

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

HULU, LLC, NETFLIX, INC., SPOTIFY USA INC., and VIMEO, LLC,
Petitioner,

v.

iMTX STRATEGIC, LLC,
Patent Owner.

Case CBM2015-00147
Patent 7,269,854 B2

Before KEVIN F. TURNER, THOMAS L. GIANNETTI, and
MATTHEW R. CLEMENTS, *Administrative Patent Judges*.

GIANNETTI, *Administrative Patent Judge*.

FINAL WRITTEN DECISION
35 U.S.C. § 328(a) and 37 C.F.R. § 42.73

Hulu, LLC; Netflix, Inc.; Spotify USA Inc.; and Vimeo, LLC
(collectively, “Petitioner”) filed a Corrected Petition pursuant to 35 U.S.C.
§§ 321–329 to institute a covered business method patent review of claims
1–23 (all claims) of U.S. Patent No. 7,269,854 B2 (Ex. 1001, “the ’854

patent”). Paper 8 (“Pet.”). iMTX Strategic, LLC (“Patent Owner”) filed a Preliminary Response. Paper 13 (“Prelim. Resp.”). Applying the standard set forth in 35 U.S.C. § 324(a), we granted Petitioner’s request and instituted a covered business method patent review of all challenged claims. Paper 14 (“Institution Decision” or “Dec.”).

During the trial, Patent Owner filed a Patent Owner Response (Paper 20, “PO Resp.”), and Petitioner filed a Reply to the Patent Owner Response (Paper 23, “Pet. Reply”). An oral hearing was held on August 26, 2016, and a copy of the transcript has been made part of the record. Paper 27 (“Hearing Tr.”).

We have jurisdiction under 35 U.S.C. § 6(b). This Decision is a Final Written Decision under 35 U.S.C. § 328(a) as to the patentability of the claims on which we instituted trial. Based on the record before us, we determine that Petitioner has shown, by a preponderance of the evidence, that claims 1–23 of the ’854 patent are unpatentable under 35 U.S.C. § 103(a).

I. BACKGROUND

A. The ’854 patent (Ex. 1001)

The ’854 patent is titled “Transaction System for Transporting Media Files from Content Provider Sources to Home Entertainment Devices.” The Abstract describes the subject matter as follows:

A system and method for enabling a user to request and download selected media files from distributed content provider sites via the Internet. The system includes a plurality of user sites each including a player/receiver housed in an enclosure having a simple user interface, a plurality of content provider sites, and a transaction server site. The player/receiver enables

the user to connect to the transaction server via the Internet to access a program guide listing available media files. The user is then able to select a desired file and, via the player/receiver and Internet, request the transaction server to authorize download of the selected file. The file request along with file encryption and transfer instructions are sent from the transaction server via the Internet to the content provider site storing the requested file. Requested files are then dynamically encrypted by the content provider site and securely downloaded to the requesting player/receiver. The requesting player/receiver is uniquely capable of decrypting a downloaded file concurrent with playing back the file on a conventional home television set and/or audio system.

Ex. 1001, Abstract. This is illustrated by Figure 1 of the patent, which is reproduced below:

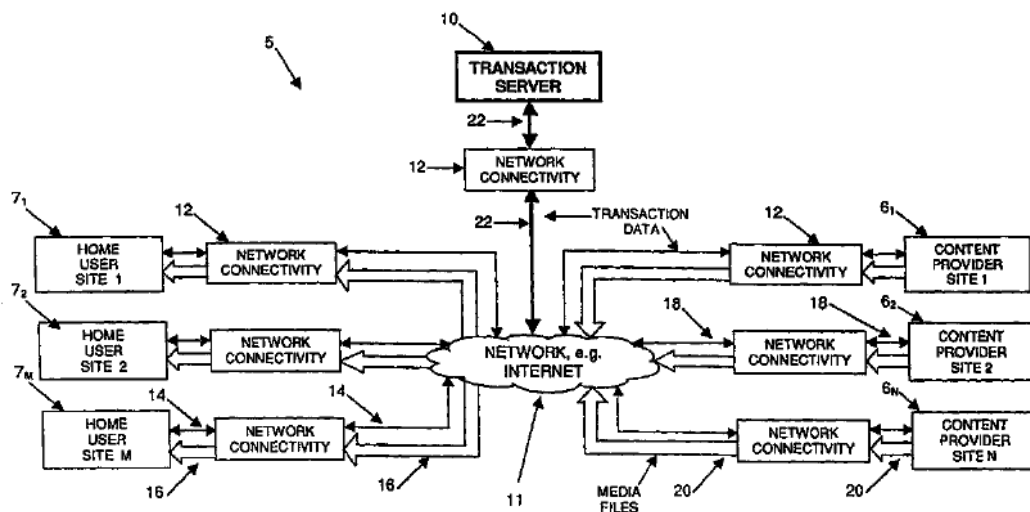


Figure 1 above is a block diagram showing the architecture of a preferred system in accordance with the invention. Ex. 1001, col. 3, ll. 66–67. The system is comprised of a plurality of content provider sites 6₁, 6₂, etc.; a plurality of home user sites 7₁, 7₂, etc.; and transaction server site 10. Each of these is connected to a common communications network 11. *Id.* at col. 4, ll. 31–36. In the preferred embodiment, network 11 is the public

Internet. *Id.* at col. 4, ll. 37–38. In alternative embodiments, however, network 11 could comprise other public or private networks. *Id.* at col. 4, ll. 42–44. According to the specification, “the invention can operate with various, public and private communications networks.” *Id.* at col. 2, ll. 30–31.

In the preferred embodiment, connections to the Internet are formed by a suitable broadband network connectivity device 12. Examples include cable modems, digital subscriber lines, or very small satellite Internet access systems. *Id.* at col. 4, ll. 38–41.

The specification includes the following statement under the section heading “Summary of the Invention:”

Systems in accordance with the invention are generally characterized by the following features:

1. They are readily scalable and can accommodate a virtually unlimited number of content provider sites and home user sites communicating via the Internet using a standard protocol, *e.g.*, TCP/IP

Id. at col 2, ll. 35–40 (emphasis added). The specification also includes the following statement under the section heading “Description of the Preferred Embodiments”:

The “Internet” refers to a global network that facilitates the connectivity of computer-based systems *typically* using a common communications protocol known as Transmission Control Protocol/Internet Protocol (TCP/IP).

Id. at col. 4, ll. 44–47 (emphasis added). As discussed *infra*, Petitioner and Patent Owner dispute the significance of these statements in the specification.

B. Illustrative Claim

Claims 1 and 14 are independent claims. Claim 1 is illustrative of the claims at issue and is reproduced below:

1. A system for executing user transaction requests for delivering digital media files via the Internet for driving a user site television set and/or audio equipment, said system comprising:

a plurality of user sites, each user site including a player/receiver, a television set and/or audio equipment, and a connectivity device for connecting said player/receiver to the Internet;

a plurality of provider sites, each provider site including a media server comprising a media file storage device and a media file encryptor, and a connectivity device for connecting said provider site media server to the Internet;

a transaction server and a connectivity device for connecting said transaction server to the Internet;

each said player/receiver including a user interface for sending a media file request via the Internet to said transaction server requesting delivery of an identified media file;

said transaction server being responsive to a received media file request for sending an authorization to the provider site storing the requested media file authorizing delivery of the requested media file from said provider site to the requesting player/receiver directly via the Internet;

said authorized provider site being responsive to said transaction server authorization for uniquely encrypting the identified media file and for downloading the encrypted media file directly via the Internet to said requesting player/receiver;

each said player/receiver including a media file decryptor; and wherein

only said requesting player/receiver decryptor is capable of decrypting said encrypted media file downloaded thereto for playback on the television set and/or audio equipment at the same user site.

Claim 14, directed to a method, recites subject matter similar to that of claim 1.

C. Related Proceedings

Petitioner and Patent Owner identify a number of related proceedings in the Northern District of California and the District of Delaware involving the '854 patent. Pet. 18–19; Paper 5; Paper 11. To establish standing under AIA § 18(a)(1)(B), each of Hulu, LLC; Netflix, Inc.; Spotify USA Inc.; and Vimeo, LLC represents that it has been sued for infringing the '854 patent in the District of Delaware. Pet. 18. In addition, the '854 patent is the subject of a reissue application, which has been stayed (Paper 18), and an *inter partes* review proceeding, Case IPR2015-01061.

D. Real Party in Interest

Petitioner identifies Hulu, LLC; Netflix, Inc.; Spotify USA Inc.; and Vimeo, LLC as the real parties-in-interest. Pet. 18. Patent Owner does not challenge this assertion.

E. References

Petitioner relies on the following references:

1. “Hooper,” U.S. Patent 5,671,225, issued Sept. 23, 1997 (Ex. 1006)
2. “Li,” Yongcheng Li, et al., *Security Enhanced MPEG Player*, March 25–26, 1996 (Ex. 1007)
3. “Kohl,” Ulrich Kohl, *Secure Container Technology as a Basis for Cryptographically Secured Multimedia Communication, Multimedia '98*, Sept. 1998 (Ex. 1008)
4. “Hickey,” U.S. Patent 5,475,835, issued Dec. 12, 1995 (Ex. 1009)
5. “Garcia-Molina,” Hector Garcia-Molina, et al., *Safeguarding and Charging for Information on the Internet*, PROCEEDINGS OF ICDE '98, Feb. 1998 (Ex. 1010)

F. Grounds Asserted

The Board instituted a covered business method patent review of the '854 patent on the following grounds identified by Petitioner (Pet. 19–20) as Grounds 2–5:¹

1. Obviousness of claims 1, 2, 6, 12, and 14 over Hooper and Li
2. Obviousness of claims 3–5 and 15–18 over Hooper, Li, and Kohl
3. Obviousness of claims 7–11 and 19–22 over Hooper, Li, and Hickey
4. Obviousness of claims 13 and 23 over Hooper, Li, and Garcia-Molina

G. Claim Construction

In an *inter partes* review, claim terms in an unexpired patent are construed according to their broadest reasonable interpretation in light of the specification of the patent in which they appear. 37 C.F.R. § 42.100(b); *Cuozzo Speed Techs. LLC v. Lee*, 136 S. Ct. 2131, 2144–46 (2016). Under that standard, claim terms are generally 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, 1257 (Fed. Cir. 2007).

1. Means plus Function

In our Institution Decision, the only means plus function term we construed was in dependent claims 9 and 10. Dec. 9–10. The term we construed was: “means for displaying a program guide listing media files stored by the digital storage device therein.” *Id.* at 9. We determined that,

¹ Ground 1 was a challenge under 35 U.S.C. § 101. Pet. 19. The Board denied institution on that challenge. Dec. 14.

under 35 U.S.C. § 112, ¶ 6, the corresponding structure for this term is a conventional, television/video display. *Id.* at 10. Neither party has contested this construction. We have considered the record and determine that this construction should not be changed.

2. “Internet”

Patent Owner asserted in the Preliminary Response that as to “Internet,” the “applicant chose to be his own lexicographer and provided an explicit definition.” Prelim. Resp. 29. Patent Owner quoted the ’854 patent specification in construing the Internet as “a global network that facilitates the connectivity of computer-based systems typically using a common communications protocol known as Transmission Control Protocol/Internet Protocol (TCP/IP).” Prelim. Resp. 29 (citing Ex. 1001, col. 4, ll. 44–47). In our Institution Decision, we concluded no special definition beyond the plain meaning of the term “Internet” was necessary. Dec. 10.

Later in our Institution Decision, however, we responded to an argument by Patent Owner that the testimony of Dr. Long, Petitioner’s expert, was “flawed” because he had analyzed the claims without a proposed construction for “Internet.” Dec. 16–17 (citing Prelim. Resp. 61). We again concluded that “[t]he ’854 patent specification provides no special definition for the term ‘Internet’ beyond its plain and ordinary meaning.” *Id.* at 17. We further stated, however, that the description of the Internet set forth in the ’854 patent “is consistent with the term’s plain meaning.” *Id.* Finally, we cited a dictionary definition that we said was “a relevant definition of ‘Internet.’” *Id.* Specifically, we cited the *Microsoft Computer Dictionary* 242 (4th ed. 1999), defining Internet as: “[t]he worldwide collection of

networks and gateways that use the TCP/IP suite of protocols to communicate with one another.” Ex. 3001.

Patent Owner now has abandoned its argument that the ’854 patent specially defines the term “Internet.” Instead, Patent Owner now “agrees” with the definition in the *Microsoft Computer Dictionary*. PO Resp. 23. Building on this alleged definition of Internet, Patent Owner also contends that the claims of the ’854 patent, by referring to “the Internet,” require use of the TCP/IP protocol. PO Resp. 23.

We are not persuaded by this argument. As noted *supra*, the ’854 patent specification states that the patented invention “communicat[es] via the Internet using a standard protocol, *e.g.*, TCP/IP.” Ex. 1001, col. 2, ll. 39–40 (emphasis added). At oral argument, counsel for Patent Owner confirmed that the ’854 patent specification gives TCP/IP only as an example:

[THE BOARD]: In fact, would you agree that the specification doesn't require the TCP/IP protocol? It gives it as an example of the protocol that you could use. Just answer my question, please, isn't it true that it just offers it up as an example?

[COUNSEL FOR PATENT OWNER]: It uses the word “EG.”

[THE BOARD]: That's an example, right?

[COUNSEL FOR PATENT OWNER]: Yes, Your Honor.

Hearing Tr. 24:23–25:5.

Similarly, the ’854 patent defines the Internet as “*typically* using a common communications protocol known as Transmission Control Protocol/Internet Protocol (TCP/IP).” Ex. 1001, col. 4, ll. 45–48 (emphasis

added). Dr. Long’s testimony confirms this: “[T]he Internet as you know it and call it runs largely, but not entirely on TCP/IP. There’s a large number of protocols.” Ex. 2009 (“Long Dep.”), 40:14–16. We find, therefore, that the description of the invention in the ’854 patent specification permits the use of protocols other than TCP/IP. This conclusion is reinforced by the fact that, according to the specification, “the invention can operate with various, public and private communications networks.” Ex. 1001, col. 2, ll. 30–31. Such networks, presumably, could use non-TCP/IP protocols. We conclude, therefore, that the specification of the ’854 patent contradicts Patent Owner’s argument that the claims require the use of TCP/IP.

Patent Owner’s reliance on the *Microsoft Computer Dictionary* definition is misplaced. The *Microsoft Computer Dictionary* describes a “TCP/IP *suite* of protocols” (Ex. 3001, 242 (emphasis added)), which is broader than just TCP/IP. Moreover, Patent Owner’s statement that “the Board has indicated” that the definition from the *Microsoft Computer Dictionary* is “the proper definition of the term” mischaracterizes the record. PO Resp. 25. The Board concluded that although that definition was “relevant,” the term “Internet” did not require construction. Dec. 10, 17 (“There was, therefore, no necessity for Petitioner or Dr. Long to offer a proposed construction for that term.”). This claim construction issue is not dispositive, however. Even applying Patent Owner’s proposed construction for Internet, we would reach the same result in this case. *See infra* Section II.B.3.

3. “*downloading the encrypted media file directly via the Internet to said requesting player/receiver*”[claim 1] /
“*causing said identified media server to uniquely encrypt the identified media file and download it directly via the Internet to the requesting user*” [claim 14]

Patent Owner proffers the same construction for these two similar terms (appearing in claims 1 and 14, respectively), as follows:

downloading an encrypted media file from a provider site to a requesting user via the Internet [1] without the media file being stored or processed by the transaction server, and [2] without specifying a particular set of connections from the provider site to the user site.

PO Resp. 27–28 (reference numbers added). Thus, Patent Owner’s proposed construction would include two negative limitations, identified as [1] and [2] in the paragraph above.

Patent Owner’s argument for the including negative limitation [1], “without the media file being stored or processed by the transaction server,” is based on the prosecution history. PO Resp. 24–25. Thus, Patent Owner asserts:

During prosecution of the ‘854 patent, applicant consistently defined a direct transfer of a media file as one in which the media file is not stored or processed by the transaction server in order to distinguish the claims from the Toyouchi reference. Thus, this limitation should properly be included in the broadest reasonable interpretation of these phrases for at least the reason that the applicant disclaimed a broader interpretation during prosecution.

Id. at 25.

We considered but did not adopt this proposed construction in our Institution Decision. Dec. 10–11. We concluded there that the proposed construction would rewrite the claims and was not consistent with the

broadest reasonable interpretation. *Id.* at 11. For similar reasons, we do not adopt this construction now.

We have also considered Patent Owner’s prosecution history argument and conclude it is unavailing. PO Resp. 24–25. The argument focuses on the applicants’ successful attempt to overcome the Examiner’s rejections of claims 1 and 14 over a Toyouchi reference. *Id.* at 24. But Patent Owner has not adequately explained Toyouchi, or attempted to compare Toyouchi to any of the art relied on by Petitioner, in a way that would be helpful to our analysis or supportive of its argument.

Moreover, we disagree with Patent Owner’s argument that the cited responses by the applicants to the Examiner’s rejections support the proposed construction. *Id.* at 13–16, 20. In those responses, the applicants argued that “applicant’s [sic] system architecture calls for the direct transfer of a media file from a provider site to a user site without the media file being stored or processed by the transaction server.” *Id.* at 24.

The Examiner’s May 22, 2007, Reasons for Allowance, however, only partially quoted in Patent Owner’s Response,² and did not adopt applicants’ reasoning that “without the media file being stored or processed by the transaction server” distinguishes Toyouchi. Instead, the Examiner focused on the path the media file follows from the transaction server to the client, stating:

[T]he prior art fails to teach the receiving a request for a file at the transaction server and authorizing a provider to send the requested file directly to the client. *The prior art generally*

² PO Resp. 20. Patent Owner’s quotation omits the italicized sentence. Also Patent Owner incorrectly identifies August 22, 2007, as the date of the Reasons for Allowance. *Id.*

teaches all traffic between the client and provider being transmitted through the transaction server.”

Ex. 1004, 0010 (emphasis added).³ The Examiner thus contrasted “directly to the client” in the claims with “being transmitted through a transaction server,” not with whether the media file is “stored or processed by the transaction server.” Thus, we find that the Reasons for Allowance, by not adopting Patent Owner’s “stored or processed” reasoning, do not support Patent Owner’s argument. “[T]he doctrine of prosecution disclaimer only applies to unambiguous disavowals.” *Grober v. Mako Prods., Inc.*, 686 F.3d 1335, 1341 (Fed. Cir. 2012) (citation omitted). We find that the prosecution record cited by Patent Owner in this case does not meet that test.

The Board “is under no obligation to accept a claim construction proffered as a prosecution history disclaimer, which generally only binds the patent owner.” *Tempo Lighting, Inc. v. Tivoli, LLC*, 742 F.3d 973, 978 (Fed. Cir. 2014). There is no reason to depart from that approach here. As Petitioner points out, unlike in district court, Patent Owner had the opportunity to propose an amendment to the claims to include the limitations it now says are “properly included” in the broadest reasonable interpretation. Pet. Reply 4.

According to Patent Owner, negative limitation [2], “without specifying a particular set of connections from the provider site to the user site,” is “properly included” in the proposed construction because of the reference in the claims to the Internet. PO Resp. 28. This argument is tied in with Patent Owner’s proposed construction of the claims as requiring use of TCP/IP. *See supra* Section I.G.2. Thus, Patent Owner asserts:

³ Patent Owner’s citation to the Examiner’s Reasons for Allowance is incorrect. PO Resp. 20 (citing Ex. 1004, 221).

The language “without specifying a particular set of connections from the provider site to the user site” is properly included in the broadest reasonable interpretation because this language merely states how data is *inherently* transmitted over the Internet as a result of the standard TCP/IP protocols that are *necessarily* used by the Internet, in the absence of a component that overrides the standard TCP/IP protocols of the Internet.

Id. at 28–29.

Petitioner responds by asserting that Patent Owner is attempting “to improperly rewrite the claims.” Pet. Reply 8. Petitioner contends that the specification and prosecution history are inconsistent with Patent Owner’s proposed construction. *Id.* To the extent that the terms need construction, Petitioner proposes the following: “‘directly’ should be construed to mean that the file is transmitted from the provider site to the player/receiver without being transmitted through a transaction server.” Pet. Reply 9. Petitioner relies on statements in the prosecution history to support this construction, including the Examiner’s Reasons for Allowance previously discussed, in which the Examiner contrasts sending files “directly to the client” with prior art teaching “all traffic between the client and provider being transmitted through the transaction server.” *Id.* at 9 (citing Ex. 1004, 010).

We find Patent Owner’s proposal—adding the negative limitation related to “specifying a particular set of connections” to the claims—is unavailing for reasons similar to those expressed above and in our Institution Decision. Specifically, we disagree with Patent Owner’s argument that the claims should be read as prohibiting “specifying a particular set of connections” in downloading media files. Patent Owner points us to nothing in the specification that would support that reading of the claims. In fact, as

pointed out in Section I.G.2 *supra*, the specification is to the contrary, for example, in its description of the Internet as “typically” (but not necessarily) using TCP/IP, and in its reference to alternative embodiments comprising other public or private networks. Ex. 1001, col. 2, ll. 30–31, col. 4, ll. 42–44. So, too, is the record developed at trial, including credible testimony from Petitioner’s expert, Dr. Long, that the Internet does not run “entirely on TCP/IP.” Long Dep. 40:15.

Nor are we persuaded by Patent Owner’s reliance on a paper (Ex. 2007) authored by Dr. Charles A. Eldering, an expert for the petitioner in IPR2015-01061, another proceeding before the Board involving the ’854 patent. PO Resp. 26–27, 29. According to Patent Owner, Dr. Eldering “distinguishes TCP/IP based networks, such as the Internet, from ‘connection-oriented’ networks, such as ATM [asynchronous transfer mode] networks.” *Id.* at 27. Patent Owner’s reliance is misplaced. The argument advanced by Patent Owner, contrasting TCP/IP and ATM, assumes that the ’854 patent claims, by referring to the Internet, require the use of TCP/IP. For the reasons discussed, we do not agree with that construction advanced by Patent Owner.

We conclude that Patent Owner’s arguments in support of including its two negative limitations in these claim elements are unavailing. We, therefore, rely on the plain meaning of these terms in the claims, not including the negative limitations proposed by Patent Owner.

4. “*transaction server*” and “*encrypted media file*”

In our Institution Decision, we determined that construction of these terms was not necessary. Dec. 10–11. Patent Owner again proffers constructions for the terms. PO Resp. 30–34. However, Patent Owner’s

arguments for patentability do not turn on those constructions. In light of this, we do not agree with Patent Owner that providing constructions for these terms is “necessary.” In any event, for reasons similar to those stated above, e.g., in connection with the term “Internet,” we are not persuaded that special constructions of “transaction server” and “encrypted media file” are required.

In any case, we do not agree with Patent Owner’s proposed constructions for these terms. PO Resp. 30–34. Patent Owner contends that the broadest reasonable interpretation for the term “transaction server” is “a server that authenticates each player/receiver, and sends information regarding a requested media file and information regarding a player/receiver that requested the media file to one of the multiple content provider sites that contains the requested media file.” PO Resp. 30. Patent Owner contends the broadest reasonable interpretation of “encrypted media file” is “a media file that can only be played back on the requesting player/receiver.” *Id.* at 34.

Patent Owner supports its proposed constructions by citations to the specification. Nonetheless, the specification references describing the function of the transaction server do not rise to the level of a limiting definition. PO Resp. 31–32. Likewise, the specification references for “encrypted media file” describe the results of the encryption, not the encryption process itself. *Id.* at 33. We are not persuaded that such limitations from the specification should be imported into the claims.

II. ANALYSIS

A. Background

All four grounds in this trial are based on Hooper and Li, together or in combination with other references. Dec. 19–20. Patent Owner’s Response focuses on independent claims 1 and 14 and on the combination of Hooper and Li. *See* discussion of Grounds 2–5 at PO Resp. 34 (“The common combination of references used in Grounds 2–5 is Hooper and Li.”). Patent Owner presents separate arguments for only two dependent claims: claims 7 and 19, which relate to storing downloaded media files. *See* PO Resp. 51–53 (discussing separately claims 7 and 19). We, therefore, focus our discussion here on the obviousness of claims 1 and 14 based on the combination of Hooper and Li. Following that, we will separately discuss claims 7 and 13. We will not address the dependent claims that Patent Owner did not argue separately in the Patent Owner Response and which are addressed in the Petition.

B. Claims 1 and 14

1. Hooper Overview

Hooper is titled “Distributed Interactive Multimedia Service System.” Ex. 1006. Hooper is directed to providing multimedia services using distributed computer networks. *Id.* at col. 1, ll. 5–8. These services include video (i.e., movies). *Id.* at col. 4, ll. 42–43. The operation of the system is

shown in Figure 4 from Hooper which follows:

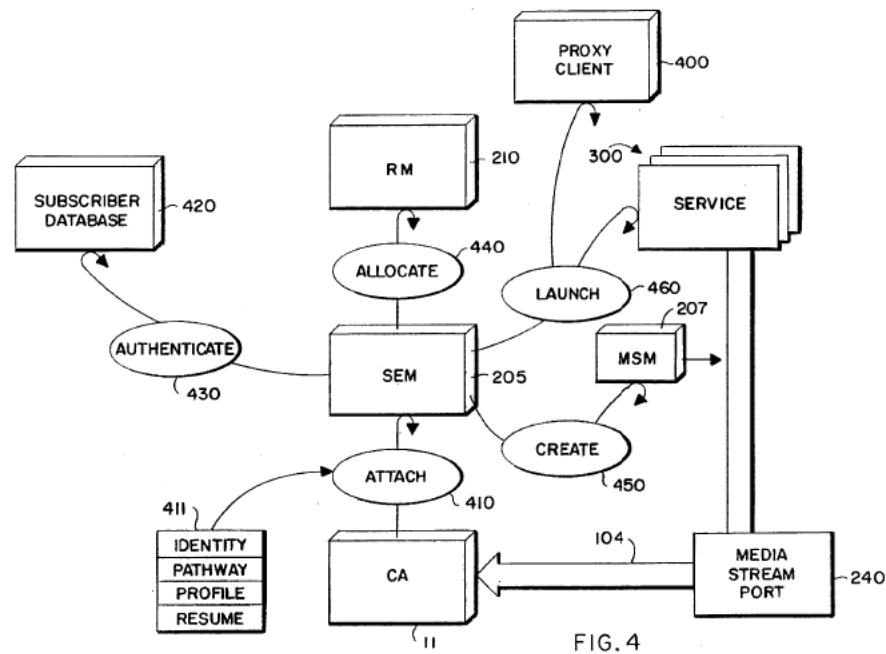


Figure 4 of Hooper is a flow diagram of interactions between clients and servers of the distributed interactive multimedia services. Ex. 1006, col. 2, ll. 56–59. As shown in Figure 4, client application (CA) 11 initiates a service session by sending attach request 410 to session manager (SEM) 205. *Id.* at col. 5, ll. 24–26. Attach request 410 can include the address of set-top box 11, an initial service pathway, and client profile. *Id.* at col. 5, ll. 26–29. The client address identifies a particular set-top box, and can also include user identification information, such as a unique password. *Id.* at col. 5, ll. 29–31.

In response to receiving attach request 410, SEM 205 validates the client/user identity against subscriber database 420. *Id.* at col. 5, ll. 41–43. Upon validation of the request as authentic, SEM 205 sends allocate request

440 to resource manager (RM) 210. RM 210 allocates the appropriate resources for the initial services. *Id.* at col. 5, ll. 41–48.

SEM 205 sends create request 450 to media stream manager (MSM) 207, and the MSM creates or allocates media stream port 205. *Id.* at col. 5, ll. 49–51. SEM 205 receives the address or “handle” of media stream port 240 so that the services can be connected to deliver constant bit rate video stream directly to the client. *Id.* at col. 5, ll. 52–55. A particular service can be selected for execution by client application 11 by sending an open request, as shown in Fig. 6. *Id.* at col. 6, ll. 47–49.

In the final step, SEM 205 generates launch request 460 to launch the selected services in one or more servers 200 (shown in Fig. 2). Launching means the execution of the process of the services, and access to the associated content assets are enabled. *Id.* at col. 5, ll. 56–60.

The services can send video streams directly to client 10 via media stream port 240. *Id.* at col. 5, ll. 61–63. The reply to a successful attach request 460 can include the addresses or “handles” of the launched services. Client application 11 uses these handles to communicate directly with the selected services during subsequent requests. *Id.* at col. 5, ll. 63–67.

2. *Li Overview*

Li describes a security-enhanced MPEG player that can be used with a World Wide Web browser to deliver video over the Internet. Ex. 1007, 1; Ex. 1023 (“Soske Dep.”), 33:25–34:2. Li describes the use of both secret key and public key encryption and decryption of continuous, real-time video streams such as MPEG streams. *Id.* Petitioner relies on Li for its teaching use of encryption and decryption and for its disclosure of video streaming over the Internet. Pet. 36; Pet. Reply 11–13; Hearing Tr. 10:1–13.

3. Discussion

At the outset of its Response, Patent Owner presents a discussion of the state of the art and the development of Patent Owner's technology. PO Resp. 2–11. As much of this discussion overlaps with Patent Owner's argument regarding objective indicia of non-obviousness (*id.* at 53–66), we will defer discussing this until we reach the issue of secondary considerations, *infra*.

Patent Owner's response focuses on two limitations of claims 1 and 14. Patent Owner asserts Hooper and Li do not teach or suggest the following limitations from claim 1: (1) “downloading a media file, directly via the Internet, from a specialized media file storage device to a requesting user” and (2) “a transaction server that sends an authorization to a provider site storing a requested media file.” PO Resp. 1–2. Corresponding limitations appear in claim 14.

Petitioner's claim charts demonstrate where each element of claims 1 and 14 is found in the Hooper–Li combination. Pet. 36–53. For example, Petitioner identifies the recited “player/receiver” with the disclosure of a television set top box in Hooper. Pet. 19. Petitioner's expert, Dr. Long, explains in detail how the Hooper–Li combination meets the elements of these claims. Ex. 1002 (“Long Decl.”) ¶¶ 86–106 (discussing claims 1 and 14). We find this testimony is credible.

Petitioner also provides a persuasive rationale for combining the teachings of Hooper and Li. Pet. 51–53; Long Decl. ¶¶ 83–85. Petitioner asserts that “[a]mong those aspects of video transmission known at the time, encryption and decryption techniques were known and commonly employed in various video transmissions systems predating the filing date by decades.”

Id. at 51 (citing Long Decl. ¶ 83). Petitioner also argues that “[t]hus, the combination of Hooper with Li represents making use of known technologies as in Li so as to improve Hooper in a similar manner.” *Id.*

Petitioner also demonstrates that it would have been obvious to combine Li’s teaching of use of the Internet to deliver video with Hooper. Pet. Reply 11–13. Petitioner relies on Dr. Long’s testimony that “an ordinarily skilled artisan making use of the video transmission methods and systems of the type described in Hooper would know to incorporate various aspects of video transmission that were commonly employed at the time.” *Id.* at 12 (quoting Long Decl. ¶ 83).

We have considered Petitioner’s obviousness analysis based on the combination of Hooper and Li in light of the record developed during trial, including credible supporting testimony from a qualified expert, Dr. Long. We adopt that analysis and its underlying reasoning. We note, also, that Patent Owner’s challenge to that analysis focuses on a few points, which we have considered and will now discuss.

Patent Owner’s response focuses on two limitations of claims 1 and 14. Patent Owner asserts neither Hooper nor Li (nor any of the other cited art) teaches or suggests the following claim 1 limitations: (1) “downloading a media file, directly via the Internet, from a specialized media file storage device to a requesting user” and (2) “a transaction server that sends an authorization to a provider site storing a requested media file.” PO Resp. 1–2. The same is alleged of the corresponding limitations appearing in claim 14.

Patent Owner contends that Hooper does not meet the first limitation of downloading a media file directly via the Internet because Hooper does

not teach use of the Internet to deliver a requested media file. PO Resp. 35. This argument is based on Patent Owner's assertion that by referring to the Internet, the claims are limited to TCP/IP.

More than that, however, Patent Owner contends that Hooper "describes functionality that is inconsistent with the use of the TCP/IP suite of protocols used by the Internet." *Id.* Patent Owner contends that Hooper discloses a gateway router (designated L1 in Fig. 2) that provides a set of connections between clients and servers. *Id.* at 38. This is in contrast to claims 1 and 14, according to Patent Owner, because "properly construed" they require the media file to be downloaded "without specifying a particular set of connections from the provider site to the user site." *Id.*

Petitioner responds by challenging Patent Owner's claim construction that would limit the claims to use of TCP/IP. Pet. Resp. 4–7. For the reasons stated by Petitioner and those discussed in Section I.G.2 *supra*, under the heading Claim Construction, we agree with Petitioner that the '854 patent claims are not limited to TCP/IP. As Dr. Long testified, "the Internet as you know it and call it runs largely, but not entirely on TCP/IP. There's a large number of protocols." Long Dep. 40:14–16. Moreover, we agree with Petitioner's reasoning that the negative claim limitations proposed by Patent Owner are not in the claims and should not be read into the claims. *See* discussion at PO Resp. 8–9 and *supra* under Claim Construction.

Petitioner contends that Hooper discloses the Internet because the Internet is "a collection of networks" and Hooper's network would be part of that collection. Pet. Reply 10. In that regard, Dr. Long testifies that a person of ordinary skill "would view Hooper as teaching the Internet as the

primary, most common type of network.” Long Decl. ¶ 86. Also, Dr. Long testifies that Hooper discloses a network that would be “part of the Internet”:

[Patent Owner’s Counsel]: Claim 1 calls for the Internet, and there's no explicit use of the term “Internet” in Hooper, but your testimony is that they disclose a network and that is sufficient. Is that accurate?

[Dr. Long] I said they disclose a network that would be part of the Internet. If you had your hypothetical new network, would I connect it into the Internet? You bet I would. Why wouldn't I?

Long Dep. 74:20–75:5. We agree with Petitioner’s reasoning.

But even if we were to accept Patent Owner’s argument that Hooper does not disclose use of the Internet, Patent Owner’s argument fails for another reason. As testimony from Patent Owner’s expert confirms, Li discloses use of the Internet to stream video. Pet. Reply 11–12 (citing Soske Dep. 33:25–34:2). Combining Hooper and Li, therefore, meets this limitation. Patent Owner does not convincingly challenge this disclosure of the Internet by Li. For this reason, among others, Patent Owner’s argument that the claims are limited to use of TCP/IP, even if true, would fail to convince us that the combination of Hooper and Li fails to meet this limitation.

Moreover, we adopt the reasoning presented by Petitioner and Dr. Long for combining Hooper and Li set forth by Petitioner and find that such a combination would have been obvious. Patent Owner does not convincingly challenge the rationale or motivation set forth by Petitioner and its expert for combining the teachings of Hooper and Li. *See* PO Resp. 49–51. Patent Owner states: “[t]here is absolutely *no* analysis by Petitioners . . . as to how Li’s teaching that MPEG video streaming can occur over the

Internet can be combined with Hooper's system." PO Resp. 51. We do not agree. We find Petitioner's rationale for combining the references persuasive. *See* discussion *supra*. Nor are we persuaded that Hooper teaches away from the use of TCP/IP or the Internet. In that connection, we credit Dr. Long's testimony that Hooper is "protocol agnostic." Long Dep. 71:15. As he explains: "It doesn't matter what protocol you are using. A bit pipe is a bit pipe." *Id.* at 71:15–16.

For the reasons stated above and in Petitioner's arguments, therefore, we are persuaded that the combination of Hooper and Li discloses use of the Internet to stream video, and that it would have been obvious to have made that combination. As the Federal Circuit reminded in *Western Union Co. v. MoneyGram Payment Systems, Inc.*, 626 F.3d 1361, 1370 (Fed. Cir. 2010), "[a]pplying modern electronics to older mechanical devices has been commonplace in recent years." *See also Muniauction, Inc. v. Thompson Corp.*, 532 F.3d 1318, 1326–27 (Fed. Cir. 2008) (concluding a patent was obvious where "adapting existing electronic processes to incorporate modern internet and web browser technology was similarly commonplace" at the time the application was filed, citing *Leapfrog Enterprises, Inc. v. Fisher Price, Inc.*, 485 F.3d 1157 (Fed. Cir. 2007)).

We have considered Patent Owner's other arguments distinguishing these references and determine that they are not persuasive. For example, we are not persuaded by Patent Owner's argument that Hooper describes a "closed system." PO. Resp. 40–41. The requirement for an "open" system is not in the claims, and we do not credit Patent Owner's argument that the reference to Internet in the claims is sufficient to impose this limitation. As noted in Section I.A *supra*, according to the '854 patent, "the invention can

operate with various, public and private communications networks.”

Ex. 1001, col. 2, ll. 30–31.

We are not persuaded, either, by Patent Owner’s argument that this requirement is not met by Hooper based upon the operation of the L1 and L2 gateway routers. PO Resp. 37–44. Patent Owner first argues that the “network control” and “routing” provided by the L1 gateway is “completely inconsistent” with using the TCP/IP protocol as in the patent claims. *Id.* at 37–38. This argument is based on Patent Owner’s erroneous construction of the claims as limited to TCP/IP and is, therefore, unavailing.

Patent Owner’s second argument is based on the construction of the claims including the negative limitation “without the media file being stored or processed by the transaction server.” *Id.* at 41–44. As discussed in Section I.G.3 *supra*, we do not adopt that construction. In any event the argument is without merit. In Hooper, the video files are not stored or processed by either the L1 or L2 gateways. They are transferred directly from the servers to the clients. Ex. 1006, col. 4, ll. 23–29. We agree with Petitioner’s reasoning that Hooper meets this limitation. *See* discussion at Pet. Reply 14–15 (Patent Owner “incorrectly focuses on the path of the *control data*, ignoring that the claim requires only that the *media file* be directly downloaded.”)

Nor do we credit Patent Owner’s alternative argument that exercising “functional commands” such as pause, play, and read, the gateways in Hooper constitutes “storing or processing” of the video file. PO Resp. 43–44. We have specifically rejected Patent Owner’s attempt to read a negative “storing or processing” limitation into the claims. *See infra* Section I.G.3. There is, moreover, no evidence that the gateways store the video data or

that the control commands result in any change to the video file that would constitute processing. And in any event, as Patent Owner acknowledges, control of the delivery of the video content in Hooper is handed off and communications between client and service bypass the L1 and L2 gateways once a session is established. Exhibit 1006, col. 6, ll. 55–60 (“[T]he client 11 . . . is communicating directly with the services, by-passing the SEM 205”); Hearing Tr. 29:1–6.

Finally, we address Patent Owner’s contention that Hooper fails to teach sending an authorization instruction to the provider site storing the requested media file. PO Resp. 45–49. According to Patent Owner and its expert, Mr. Soske,

Instead of sending an authorization or instruction to the provider site that stores the requested video, which is what claims 1 and 14 require, the session manager (SEM), which resides on the L2 gateway router/IGU 202, sends an allocate request to the RM 210, and sends a create request to a media stream manager 207, neither of which are described as being located at or being a part of the provider site that contains the requested content.

PO Resp. 46; Soske Decl. ¶ 83.

Petitioner responds that Patent Owner “completely ignores the launch request of Hooper.” Pet. Reply 17. The launch request is specifically identified with this limitation in Petitioner’s claim charts. Pet. 44 (claim element [1f]). Furthermore, Mr. Soske admits he does not mention the launch request in his declaration. Soske Dep. 30:18–31:7. He agrees, also, that after launch the client can directly communicate with the server. *Id.* at 32:32–35.

We agree with Petitioner’s reasoning that Patent Owner’s argument has no merit. Pet. Reply 17–19. As explained *supra*, SEM 205 in Hooper

generates launch request 460 to launch the selected services in one or more servers 200. Ex. 1006, col. 5, ll. 56–58. As shown in Figure 4 of Hooper, reproduced *supra*, the launch request goes directly from the SEM to the service. Launching means the execution of the process of the services, and access to the associated content assets are enabled. *Id.* at col. 5, ll. 58–60. We find, therefore, that the launch request in Hooper meets this requirement of claims 1 and 14 for an authorization instruction.

We have considered Patent Owner’s other arguments regarding this ground of challenge and find them unpersuasive for reasons including those set forth in the Patent Owner’s Reply. We conclude that Petitioner has proved by a preponderance of the evidence that claims 1 and 14 would have been obvious over Hooper and Li.

C. Claims 7 and 19

These dependent claims contain limitations relating to storing of media files. Petitioner asserts they would have been obvious over the combination of Hooper, Li, and Hickey, and provides an analysis of these claims (including claim charts) in relation to those references in the Petition. Pet. 61–66, 72–74. Petitioner relies on Hickey as teaching the additional user interface and storage features of the claims. *Id.* at 62–63. Moreover, Petitioner provides a persuasive rationale for combining the references. *Id.* at 73–74.

Patent Owner first argues in response that “Hooper does not disclose, teach or suggest *storing* a downloaded encrypted media file on a digital storage device, accessing the *stored* encrypted media file, and controlling the playback of that *stored* accessed media file, as claims 7 and 19 require.” PO Resp. 53 (citing Ex. 2002 (“Soske Decl.”) ¶ 89). Patent Owner next argues

that those features are not taught or suggested by Hickey. *Id.* According to Patent Owner, “the only teaching in Hickey as to controlling playback of media is with regards to controlling ‘video tape record-playback units, audio tape record playback units, video disc record or playback units, CD audio record or playback units, and the like.’” *Id.* (citing Ex. 1009, Abstract).

Citing testimony from Mr. Soske, Petitioner responds that this is untrue and that “Hickey discloses numerous types of digital storage, including compact discs, DAT digital versions of tapes, video discs and others that [Mr. Soske] is not familiar with, namely DCC and MD format CDs.” Pet. Reply 20 (citing Soske Dep. 37:9–38:17). Moreover, Dr. Long testifies credibly that this claim element is met by Hooper, Li, and Hickey:

Hooper indicates that data can “be stored in the client,” i.e. at a player/receiver, and Hickey discloses “a computer with associated software, for controlling any combination or number of video tape record-playback units, audio tape record playback units, video disc record or playback units, CD audio record or playback units, and the like” that satisfies the limitation of a storage device for media files recited in claim 7. Ex. 1006 at 4:17-20; 1009 at Abstract.

Long Decl. ¶ 122 (claim 7); *see also id.* ¶ 129 (applying same analysis to claim 19).

We credit Dr. Long’s testimony and are persuaded that for the reasons set forth Petitioner’s analysis in the Petition and Reply, the limitations of claims 7 and 19 are met by the combination of Hooper, Li, and Hickey, and that it would have been obvious to combine the teachings from those references.

D. Claims 2–6, 8–13, 15–18, and 20–23

Claims 2–6 and 8–13 depend directly or indirectly from claim 1. Claims 15–18 and 20–23 depend directly or indirectly from claim 14. Patent

Owner presented no separate argument for these dependent claims beyond the arguments directed to claims 1 and 14. Accordingly, we determine that they would have been obvious for the reasons set forth above with respect to claims 1 and 14 and the adopted grounds set forth in the Petition.

E. Objective Indicia

As noted *supra*, Patent Owner relies on asserted the existence of “objective indicia of nonobviousness.” PO Resp. 53–66. After consideration of the record presented by Patent Owner and Petitioner’s response, we are not persuaded by those arguments.

1. Asserted Long-Felt Need and Failure of Others

Patent Owner contends there was a long-felt need for the invention of the ’854 patent. PO Resp. 56–64. In support of this contention, Patent Owner relies mainly on testimony from co-inventor Selwyn D. Simmons (Ex. 2001) and, to a lesser degree, from Mr. Soske.

According to Patent Owner, prior to 1998, video downloading was available to home users only on what it terms “closed networks” controlled by large corporations. *Id.* at 57. Patent Owner identifies several “hurdles” to providing video downloading via the Internet, including the fact that high-speed broadband connections were not available, file sizes were large due to the unavailability of appropriate codecs, suitable devices for connecting televisions to the Internet were lacking, downloading times were slow, and there was no “transaction platform” enabling transactions to purchase online content for download. *Id.* at 59–60. According to Patent Owner, “there was no reason for the ‘walled garden’ providers to open up their networks, as this would introduce unwanted competition for content distribution.” *Id.* at 62–63 (citing Ex. 2001 ¶ 13).

Patent Owner asserts, “[t]he inventions described and claimed in the ‘854 patent solved these problems in a unique way that revolutionized access to media.” *Id.* at 63. Patent Owner then presents a listing of “problems solved”:

(1) a player/receiver that is able to playback a media file on a television set and/or audio equipment, and that is able to connect to the Internet;

(2) a transaction server that authenticates each player/receiver, and sends information regarding a requested media file and information regarding a player/receiver that requested the media file to one of multiple content provider sites that contains the requested media file; and

(3) an architecture that enabled downloading of uniquely encrypted media files directly via the Internet from a provider site to a request player/receiver, without the media file being stored or processed by the transaction server and without specifying a particular set of connections from the provider site to the user site.

Petitioner responds that because Mr. Simmons is an interested party, as a named inventor and managing member of Patent Owner, his testimony is entitled to little weight. PO Reply 22–23. Petitioner also contends there is no nexus between the alleged objective indicia and the claims. *Id.* at 23.

We agree with Petitioner’s reasoning that this information does not demonstrate a long-felt need or failure by others. Patent Owner has not tied the information to the invention defined by the claims that are being challenged. “For objective evidence of secondary considerations to be accorded substantial weight, its proponent must establish a nexus between the evidence and the merits of the claimed invention.” *ClassCo, Inc. v.*

Apple, Inc., No. 2015-1853, 2016 WL 5219886, at *4 (Fed. Cir. Sept. 16, 2016) (citations omitted). “A nexus may not exist where, for example, the merits of the claimed invention were readily available in the prior art. Additionally, there is no nexus unless the evidence presented is reasonably commensurate with the scope of the claims.” *Id.* (citations and internal quotation marks omitted). In fact, the alleged “hurdles” facing Mr. Simmons, such as limited bandwidth, large file sizes, slow download times, etc., are not addressed by the ’854 patent, but were solved by others. *See, e.g., Newell Cos., Inc. v. Kenney Mfg. Co.*, 864 F.2d 757, 768 (Fed. Cir. 1988) (“Like the inventor in *Calmar, Inc. v. Cook Chemical Co.*, part of the *Graham* trilogy, once another supplied the key element, there was no long-felt need or, indeed, a problem to be solved by Ferguson.”). Even Mr. Simmons’s explanation of the importance of the Internet to his invention (*e.g.*, Ex. 2001 ¶¶ 22–24) is unconvincing in light of the statements in the specification that “the invention can operate with various, public and private communications networks.” Ex. 1001, col. 2, ll. 30–31.

Nor are the “problems solved” by the ’854 patent listed by Patent Owner the focus of the claims. PO Resp. 63–64. The ’854 patent is not directed to a player or a transaction server. The problem involving the “architecture” of the system refers to the Internet, which was not Mr. Simmons’ invention. And, as mentioned, Patent Owner’s attempt to construe the claims to define the particular architecture described, one “without the media file being stored or processed by the transaction server and without specifying a particular set of connections from the provider site to the user site,” is unavailing. *See* discussion of Claim Construction, *supra*.

After consideration of the arguments and evidence, we therefore give little weight to Patent Owner's argument based on alleged long-felt need.

2. Asserted Industry Skepticism

In support of this contention, Patent Owner relies mainly on Petitioner's expert, Dr. Long. PO Resp. 64–66. In an article cited by Patent Owner, Dr. Long wrote that “[n]one of the companies that invested in VOD have been able to come up with a single successful commercial system.” Ex. 2003, 1; PO Resp. 64. However, he also wrote, in the next sentence, “[t]he overall consensus now is that the commercial deployment of VOD will have to wait until the cost of building and maintaining the required infrastructure can be significantly lowered.” Ex. 2003, 1. A second article by Dr. Long attributes the lack of successful video on demand services to the lack of sufficient bandwidth, which “would require costly upgrades of the existing communication infrastructure.” Ex. 2005, 2. This is consistent with Mr. Simmons's testimony that the availability of broadband access to the Internet was a limitation on the development of commercial video on demand systems. Ex. 2001 ¶ 10.

We are not persuaded by Patent Owner's argument and evidence that the industry was skeptical about the invention claimed in the '854 patent. No testimony from independent industry sources is proffered. Nor does Patent Owner tie the alleged skepticism to the subject matter of the claims. To the contrary, both Dr. Long's and Mr. Simmons's statements attribute any lack of commercially successful video on demand services to insufficient bandwidth to access the Internet, a problem which the '854 patent does not address.

F. Conclusion

In sum, after considering all the evidence and arguments presented, including the evidence of objective indicia presented by Patent Owner, we conclude that Petitioner has demonstrated by a preponderance of the evidence that claims 1–23 of the '854 patent would have been obvious.

III. ORDER

In consideration of the foregoing, it is

ORDERED that, because this is a final written decision of the Board under 35 U.S.C. § 328(a), parties to the proceeding seeking judicial review of the decision must comply with the notice and service requirements of 37 C.F.R. § 90.2; and

FURTHER ORDERED that claims 1–23 of U.S. Patent 7,269,854 B2 are unpatentable under 35 U.S.C. § 103(a).

CBM2015-00147
Patent 7,269,854 B2

PETITIONER:

Michael Rosato
mrosato@wsgr.com

Jennifer Schmidt
jschmidt@wsgr.com

Michael Guo
mguo@wsgr.com

PATENT OWNER:

René A. Vazquez
rvazquez@sinergialaw.com