

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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GOOGLE LLC,  
Petitioner,

v.

SANDPIPER CDN, LLC,  
Patent Owner.

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IPR2025-00969  
Patent 8,478,903 B2

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Before MITCHELL G. WEATHERLY, SHEILA F. McSHANE, and  
MICHAEL T. CYGAN, *Administrative Patent Judges*.

CYGAN, *Administrative Patent Judge*.

DECISION  
Granting Institution of *Inter Partes* Review  
35 U.S.C. § 314

## I. INTRODUCTION

### A. *Background and Summary*

Google LLC (“Petitioner”) filed a Petition requesting an *inter partes* review of claims 1, 2, 22–24, and 26–46 of U.S. Patent No. 8,478,903 (Ex. 1001, “the ’903 patent”). Paper 1 (“Pet.”). The Petition is supported by a Declaration from Dr. Todd C. Mowry. Ex. 1003 (“Mowry Declaration”). Sandpiper CDN, LLC (“Patent Owner”) filed a Preliminary Response to the Petition. Paper 7 (“Prelim. Resp.”). Patent Owner’s Preliminary Response is supported by a Declaration of Dr. Prashant Shenoy. Ex. 2014 (“Shenoy Declaration”). The proceeding was referred to this panel by the Acting Chief Administrative Judge for determination of whether to institute trial under 35 U.S.C. § 314. Paper 13.

We have authority to determine whether to institute an *inter partes* review. *See* 35 U.S.C. § 314 (2018); 37 C.F.R. § 42.4(a) (2023). The standard for instituting an *inter partes* review is set forth in 35 U.S.C. § 314(a), which provides that an *inter partes* review may not be instituted “unless . . . there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” For the reasons given below, on this record, Petitioner has established a reasonable likelihood that it would prevail in showing the unpatentability of at least one of challenged claims 1, 2, 22–24, and 26–46 of the ’903 patent. Accordingly, we institute an *inter partes* review of the ’903 patent.

### B. *Real Parties-in-Interest*

Petitioner identifies itself as a real party-in-interest. Pet. 67. Patent Owner identifies itself as a real party-in-interest. Paper 3, 1.

*C. Related Matters*

The parties represent that the '903 patent is involved in *Sandpiper CDN, LLC v. Google LLC*, 2-24-cv-03951 (CDCA), filed May 10, 2024. Paper 3, 1; Pet. 68. Petitioner further represents that the '903 patent is involved in *Sandpiper CDN, LLC v. Comcast Cable Commc 'ns Mgmt. LLC*, No. 2:24-cv-00886 (E.D. Tex.), filed Nov. 1, 2024. Pet. 68.

*D. The '903 Patent*

The '903 patent is titled “Shared Content Delivery Infrastructure.” Ex. 1001, code (54). The '903 patent issued on July 2, 2013 from U.S. Application No. 11/065,412, filed on February 23, 2005, which is a continuation of U.S. Application No. 09/612,598, filed on July 7, 2000, which is a division of U.S. Application No. 09/021,506, filed on February 10, 1998, now U.S. Patent 6,185,598. *Id.* at codes (21), (22), (60). The '903 patent relates to “[a] system in which a plurality of content providers provide multiple resources to multiple clients.” *Id.* at code (57). A shared content delivery network is formed from a plurality of servers, distinct from content sources associated with content providers, to serve resources to the clients. *Id.*

*E. Illustrative Claim*

Claim 1 is illustrative, and recites as follows:<sup>1</sup>

1. [1.pre] A content delivery system operative in a computer network for delivering resources associated with a plurality of content providers to multiple client machines, the system comprising:

[1.a.i] at least one shared repeater server constructed and adapted to replicate at least some of the resources associated with a first content provider of said plurality of content providers,

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<sup>1</sup> Bracketed organization added as per the Petition. Pet. 71–72.

[1.a.ii] and to replicate at least some of the resources associated with a second content provider of said plurality of content providers, wherein the second content provider is distinct from the first content provider;

[1.b] at least one table listing a plurality of alias names corresponding to content providers authorized to have resources delivered to client machines via the at least one shared repeater server, wherein the plurality of content providers comprises the first content provider and the second content provider,

[1.c] wherein at least a first resource associated with the first content provider is associated with a first alias name of the plurality of alias names, said first alias name being associated with said at least one shared repeater server;

[1.d] wherein, requests for the first resource from said client machines are directed to the at least one shared repeater server, based at least in part on said first alias name;

[1.e] wherein at least a second resource associated with the second content provider is associated with a second alias name of the plurality of alias names, said second alias name being associated with said at least one shared repeater server;

[1.f] wherein requests for the second resource made from said client machines are directed to the at least one shared repeater server, based at least in part on said second alias name;  
and

[1.g] wherein the at least one shared repeater server is further constructed and adapted to analyze, 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, 25:14–51.

*F. Evidence*

Petitioner relies on the following evidence.

<b>Name</b>	<b>Document</b>	<b>Exhibit</b>
Kenner et al. “Kenner”	WO 96/41285 A1	1005
Vetter et al. “Vetter”	“Mosaic and the World-Wide Web,” Computer, vol. 27, n. 10, 49 (October 1994).	1006
Rekimoto	EP 0753836 A2	1007
Boyles et al. “Boyles”	US 5,511,208	1008

*G. Prior Art and Asserted Grounds*

Petitioner asserts that claims 1, 2, 22–24, and 26–46 would have been unpatentable on the following grounds:

<b>Claim(s) Challenged</b>	<b>35 U.S.C. §</b>	<b>Reference(s)/Basis</b>
1, 2, 22–24, 26, 28–32, 35, 37, 38, 40, 41, 43–45	103(a) <sup>2</sup>	Kenner
33	103(a)	Kenner, Vetter
34	103(a)	Kenner, Rekimoto
27, 36, 39, 42, 46	103(a)	Kenner, Boyles

**II. ANALYSIS**

*A. Legal Standards*

A claim is unpatentable under 35 U.S.C. § 103 if the differences between the claimed subject matter and the prior art are such that the subject matter, as a whole, “would have been obvious at the time the invention was made to a person having ordinary skill in the art [to which said subject matter pertains].” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual

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<sup>2</sup> We apply pre-AIA 35 U.S.C. §§ 102, 103(a) to the ’903 patent because its priority date predates March 16, 2013. Ex. 1001, codes (22), (60); Pet. 2.

determinations including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of ordinary skill in the art; and (4) objective evidence of non-obviousness.<sup>3</sup> See *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

*B. Level of Ordinary Skill in the Art*

Petitioner asserts that a person of ordinary skill in the art (“POSITA”) at the critical time “would have had at least a bachelor’s degree in computer science, electrical engineering, or a related field, and at least two years of work or research experience in the field of content delivery management or networks,” and that “[w]ork experience can substitute for formal education and additional formal education can substitute for work experience.” Pet. 5 (citing Ex. 1003 ¶ 47). Patent Owner does not provide any such assessment in its Preliminary Response. Prelim. Resp. 26. For purposes of this Decision, we adopt Petitioner’s proposed level of ordinary skill, as it appears to be consistent with the specification of the ’903 patent and the prior art of record.

*C. Claim Construction*

In an *inter partes* review, we construe a patent claim “using the same claim construction standard that would be used to construe the claim in a civil action under 35 U.S.C. [§] 282(b).” 37 C.F.R. § 42.100(b). Under this standard, the words of a claim generally are given their “ordinary and customary meaning,” which is the meaning the term would have to a person of ordinary skill at the time of the invention, in the context of the entire

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<sup>3</sup> Neither party presents evidence or arguments regarding objective evidence of non-obviousness.

patent including the specification. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–13 (Fed. Cir. 2005) (en banc).

Neither party proposes any express claim construction at this stage of the proceeding. Pet. 5; Prelim. Resp. 26. Based on the record before us, we determine that no claim term requires express construction for purposes of this Decision.

#### *D. Obviousness over Kenner*

Petitioner asserts that claims 1, 2, 22–24, 26, 28–32, 35, 37, 38, 40, 41, and 43–45 are unpatentable under 35 U.S.C. § 103 as obvious over Kenner. Pet. 6. Patent Owner argues against this assertion. Prelim. Resp. 27.

Upon consideration of Petitioner’s explanations and the totality of evidence in this current record, we are persuaded that Petitioner demonstrates a reasonable likelihood of prevailing in showing that at least one claim is unpatentable under 35 U.S.C. § 103.

##### *1. Kenner*

Kenner is titled “System and Method for Delivery of Video Data Over a Computer Network.” Ex. 1005, code (54). Kenner relates to a system for collecting desired video clips through requests from the Internet. *Id.*, code (57). “When the user requests a desired video clip shown on a Web page, the request is diverted to a primary index manager,” which “attempts to locate the closest server containing the requested clip, from which the download is completed.” *Id.*

Patent Owner provides the following illustration of Kenner’s clip database used to associate video clips with the SRUs containing the video clip:

Item Name	Format	Description
Counter	numeric	Primary index for the records. Each record represents one video clip.
Video ID	text	The globally unique name of the video clip, as specified above.
Extended SRUs	IP array	The IP addresses of all the extended SRUs 66 which contain the file.

Prelim. Resp. 33 (quoting Ex. 1005, 34:7–11).

## 2. Analysis of Claim 1

We begin our analysis of Petitioner’s obviousness contentions with Petitioner’s assertions as to claim 1.

*a) [1.pre] A content delivery system operative in a computer network for delivering resources associated with a plurality of content providers to multiple client machines, the system comprising: [1.a.i] at least one shared repeater server constructed and adapted to replicate at least some of the resources associated with a first content provider of said plurality of content providers, [1.a.ii] and to replicate at least some of the resources associated with a second content provider of said plurality of content providers, wherein the second content provider is distinct from the first content provider; [1.b] at least one table listing a plurality of alias names corresponding to content providers authorized to have resources delivered to client machines via the at least one shared repeater server, wherein the plurality of content providers comprises the first content provider and the second content provider*

Patent Owner does not contest Petitioner’s assertions as to limitations [1pre]–[1a]. Prelim. Resp. 16–39. We have reviewed Petitioner’s assertions relating to limitations [1pre]–[1a], and the uncontested portions of [1.b], and find them supported by the record. Pet. 17–20. In particular, that Kenner describes a distributed digital video clip delivery system to deliver (replicate) requested video clips (resources) from content providers to thousands of authorized users’ multimedia terminals via a Primary

Index Manager (“PIM,” a shared repeater server) that uses a clip database (table) having a video ID (alias name) field that is used to refer to a particular resource or entity and includes the content provider’s account number. *Id.*

With further respect to limitation [1.b], Petitioner asserts that Kenner’s content providers are “authorized to have resources delivered to client machines via the at least one shared repeater server because, prior to downloading a clip to a user’s terminal the primary IM ‘checks the user’s subscription rights in its user database’ to determine if the download is ‘authorized and necessary.’” Pet. 19 (citing Ex. 1005, 37:18–31, 38:17–22, 52:7–12) (emphasis removed). Petitioner cites to an allegedly similar authorization in the ’903 patent. *Id.* (citing Ex. 1001, 23:17–20 (“Each new request for the resource must be tested at the origin server to assure that the requester is authorized to access the resource.”)).

Patent Owner argues that Kenner does not teach that its table list content from “content providers that are authorized to have resources delivered to client machines via the at least one shared repeater server.” Prelim. Resp. 37 (citing Ex. 2014 ¶ 113) (emphasis omitted). Patent Owner argues that “mere inclusion of the provider’s account number in the video ID does not indicate that a content provider is authorized to have resources delivered to client machines via the at least one shared repeater server.” *Id.* (emphasis omitted). Patent Owner argues that Kenner discloses access permissions of end users, not authorization of

content providers. *Id.* at 37–38 (citing Ex. 1005, 33:4–11). Patent Owner further argues that Kenner does not describe that such authorizations are particular to the repeater server, as required by the limitation “via the at least one shared repeater server.” Prelim. Resp. 38 (emphasis omitted).

However, Patent Owner’s argument is undercut by its admission that “all content providers are authorized to use the PIM in Kenner.” Prelim. Resp. 37–38. 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.” Because all content providers are authorized to use the PIM in Kenner, Kenner teaches the disputed claim limitation.

*b) [1.c] wherein at least a first resource associated with the first content provider is associated with a first alias name of the plurality of alias names, said first alias name being associated with said at least one shared repeater server; [1.d] wherein, requests for the first resource from said client machines are directed to the at least one shared repeater server, based at least in part on said first alias name; [1.e] wherein at least a second resource associated with the second content provider is associated with a second alias name of the plurality of alias names, said second alias name being associated with said at least one shared repeater server; [1.f] wherein requests for the second resource made from said client machines are directed to the at least one shared repeater server, based at least in part on said second alias name;*

With respect to limitation [1.c], Petitioner asserts that Kenner teaches a video clip (a first resource) that has a video ID (associated with an alias name) that includes the content provider’s account number (associated with

the content provider). Pet. 20 (citing Ex. 1005, 44:1–26, 36:37–37:6, 43:27–29). Petitioner asserts that Kenner teaches that the video ID (alias name) is associated with at least one IM (shared repeater server) because Kenner maintains a database of which clips are stored on which IMs or extended SRUs. *Id.* at 20–21 (citing Ex. 1005, 34:3–6, 41:1–6).

With respect to limitation [1.d], Petitioner asserts that Kenner teaches a user’s request for video clips (requests for a first resource) are directed to the PIM (shared repeater server), either from a local SRU within the client’s network or from a neighboring IM. Pet. 22 (citing Ex. 1005, 36:22–27, 40:29–33). Petitioner asserts that such requests are directed based on the video ID (alias name). *Id.* (citing Ex. 1005, 36:22–27).

With respect to limitations [1.e] and [1.f], Petitioner asserts that the same processes of limitations [1.c] and [1.d] apply to requests for the second resource. *Id.* at 24.

Patent Owner first argues that Kenner’s video ID is not associated with both a content provider and at least one shared repeater server because Kenner’s video ID does not identify any PIM or other repeater server. Prelim. Resp. 32–33 (citing Ex. 2014 ¶¶ 92–106). However, this argument is unavailing because Petitioner does not assert that Kenner’s ID identifies a repeater server, relying instead on Kenner’s clip database.

Patent Owner next argues that Kenner does not teach that requests for a resource are directed to a repeater server based at least in part on the alias name because Kenner’s user always accesses the same repeater server (PIM), regardless of the video ID. Prelim. Resp. 34 (citing Ex. 1005, 37:7–38:16). Patent Owner argues that in situations in which the PIM receives a request from a neighboring IM, i.e., for content not on the

neighboring IM, that PIM is not associated with a video ID. Pet. 34–35. Instead, Patent Owner argues, the content coordinate data included in the video ID is used to determine which categories of content are to be made available to the subscribers in the region, and accordingly, a PIM can identify regional IMs that have subscribed to the category of the video ID. *Id.* at 35 (citing Ex. 1005, 36:20–30 (“The content coordinates enable a match with the regional IMs that have subscribed to that type of file”). Patent Owner argues that the content coordinate information merely teaches the PIM being associated with other IMs, not the video ID being associated with a particular PIM as required by the claims. *Id.* (citing Ex. 2014 ¶ 105).

On the current record, we are persuaded by Petitioner that Kenner’s video ID is associated with a shared repeater server. As noted by Patent Owner, Kenner’s video ID includes content coordinate data that may “match with the regional IMs [repeater servers] that have subscribed to that type of file.” Prelim. Resp. 35 (citing Ex. 1005, 36:20–30). Kenner describes that content coordinate data is maintained on a database of each IM, which includes the Internet address of all other connected IMs and content coordinate data describing the type of files stored by the SRUs of each IM. Ex. 1005, 41:1–6. That content coordinate data, stored in each video ID and each IM, teaches the claimed association of alias with repeater server. Because the content coordinate data directs the PIM to the repeater server(s) having that particular data, Kenner’s user does not always access the same repeater server, and Patent Owner’s argument is unavailing.

At this juncture, we are also persuaded by Petitioner that Kenner’s video ID is also associated with a content provider because it contains the content provider’s account number. Pet 20; Ex. 1005, 36:32–37:5.

Patent Owner further argues that Kenner’s video ID is not an “alias” because it is the only unique identifier of a video. Prelim. Resp. 35–36 (citing Ex. 2014 ¶ 94). Patent Owner’s argument is unavailing. Dr. Shenoy attests that Kenner’s video is not an alias, but does not explain what is required for a name to be an alias, or why Kenner’s video ID does not meet those requirements. Ex. 2014 ¶¶ 92–95. In part, Dr. Shenoy points to the use of alias name in the ’903 patent as referring to “an alternative address for a repeater server that contains the URL of a resource.” *Id.* ¶ 92 (citing Ex. 1001, 8:29–33, 9:53–55). Neither Dr. Shenoy nor Patent Owner propose that this description provides a construction for the claim term, much less explain why that description would either be the plain meaning of “alias” or an express definition of “alias” set forth in the ’903 patent. Moreover, Kenner teaches an alias under that description because Kenner teaches that the “video ID” is not the same as the unique “text name of the file as defined by the content provider” because it contains “a multidimensional set of content-characterization coordinates plus a unique file name” as well as “the content provider’s account number, . . . a time stamp, and a time period over which the file is relevant.” *See* Prelim. Resp. 22 (quoting Ex 1005, 36:28–29, 36:32–37:5). Based on the preliminary record, we are persuaded that Petitioner teaches the claimed alias name for purposes of institution.

*c) [1.g] wherein the at least one shared repeater server is further constructed and adapted to analyze, 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.*

Petitioner asserts that Kenner’s PIM (repeater server) uses its clip database (table) to identify the source IM (content provider) associated with the requested video ID (the alias name received with a client request for a particular resource). Pet. 24–25 (citing Ex. 1005, 36:25–27, 40:29–41:5;

referring to its assertions for limitation [1.d]). Petitioner quotes Kenner’s description that if “after having queried the neighboring remote IMs, [PIM 64] is still unable to locate the desired clip on an SRU 66 or 92, the PIM 64 will then contact the source IM 90, where the content provider first uploaded the file.” *Id.* at 25 (citing Ex. 1005, 41:13–15). Petitioner asserts that a person having ordinary skill in the art would recognize that identifying the source IM also identifies the content provider associated with that source IM used to upload the content. *Id.* (citing Ex. 1003 ¶ 96). Petitioner further notes that the content provider’s account number is included in the video ID within the database. *Id.* (citing Ex. 1005, 36:32–37:6).

Patent Owner argues that Kenner’s PIM (repeater server) does not use the clip database (table) to analyze the video ID (alias) received with a client request to determine a content provider associated with the particular resource. Prelim. Resp. 38. Patent Owner argues that the PIM “could identify the source IM with the video ID because the video ID itself contains the provider’s account number.” *Id.* (citing Ex. 1005, 36:32–37:5). Patent Owner argues that “any additional analysis of the video ID to determine the provider with respect to the clip database would be redundant.” *Id.* at 38–39.

We are persuaded that Petitioner has shown Kenner teaches this limitation for purposes of institution. Limitation [1.g] requires use of the table “to analyze . . . an alias name . . . to determine a content provider.” Patent Owner focuses only on analysis of the alias name (video ID) to *identify the account number* of the content provider, which it argues to not require a table because the account number is in the video ID. Prelim. Resp. 38. However, Petitioner relies on Kenner’s recourse to its clip database to

*determine the content provider* associated with the requested video ID. Pet. 24–25. It is not established on the current record that the account number identifies the content provider, in the sense that its identity may be determined, only that the account number represents an association with the content provider.

Regardless of whether the content provider can be determined by the video ID itself, Petitioner points to a teaching in Kenner that would meet the disputed limitation. *See* Pet. 24–25. Kenner describes the video ID as containing content coordinates that “enable a match with the regional IMs that have subscribed to that type of file.” Ex. 1005, 36:28–31. When seeking clips not on the PIM, “another IM database maintains . . . the Internet address of [every] IM and the content coordinates of all audio-video files that it maintains.” *Id.* at 38:2–6. The PIM maintains this database, and can determine, by using the content coordinate data in the video ID and the content coordinate data in the database, which IMs are likely to have the desired clip. *Id.* at 41:1–6. If none have the clip, the PIM consults the clip database to determine the Internet address of the source IM 90, where the content provider first uploaded the file. *Id.* at 41:13–18. Source IM 90 is part of the “content provider’s region 91,” which is connected to “the provider who will upload audio-video content.” *Id.* at 32:14–20. Patent Owner’s argument that this procedure would be redundant is unavailing because it is explicitly described by Kenner, and therefore, appropriate to consider in determining whether claim 1 would have been obvious over Kenner.

Consequently, at this juncture, we agree that Kenner describes a method of consulting its clip database to determine the content provider; i.e.,

its Internet location, that would be performed even where the account number itself may identify the content provider.

*d) Determination*

For the foregoing reasons, we determine that Petitioner has shown a reasonable likelihood that it will prevail on its obviousness assertions for claim 1.

*3. Claims 2, 22–24, 27–46*

Petitioner’s assertions of obviousness over Kenner for claims 2, 22–24, 26, 28–32, 35, 37, 38, 40, 41, and 43–45 are not disputed by Patent Owner beyond its arguments with respect to claim 1. We have reviewed Petitioner’s assertions and determine that they are sufficient on the current record to show a reasonable likelihood that it will prevail on its obviousness assertions for these claims.

Petitioner’s assertions of obviousness over Kenner in view of either Vetter, Rekimoto, or Boyles for dependent claims 27, 33, 34, 36, 39, 42, 46 are not separately challenged by Patent Owner at this stage. We have reviewed Petitioner’s assertions, and determine that they are sufficient on the current record to show a reasonable likelihood that it will prevail on its obviousness assertions for these claims.

III. CONCLUSION

For the reasons discussed above, we conclude Petitioner has shown a reasonable likelihood of prevailing with respect to at least one of the challenged claims. Accordingly, we institute an *inter partes* review of asserted claims 1, 2, 22–24, and 26–46 of U.S. Patent No. 8,478,903 on all asserted grounds. 37 C.F.R. § 42.108(a) (“When instituting *inter partes* review, the Board will authorize the review to proceed on all of the

challenged claims and on all grounds of unpatentability asserted for each claim.”); *see SAS Inst. Inc. v. Iancu*, 138 S. Ct. 1348, 1355 (2018) (noting that the language of 35 U.S.C. § 314(b) “indicates a binary choice—either institute review or don’t”); *PGS Geophysical AS v. Iancu*, 891 F.3d 1354, 1360 (Fed. Cir. 2018) (interpreting the statute as requiring “a simple yes-or-no institution choice respecting a petition, embracing all challenges included in the petition”).

Our determination at this stage of the proceeding is based on the evidentiary record currently before us. This decision to institute trial is not a final decision as to patentability of any claim for which an *inter partes* review has been instituted. Our final decision will be based on the full record developed during trial.

#### IV. ORDER

For the foregoing reasons, it is:

ORDERED that pursuant to 35 U.S.C. § 314(a), an *inter partes* review is hereby instituted for all asserted grounds on all asserted claims, i.e.:

<b>Claim(s) Challenged</b>	<b>35 U.S.C. §</b>	<b>Reference(s)/Basis</b>
1, 2, 22–24, 26, 28–32, 35, 37, 38, 40, 41, 43–45	103(a)	Kenner
33	103(a)	Kenner, Vetter
34	103(a)	Kenner, Rekimoto
27, 36, 39, 42, 46	103(a)	Kenner, Boyles

FURTHER ORDERED that 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; the trial will commence on the entry date of this Decision.

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