in the proposed *Kenner-Rekimoto* combination, DNS is enabled when the clip is not available on the local SRUs (Pet., 58) and would decrease latency in the system when the clip is not available on the local SRUs, as described in *Rekimoto*. Mowry, ¶¶185, 190.

VIII. Conclusion

For the foregoing reasons, Petitioner respectfully requests that the Board find the challenged claims unpatentable.

Dated: May 18, 2026

Respectfully submitted,

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CERTIFICATE OF COMPLIANCE

Pursuant to 37 C.F.R. § 42.24(c)(1), the undersigned hereby certifies that the foregoing REPLY TO PATENT OWNER'S RESPONSE contains 5,592 words, excluding the parts exempted under 37 C.F.R. § 42.24(c), as measured by the word-processing system used to prepare this paper.

/Erika H. Arner/

Erika H. Arner, Lead Counsel

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CERTIFICATE OF SERVICE

The undersigned certifies that a copy of the foregoing **Petitioner's Reply to Patent Owner's Response** was served electronically via email on May 18, 2026, in its entirety on the following:

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