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Paper 37
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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

LENOVO HOLDING COMPANY, INC., LENOVO (UNITED STATES) INC., and MOTOROLA MOBILITY LLC,
Petitioner,

v.

DODOTS LICENSING SOLUTIONS LLC,
Patent Owner.

IPR2019-00988
Patent 9,369,545 B2

Before GRACE KARAFFA OBERMANN, JAMES A. WORTH, and PAUL J. KORNICZKY, *Administrative Patent Judges*.

KORNICZKY, *Administrative Patent Judge*.

JUDGMENT
Final Written Decision
Determining No Challenged Claims Unpatentable
35 U.S.C. § 318(a)

I. INTRODUCTION

Lenovo Holding Company, Inc., Lenovo (United States) Inc., and Motorola Mobility LLC ("Petitioner") filed a Petition for an *inter partes* review of claims 1–10 and 12–15 of U.S. Patent No. 9,369,545 B2 (Ex. 1001, "the '545 patent"). Paper 1 ("Pet."). We issued a decision to institute an *inter partes* review of these claims. Paper 7 ("Inst. Dec."). After institution, Patent Owner filed a Patent Owner Response (Paper 15, "PO Resp."), Petitioner filed a Reply (Paper 24, "Reply"), and Patent Owner filed a Redacted Sur-Reply to Petitioner's Reply[1] (Paper 35, "Sur-reply").

Oral argument was held on June 10, 2020, and the transcript of the hearing has been entered as Paper 36 ("Tr.").

We have jurisdiction under 35 U.S.C. § 6. This Final Written Decision is issued pursuant to 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73.

Petitioner bears the burden of proving unpatentability of the challenged claims, and the burden of persuasion never shifts to Patent Owner. *Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015). To prevail, Petitioner must prove unpatentability by a preponderance of the evidence. *See* 35 U.S.C. § 316(e) (2016); 37 C.F.R. § 42.1(d). For the reasons that follow, we determine that Petitioner has not shown by a preponderance of the evidence that claims 1–10 and 12–15 of the '545 patent are unpatentable. *See* 35 U.S.C. § 316(e).

[1] In our Order dated June 9, 2020 (Paper 34), we granted Petitioner's motion to strike (Paper 29) certain portions of Patent Owner's Sur-Reply (Paper 26). In response to our Order, Patent Owner filed its Redacted Sur-Reply.

II. BACKGROUND AND SUMMARY

A. Real Parties in Interest

According to Petitioner, Lenovo Holding Company, Inc., Lenovo (United States) Inc., and Motorola Mobility LLC are the real parties-in-interest. Pet. 64. According to Patent Owner, DoDots Licensing Solutions LLC is the real party-in-interest. Paper 4, 2.

B. Related Matters

According to Petitioner, the ’545 patent as well as U.S. Patent Nos. 8,020,083 and 8,510,407 are at issue in *DoDots Licensing Solutions LLC v. Lenovo Holding Company, Inc. et al*., Case No. 18-098-MN (D. Del.). Pet. 64; *see also* Paper 4, 2 (Patent Owner identifies the district court action).

C. The ’545 Patent (Ex. 1001)

The title of the ’545 patent is “Accessing and Displaying Network Content.” Ex. 1001, code (54). The ’545 patent discloses, among other things, a method for accessing and displaying network content in a graphic user interface (“GUI”). *Id.* at code (57).

According to the ’545 patent, conventional web browsers are limited in the “aggregation” and “presentation” of content. *Id.* at 1:48–51. As to the aggregation of content, the ’545 patent states that a user may use conventional web pages to view content sources in a single web page, such as stock, weather and sports information (*id.* at 1:27–38), and because the user is not in a position to separately aggregate the content at a client computer, the user is constrained to view the content that has been delivered

in the manner provided by the server computer hosting the web page (*id*. at 1:45–48). As to the presentation of content, the ’545 patent states that conventional content was divided into regions on a single web page. *Id.* at 1:27–38. The ’545 patent identified a purported problem, noting that when disparate content was aggregated, it was “reassembled into a full web page and [] served through a full-screen browser.” *Id.*

In contrast to conventional web pages, the ’545 patent discloses a method for accessing and displaying network content in a GUI. *Id.* at code (57). It is capable of processing distributable computer readable media. *Id*. at 4:29–30. Distributable computer readable media includes, but is not limited to, standard web content, such as HTML, dHTML, images, imbedded ActiveX and Java applications, JavaScript, CSS, Pen scripts, Streaming Media, and/or Flash. *Id*. at 4:31–34.

According to the ’545 patent, a user logs into a server by providing a login identifier, which is used to obtain the user’s profile. *Id*. at 4:44–47. The user profile includes references to networked information monitors (NIMs). *Id*. at 4:54–56. In the ’545 patent, the term “networked information monitor” refers to a fully configurable frame with one or more controls, which stands in contrast to conventional web browsers, which have limited means to alter the browser controls. *Id*. at 4:56–63. A “NIM template” defines the characteristics of a specific NIM, including fully configurable frame characteristics, viewer and control characteristics, and NIM content references. *Id*. at 6:34–37; *see id*. at 2:30–32 (referred “a definition of a Networked Information Monitor (NIM)” which defines a “NIM frame”). After the user accesses the user profile and the NIM template defines the

characteristics of the NIM frame, the content is placed in the NIM viewer defined by the frame. *Id*. at 2:30–34.

D. Illustrative Claim

As mentioned above, the challenged claims are claims 1–10 and 12–15. Claim 1 is the only independent claim among the challenged claims, and is reproduced below:[2]

> 1. [1.preamble] A computer-implemented method of obtaining content over a network and displaying the content to a user, the method being implemented in a client computing device in operative communication with a server over a network, the client computing device including electronic storage, a display, and one or more processors configured to execute one or more computer program modules, the method comprising:
>
> [1.A] transmitting a request to the server over the network, the request requesting network information monitor template;
>
> [1.B]: receiving the requested networked information monitor template from the server over the internet, the requested networked information monitor template having been transmitted from the server over the network responsive to the transmitted request, the networked information monitor template comprising:
>
> [1.C]: a definition of a viewer graphical user interface within which content in a web browser-readable language may be presented on the display of the client computing device; and
>
> [1.D]: a definition of a first content element for the networked information monitor template, the definition of the first content element referencing a first network location from which the first content element for the networked information monitor template is served over the network;

[2] For ease of reference, claim 1 includes Petitioner's bracketed limitation designations. *See* Pet. 17–19.

> [1.E]: responsive to instructions included in the requested *networked information monitor template*, presenting the viewer graphical user interface defined by the networked information monitor on the display of the client computing device separate from and outside of any other graphical viewer user interface that includes user controls for specifying the first network location from which the first content element for the networked information monitor is served over the network;
>
> [1.F]: responsive to instructions included in the requested networked information monitor template, transmitting over the network a first content request to the first network location referenced by the definition of the first content element for the networked information monitor template;
>
> [1.G]: receiving, over the network, the first content element transmitted responsive to the first content request; presenting the received the first content element in the viewer graphical user interface defined by the networked information monitor template,
>
> [1.I]: wherein the definition of the viewer graphical user interface and/or the first content element define all controls for enabling a user to interact with the first content element through the viewer graphical user interface.

Ex. 1001, 42:22–43:4 (emphasis added).

E. Prior Art References

Petitioner relies on the following references:

Reference	Description	Date	Exhibit
Hoff[3]	US 5,919,247	Issued July 6, 1999	Ex. 1006
Berg	Cliff Berg, *How Do I Create a Signed Castanet Channel?*, DR. DOBB'S JOURNAL, January 1, 1998	Published Jan. 1, 1998	Ex. 1007
Razavi	US 6,401,134 B1	Issued June 4, 2002	Ex. 1008
Banthia	US 5,922,044	Issued July 13, 1999	Ex. 1009
Berry	US 5,586,244	Issued Dec. 17, 1996	Ex. 1010
Dang	US 7,216,300 B2	Issued May 8, 2007	Ex. 1011
Cordell	US 5,778,372	Issued July 7, 1998	Ex. 1013

F. Asserted Grounds

Petitioner asserts that claims 1–10 and 12–15 are unpatentable on the following grounds:

Ground	Claim(s)	35 U.S.C. §[4]	Reference(s)
1	1, 2, 10, 14	103	Hoff, Berg
2	2–5, 9	103	Hoff, Berg, Dang, Berry
3	6, 7, 12, 13, 15	103	Hoff, Berg, Razavi, Banthia
4	8	103	Hoff, Berg, Razavi, Banthia, Cordell
5	1, 6, 7, 10, 12–15	103	Razavi, Banthia

[3] The first-named inventor is Arthur Van Hoff, but, for consistency with the Petition, we refer to the patent as "Hoff."

[4] The Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (September 16, 2011) ("AIA"), included revisions to 35 U.S.C. §103 that became effective on March 16, 2013. Because the '545 patent issued from an application filed before March 16, 2013, we apply the pre-AIA version of the statutory basis for unpatentability.

Ground	Claim(s)	35 U.S.C. §[4]	Reference(s)
6	2–5, 9	103	Razavi, Banthia, Dang, Berry
7	8	103	Razavi, Banthia, Cordell

Pet. 1. Petitioner relies on the testimony from Dr. Vijay K. Madisetti (Ex. 1005). Based on his statement of qualifications and experience, we find Dr. Madisetti qualified to opine about the understanding of a person of ordinary skill in the art at the time of the invention. *See* Ex. 1005 ¶¶ 6–30 (statement of qualifications and experience).

III. ANALYSIS

A. Legal Standards

A claim is unpatentable under 35 U.S.C. § 103(a) if the differences between the subject matter sought to be patented 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 based on underlying factual 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) when in the record, objective evidence of nonobviousness, such as commercial success. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966). In that regard, an obviousness analysis "need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ." *KSR*, 550 U.S.

at 418. Further, "[t]o satisfy its burden of proving obviousness, a petitioner cannot employ mere conclusory statements. The petitioner must instead articulate specific reasoning, based on evidence of record, to support the legal conclusion of obviousness." *In re Magnum Oil Tools Int'l, Ltd.*, 829 F.3d 1364, 1380 (Fed. Cir. 2016). We analyze the asserted grounds with these principles in mind.

B. Level of Ordinary Skill in the Art

Petitioner asserts that a person of ordinary skill in the art would have a "bachelor's degree in Electrical or Computer Engineering, Computer Science, or a related field and have three or more years of experience in the field." Pet. 8 (citing Ex. 1005 ¶¶ 38–41). Patent Owner does present evidence regarding the education and experience of a person of ordinary skill in the art.

Petitioner's proposal appears to be consistent with the prior art of record and with the '545 patent. *Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001) (explaining that specific findings regarding ordinary skill level are not required where the prior art itself reflects an appropriate level and a need for testimony is not shown) (internal quotation marks and citation omitted). We adopt Petitioner's asserted level of ordinary skill in the art.

C. Claim Construction

In an *inter partes* review based on a petition filed after November 13, 2018, the claims are construed

> 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), including construing the claim in accordance with

> the ordinary and customary meaning of such claim as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent.

See Changes to the Claim Construction Standard for Interpreting Claims in Trial Proceedings Before the Patent Trial and Appeal Board, 83 Fed. Reg. 51,340, 51,340, 51,358 (Oct. 11, 2018) (amending 37 C.F.R. § 42.100(b) effective November 13, 2018) (now codified at 37 C.F.R. § 42.100(b). (2019)); *see Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–13 (Fed. Cir. 2005). Any special definitions for claim terms must be set forth in the specification with reasonable clarity, deliberateness, and precision. *See In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994).

To resolve Petitioner's challenge, the parties assert that two claim terms need to be construed: network information monitor (NIM) and network information monitor template (NIM template).

1. Network Information Monitor (NIM)

Patent Owner asserts that the "inventors defined NIMs in the specification as follows: 'As used herein, the term networked information monitor or NIM refers to a fully configurable frame with one or more controls; the frame through which content is optionally presented.'" PO Resp. 8 (citing Ex. 1001, 4:56–59). Petitioner agrees that the Specification defines "a NIM as 'a fully configurable frame with one or more controls' through which content is presented to the user." Reply 2 (citing Ex. 1001, 2:28–30; 4:56–67). We agree that the Specification defines a NIM as "a fully configurable frame with one or more controls through which content is presented to the user," and this is the interpretation we apply here. Ex. 1001, 4:56–63.

2. Network Information Monitor Template (NIM template)

a) The Parties' Contentions

Patent Owner asserts that "the NIM template (a.k.a., NIM definition) is a data structure that defines the NIM; it is not the NIM and it is not an executable program (i.e., compiled code)." PO Resp. 8 (citing Ex. 2001 ¶¶ 20–36); *id*. at 2 ("NIM templates are 'data structures,' not applications"). According to Patent Owner, the Specification states that "NIMs are extremely flexible, because the definition of the NIM is **content, rather than compiled code**." *Id*. at 8 (citing Ex. 1001, 21:58–60 (emphasis added), 6:33–37 ("NIM templates database 74 includes a large number of NIM templates. Each **NIM template defines the characteristics of a specific NIM**, including fully configurable frame characteristics, view and control characteristics, and NIM content references.") (emphasis added), 3:31-33 ("FIG. 13 illustrates a **data structure** for a NIM definition, stored in the NIM application server's template database or user profile database.") (emphasis added)). Patent Owner also argues that "NIM templates are significantly smaller than the NIMs they define." *Id*. at 9 (citing Ex. 2001 ¶ 24; Ex. 1001, 33:47–55 ("Each NIM definition contains just enough information to define and initialize the NIM's components (NIM frame, controls, etc.). For example, this information may contain data to configure the skeleton or frame that is filled in by NIM content from a developer's server. The NIM definition is therefore fairly small in size (~2K), and is therefore easily distributable as an XML file or Blob (binary large object), which is communicated using the same mechanisms (HTTP/ HTTPS requests) as regular Web pages.")).

Petitioner does not present a construction for a "NIM template," but criticizes Patent Owner's proposed construction and argues that a NIM template should encompass executable programs and compiled code. Reply 2–4. Petitioner argues that "nothing in the claims or specification limits a NIM template to a data structure excluding an executable program, as Patent Owner proposes." *Id*. at 2. Petitioner argues that Patent Owner's examples of NIM templates in the Specification, which exclude compiled code and executable applications, are merely "non-limiting examples of NIM templates" (*id*. at 3), while certain other embodiments disclose NIM templates that are executable code (*id*. at 5). Petitioner also argues that extrinsic evidence—statements in another related patent and in related litigation—evidence that NIM templates may contain executable code. As discussed in our analysis below, Petitioner's arguments are not persuasive.

b) Construction of "NIM Template"

After considering the usage of "NIM template" in the claims, the Specification, the prosecution history, and the parties' contentions, we determine that a NIM template is a data structure which defines the characteristics of a NIM, including the NIM frame, view and control characteristics, and which excludes executable applications/compiled code.

Turning to the usage of NIM template in the claims, claim 1, in relevant part, states:

> the networked information monitor template comprising:
>
> [1.C]: a definition of a viewer graphical user interface within which content in a web browser-readable language may be presented on the display of the client computing device; and

> [1.D]: a definition of a first content element for the networked information monitor template, the definition of the first content element referencing a first network location from which the first content element for the networked information monitor template is served over the network.

Ex. 1001, 42:36–47. From claim 1, we understand that the NIM template defines the characteristics of the viewer and the content on the viewer.

As to the prosecution history of the ’545 patent, the parties did not identify, and we did not find, any portion of the prosecution history that is helpful in determining the meaning of NIM template.

The Specification of the ’545 patent does address the meaning of NIM template. The Specification states the “NIMs allow a developer to provide an application feel without developing custom client applications” (Ex. 1001, 26:33–35), and the “NIM template defines the characteristics of a specific NIM, including fully configurable frame characteristics, viewer and control characteristics, and NIM content references” (*id*. at 6:34–37). *See also id*. at 21:21–23 (“The NIM definitions, as discussed above, includes the NIM frame definition and the definition of the controls for filling the viewer within the frame with content.”).

Figure 13 of the ’545 patent is reproduced below.

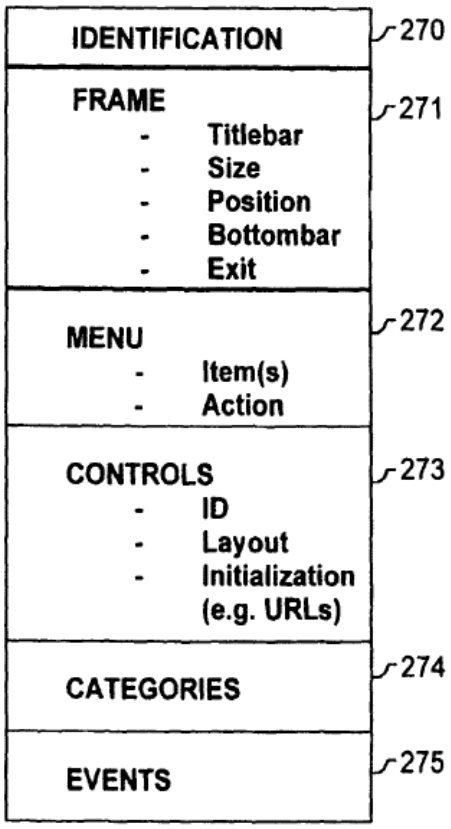

FIG. 13

Figure 13 "illustrates a data structure for a NIM definition." *Id*. at 21:42, 3:31. According to the Specification, in the exemplary embodiment of Figure 13, "the definition of a NIM includes tags that identify the NIM 270, define and configure the NIM frame 271, specify and layout the controls 273 in the NIM viewer, and specify parameters to initialize all the NIM's components with content or data." *Id*. at 22:4–8. This disclosure does not indicate that the data structure for the NIM template contains compiled code.

The Specification states that "a NIM is defined as a frame that contains a collection of controls, or functional units, such as a web rendering control or a GIF rendering control," and the NIM definitions "include all the

information needed to build a NIM frame and fill the NIM with NIM content." *Id*. at 21:42–53. The Specification further states:

> In one embodiment, the NIM definitions are defined using Extensible Markup Language (XML), so that the NIM as a whole–the frame and the content within the viewer—is advantageously as flexible as standard web content. NIMs are extremely flexible, because ***the definition of the NIM is content, rather than compiled code***. The NIM definition defines the structure of the NIM, and everything that is visible in a NIM is based on standard Internet content, such as HTML, dHTML, or GIFs, and is referenced or pointed to by the NIM definition. An "application"–type NIM, such as a web calendar or web mail, may be changed by the user, by the content provider, or by other content, ***while advantageously avoiding*** the need to distribute and support a ***hard-coded compiled application***. The definition of a NIM thus includes everything that is needed for the NIM to be rendered and filled with Internet content.

Id. at 21:55–22:3 (emphasis added). From this disclosure, we understand that the Specification prohibits the NIM template from using compiled code or an executable application. Our review of the Specification did not identify use of compiled code or an executable application by the NIM template.

Petitioner argues that the data structure illustrated in Figure 13 and the related discussion of Figure 13 is merely one non-limiting embodiment, and that the Figure 13 embodiment merely describes implementing a NIM template as XML rather than compiled code. Reply 3–4 (citing *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1117 (Fed. Cir. 2004) ("particular embodiments appearing in the written description will not be used to limit claim language that has broader effect")). Petitioner's argument is not persuasive. While we agree with Petitioner that the XML is one possible embodiment of a NIM template, the Specification

distinguishes the XML embodiment from embodiments using other languages for data structures, rather than distinguishing the XML embodiment from embodiments in which the template is compiled code. The Specification's broad statement that a NIM template does not use compiled code or executable applications applies to all NIM templates, not just one particular embodiment. The Specification does not describe any NIM template that uses compiled code or executable applications.

Petitioner argues that the Specification provides several examples of a NIM template which uses executable code. First, Petitioner references the Specification's statement that "[t]he NIM definition is . . . fairly small in size (~2K), and is therefore easily distributable as an XML file or Blob (binary large object) . . . ." Reply 4–5 (citing Ex. 1001, 33:51–53). Petitioner argues that a "binary large object" "might contain any binary content, including executable code." *Id*. at 4. Petitioner's argument is not persuasive. The Specification refers to an "XML file" and an "XML Blob." *See, e.g*., Ex. 1001, 34:21 (referring to "XML Blob"). In addition, Petitioner's contention is attorney argument unsupported by persuasive expert testimony. *In re Geisler*, 116 F.3d 1465, 1470–1471 (Fed. Cir. 1997) (argument by counsel cannot take the place of evidence); *In re Pearson*, 494 F.2d 1399, 1405 (CCPA 1974) ("Attorney's arguments in a brief cannot take the place of evidence."). Unlike Patent Owner, Petitioner provided no declarant testimony probative to the issue of how the ordinary artisan would understand and interpret the relevant Specification passages and the limitation in dispute.

Second, Petitioner argues that the "second executable module" described in the specification is an embodiment of a "NIM template."

Reply 5. According to Petitioner, the Specification states a "second ***executable module defines a NIM frame*** for the NIM using the definition," and because "the 'second executable module' defines a NIM frame, the 'second executable module' is a NIM template under its plain and ordinary meaning." *Id*. (citing Ex. 1001, 2:38–30, 2:44–45). Petitioner further argues that the "NIM definition modules" are "executable code as distinct from data." *Id*. at 6. Petitioner's argument is not persuasive because Petitioner does not identify, and we do not find, any portion of the Specification which discloses that the second executable module contains compiled code. In the context of the Specification, the second executable module and the NIM definition module contains the "data structure" for a NIM definition, and appears to mean that the content in the modules are used with the specified operation. *See* Ex. 1001, 3:31. In addition, Petitioner's contentions about the meaning of NIM template, second executable module, and NIM definition module are attorney argument unsupported by persuasive expert testimony. *In re Geisler*, 116 F.3d at 1470–1471 (argument by counsel cannot take the place of evidence). The Specification does not describe any NIM template that uses compiled code or executable applications.

Third, Petitioner argues that, during prosecution of a related '874 application,[5] Patent Owner admitted that the NIM template can be executed. Reply 6. According to Petitioner, "the '874 Application includes claims reciting 'executing the first networked information monitor template,' and

[5] According to Petitioner, the'545 patent indirectly claims priority to U.S. Patent No. 7,660,868 (the "'868 patent"), and the'545 and '868 patents share essentially the same specifications. Reply 6–7. U.S. Patent Application No. 13/215,874 (the "'874 application") also claims priority to and shares a specification with the '868 patent. *Id*.

during prosecution, Patent Owner differentiated the claims from a prior art reference on the basis that the prior art did not 'teach or suggest executing' the claimed NIM template." *Id*. at 7 (citing Ex. 1019, 6–7, 14). Petitioner argues that Patent Owner's attempt to define NIM template differently in this proceeding is improper. *Id*. at 6 (citing *Omega Eng'g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1334 (Fed. Cir. 2003)). As an initial matter, Exhibit 1019 is the Second Amended Complaint in a litigation, not the prosecution history of the '874 patent application. In addition, Petitioner's contentions about the meaning of the disputed terms are attorney argument unsupported by citations to persuasive intrinsic evidence or testimony from a witness competent to opine about how an ordinarily skilled artisan would understand the terms. *In re Geisler*, 116 F.3d at 1470–1471 (argument by counsel cannot take the place of evidence). Petitioner's argument is not persuasive.

Fourth, Petitioner argues that "Patent Owner's assertion that an application could never be a NIM template (i.e., that a NIM template cannot be executable) is further contradicted by its infringement allegations against the Petitioners in the underlying district court action, where Patent Owner has contended that each step of Claim 1 is performed by the use of 'a stocks (finance) ***app***, MSN weather ***app***, sports team ***app***, a podcast ***app*** and numerous other ***apps*** . . . .'" Reply 7 (citing Ex. 1020, 6–7). Petitioner's argument is not persuasive because it does not present any evidence about how the "apps" work and how they apply to the disputed NIM template, compiled code, and executable applications. In addition, Petitioner's contentions about the meaning of the disputed terms and apps are attorney argument unsupported by persuasive evidence. *In re Geisler*, 116 F.3d at 1470–1471 (argument by counsel cannot take the place of evidence). A

parties' infringement allegations do not override the meaning of the claims based on the intrinsic evidence. To the extent Petitioner is contending that Patent Owner is taking inconsistent claim construction positions in an effort to establish infringement in the related litigation, Petitioner can, of course, present that argument to the court should litigation continue.

For the reasons above, we determine that a NIM template is a data structure which defines the characteristics of a NIM, including the NIM frame, view and control characteristics, and which excludes executable applications/compiled code.

D. Ground 1– Obviousness over Hoff and Berg

Petitioner contends that the subject matter of claims 1, 2, 10, and 14 would have been obvious over the combined teachings of Hoff and Berg. Pet. 22–29. We first describe the prior art that Petitioner seeks to combine to show that independent claim 1 is obvious, and then turn to the merits of the combination.

1. Overview of Hoff (Ex. 1006)

Hoff is a patent titled "Method for the Distribution of Code and Data Updates," and issued on July 6, 1999. Ex. 1006, codes (54), (45). Petitioner contends Hoff is prior art under 35 U.S.C. § 102(e). Pet. 10.

Hoff discloses a system and method for distributing software applications and data to thousands of clients over a network. Ex. 1006, code (57). In Hoff, the applications are called "channels," the server is called the "transmitter," and the client is called the "tuner." *Id*. The end-user needs to subscribe to a channel before it can be executed. *Id*. When the end-user subscribes to a channel, the associated code and data is downloaded to the

local hard-disk and, once downloaded, the channel can be executed many times without requiring further network access. *Id*. Because the channel's software and data updates can be automatically downloaded and installed in the background at regular intervals by the tuner, Hoff states that the end-user is not required to manually install software updates. *Id*. Hoff asserts that this method of automatic downloading of updates achieves for the client the same result as the broadcast distribution of software over a connection based network, but wherein the client initiates each update request without requiring any special broadcast networking infrastructure. *Id*.

2. Overview of Berg[6] (Ex. 1007)

Berg is an article titled "How Do I Create a Signed Castanet Channel?" Ex. 1007, 1. Berg discloses using Marimba's Castanet, the "Java-centric (but not limited to Java) push technology," to distribute content from Marimba. Berg, 1. Castanet is "a technology for deploying highly scalable applications, with centralized update and administration capabilities." *Id*. at 2. Berg states that:

> Castanet consists of a client called the "tuner" and a server called the "transmitter." Channels are published by an administrator on a transmitter. A workstation that has a tuner installed can subscribe to any number of channels on any number of transmitters. The tuner updates the channel's content, which may consist of Java code, media, and other

[6] The parties dispute whether Berg was publicly accessible as of the critical date (April 26, 1999), and, therefore, available as a prior art printed publication. PO Resp. 12–14; Reply 9–11. We do not reach the dispute regarding the prior art status of Berg because it is not necessary to our ultimate decision. Even if we accept Petitioner's view that Berg qualifies as prior art, we find that Petitioner has not established the unpatentability of any challenged patent claim.

> files, including binary code (signed channels can load native methods supported by DLLs). The tuner presents a user interface for managing channels. The tuner interface is set apart from the interface constructed by any given channel (if the channel even has a user interface). This is unlike a browser, which imposes a user interface frame around any application that runs within it. Channels construct their own frames if and when they need them.

Id.

Berg discloses a HotJavaBean component, which is an HTML renderer, used in a Castanet channel to render full "style-sheets, applets, and frames" in a GUI, such that "by deploying an application via Castanet, you do not have to forego the web capabilities of a browser." Ex. 1007, 3. Berg discloses that the channel application contains parameters defining a GUI, including (1) the location of the viewing window to display the selected webpage; (2) the size of the GUI; (3) a drop-down menu for selecting a webpage; and (4) an "X" for closing the GUI. *Id.*, 2–4. The channel application can "provide users with a customized selection of URLs to view" and the "viewing window can be placed anywhere within the Java application, just like any other component." *Id.*, 3. For example, Berg discloses an exemplary channel—*BigCorporateApp*—as a Java application that can be downloaded to a client. *Id.*, 3–5. When the user initiates that channel, the application opens a GUI and presents the user with a menu selection of three URLs. *Id.* Once the user selects a URL, the application fetches that webpage over the Internet via the corresponding address and displays the webpage within a portion of the GUI. *Id*; Ex. 1005 ¶¶ 93–95.

3. Claims 1, 2, 10, 14 —Obviousness Over Hoff and Berg

In support of Petitioner's contention that claims 1, 2, 10, and 14 are obvious over the combined teachings of Hoff and Berg, Petitioner provides an element-by-element analysis showing where each element of the challenged claims is in Hoff or Berg. Pet. 22–29. Petitioner also provides supporting testimony by Dr. Madisetti (Ex. 1005). Patent Owner, relying on supporting testimony by Dr. Sacerdoti (Ex. 2001), argues that Petitioner does not show that claims 1, 2, 10, and 14 are unpatentable because, in part: (1) Hoff and Berg do not have a NIM template, (2) Hoff and Berg do not have a separate NIM and NIM template, and (3) objective evidence of non-obviousness such as commercial success undermines Petitioner's arguments of unpatentability.[7] For reasons set forth below, we determine that Petitioner has not shown that Hoff and Berg teach or suggest the limitations of claims 1, 2, 10, and 14.

a) Claim 1—The NIM Template Limitation

Claim 1, the only challenged independent claim, recites, in part (emphasis added):

[7] Patent Owner asserts that objective evidence of non-obviousness — commercial success — supports a finding of non-obviousness of the '545 patent. PO Resp. 17–18. We do not assess the objective evidence of non-obviousness because we find that Petitioner fails to carry its burden of demonstrating the unpatentability of any challenged claim based on the asserted prior art. *See, e.g.*, *Hamilton Beach Brands, Inc. v. f'real Foods, LLC*, 908 F.3d 1328, 1343 (Fed. Cir. 2018) (holding, in affirming Board decision determining that petitioner had not shown unpatentability, that "objective indicia of nonobviousness" "need not [be] addressed" because the court "affirmed the Board's findings regarding the failure of the prior art to teach or suggest all [claim] limitations").

> [1.A] transmitting a request to the server over the network, the request requesting *network information monitor template*;
>
> [1.B]: receiving the requested *networked information monitor template* from the server over the internet, the requested *networked information monitor template* having been transmitted from the server over the network responsive to the transmitted request, the ne*tworked information monitor template* comprising:
>
> [1.C]: a definition of a viewer graphical user interface within which content in a web browser-readable language may be presented on the display of the client computing device; and
>
> [1.D]: a definition of a first content element for the *networked information monitor template*, the definition of the first content element referencing a first network location from which the first content element for the *networked information monitor template* is served over the network.

Petitioner asserts that Hoff and Berg teach the "NIM" recited in claim 1 by disclosing a channel application. Pet. 23 (citing Ex. 1006, Abstract, 2:45–48, 2:56–67, 3:1–5 ("[A] request is made to the transmitter hosting the channel."), 4:47–49; Ex. 1007, 2; Ex. 1005 ¶¶ 113–115).

Petitioner also asserts that "the 'channel' applications disclosed in *Hoff* and *Berg* contain the claimed NIM template." Pet. 23 (citing Ex. 1005 ¶¶ 116–118), 24–25. According to Petitioner, "*Hoff* discloses that the client receives the code and data (NIM template) necessary to implement a channel (NIM) from the transmitter (located on the server) in response to a request from the tuner (located on the client)." Reply 8. Petitioner explains that Hoff discloses, "in response to a transmitted request from the tuner, the client receives the requested channel from the transmitter, which is located on the server." Pet. 23–24 (citing Ex. 1006, code (57), 2:45–48, 2:64–66, 3:2–5 ("[C]ode and data for the channel is downloaded and stored in a local

persistent storage."), 4:49–57). Petitioner also asserts that the "communication between the client and the server occurs over 'a network 101 such as the Internet.'" *Id*. at 24 (citing Ex. 1006, 3:34–36). As to Berg, Petitioner asserts that Berg "discloses that the tuner can be used to 'subscribe to any number of channels on any number of transmitters.'" *Id*. (citing Ex. 1007, 2). Relying on Dr. Madisetti's testimony, Petitioner asserts that the "channel downloaded from the transmitter and stored on the client computer in *Hoff* and *Berg* includes the claimed NIM template" and "the channel contains instructions and data used to create a GUI and display content therein." *Id*. (citing Ex. 1005 ¶ 118).

Petitioner's arguments are not persuasive because Petitioner does not show persuasively that Hoff's and Berg's channel application containing the alleged NIM template comprises a data structure which defines the characteristics of a NIM, including the NIM frame, view and control characteristics, and which excludes executable applications/compiled code. Indeed, Petitioner admits that the asserted "NIM template" in Hoff and Berg contains compiled "code and data." Reply 8; Pet. 23–24. Hoff discloses that its invention

> consists of a system and method for the large scale distribution of *application code* and data. The system consists of a client-side component, which the user uses to download *applications*, as well as a server-side component, which is used by a content provider or developer to make *applications* available for distribution. The system also allows for the automatic updating, personalization, and usage monitoring of *applications*. In addition it is possible to use the application even when the host computer is not always connected to the network.

Ex. 1006, 2:43–53 (emphasis added). Hoff also discloses that a channel, which Petitioner argues contains the NIM template, is a "named application consisting of *code and data* which can be subscribed to by an end-user," and "[o]nce delivered to the end-user[,] a channel behaves much like a normal application." *Id*. at 2:56–59 (emphasis added). Dr. Madisetti, for example, testifies that Hoff and Berg's channel contains compiled code or executable applications. *See, e.g.*, Ex. 1005 ¶ 114 (citing Ex. 1006, 3:1–5 ("The [Hoff] end-user uses the tuner to subscribe to channels. When the user first subscribes to a channel a request is made to the transmitter hosting the channel. As a result of this request, *the code and data for the channel* is downloaded and stored in a local persistent storage, usually a hard disk.") (emphasis added)), ¶ 113 ("channels . . . are the downloaded applications"), ¶ 119 (stating "*in the provided code* and description of the exemplary channel application, Berg discloses that the channel application contains parameters that define a GUI" (citing Ex. 1007, 2–5) (emphasis added)). We also credit Dr. Sacerdoti's testimony that Hoff's and Berg's channels contain compiled code or executable applications, as consistent with the other evidence of record. *See, e.g.*, Ex. 2001 ¶¶ 56 ("[T]he petition identifies or references *Berg* discussing the source code of an application. One of skill in the art would understand that the Java source code defining the channel disclosed in *Berg* was compiled into byte codes (likely on a device different from the server disclosed by *Berg*) prior to the channel being downloaded from a server to a client."). Like Hoff, Berg concerns itself with applets and applications. *See, e.g.*, Ex. 1007, 2 ("Using [Castanet] . . . you can now create full-featured client applications . . . ."). In contrast, the claimed NIM templates use data structures rather than applets or applications.

Further, both Petitioner and Patent Owner agree that the NIM and the NIM template are separate and distinct elements. Reply 2; PO Resp. 8. However, neither Petitioner nor Dr. Madisetti identify what in Hoff and Berg might be a NIM template separate and distinct from the NIM. To the contrary, Petitioner argues that the channel applications (i.e., the NIM) contain the NIM template. *See, e.g.*, Pet. 23–24; Ex. 1005 ¶ 118 ("The channel downloaded from the transmitter and stored on the client computer in *Hoff* and *Berg* includes the claimed NIM template."). We also credit Dr. Sacerdoti's testimony that, under Petitioner's interpretation, Hoff's and Berg's channel application (NIM) contains the claimed NIM template, but do not disclose a NIM and a NIM template that are separate and distinct elements. Ex. 2001 ¶¶ 50 ("The petition does not identify any entity disclosed by *Hoff* operating on the client that is responsive to instructions included in a NIM template, presents a viewer graphical user interface defined by a NIM, and presents content within that interface, that is distinct from the NIM template."), 55 ("As with *Hoff*, neither Madisetti nor the petition asserts what in *Berg* might be the NIM template (channel template) that is distinct from the NIM (channel).").

Thus, for the reasons discussed above, we conclude that Petitioner has not demonstrated by a preponderance of the evidence that claim 1 would have been obvious over the asserted prior art.

b) Claims 2, 10, and 14

Each of claims 2, 10, and 14 depend from independent claim 1, and, therefore, require a "NIM template." Ex. 1001, 43:5–44:31. Thus, for the same reasons discussed above with respect to Petitioner's challenge of claim

1, we also conclude that Petitioner has not demonstrated by a preponderance of the evidence that claims 2, 10, and 14 would have been obvious over the asserted prior art.

c) Summary of Claims 1, 2, 10, and 14

For the reasons above, Petitioner has not shown that Hoff and Berg, either singly or in combination with each other, disclose a NIM template comprising a data structure which defines the characteristics of a NIM, including the NIM frame, view and control characteristics, and which excludes executable applications/compiled code. Thus, Petitioner has not shown by the preponderance of the evidence that claims 1, 2, 10, and 14 are unpatentable over Hoff and Berg.

E. Grounds 2–4: Claims 2–9, 12, 13, 15

As mentioned above, Petitioner also challenges the patentability of (1) claims 2–5 and 9 over the combination of Hoff, Berg, Dang, and Berry, (2) claims 6, 7, 12, 13, and 15 over the combination of Hoff, Berg, Razavi, and Banthia, and (3) claim 8 over the combination of Hoff, Berg, Razavi, Banthia, and Cordell. Pet. 29–44. Each of claims 2–9, 12, 13, and 15 depend, directly or indirectly, from independent claim 1, and, therefore, require a "NIM template." Ex. 1001, 43:5–44:31. Petitioner does not argue that Dang, Berry, Razavi, Banthia, or Cordell remedy the deficiencies of Hoff and Berg. Thus, for the same reasons discussed above with respect to Petitioner's challenge of claim 1, we also conclude that Petitioner has not demonstrated by a preponderance of the evidence that claims 2–9, 12, 13, and 15 would have been obvious over the asserted prior art.

F. Ground 5– Obviousness over Razavi and Banthia

Petitioner contends that the subject matter of claims 1, 6, 7, 10, and 12–15 would have been obvious over the combined teachings of Razavi and Banthia. Pet. 44–57. We first describe the prior art that Petitioner seeks to combine to show that independent claim 1 is obvious, and then turn to the merits of the combination.

1. Overview of Razavi (Ex. 1008)

Razavi is a patent titled "Detachable Java Applets," and was filed on July 25, 1997. Ex. 1008, codes (54), (22). Petitioner contends Razavi is prior art under 35 U.S.C. § 102(e). Pet. 13.

Razavi discloses a system and method for "detaching Java applets from the constraints of the application such as a browser." Ex. 1008, code (57). Razavi's applets run "without regard to the graphical interface limits of the [browser] application." *Id.* Razavi discloses conventional applets presented in a browser that were constrained by "a window size that the applet must execute within." *Id*. at 1:35–44. Razavi discloses a method to "detach Java applets from the constraints of the application so that they can be GUI-controlled directly" and "not be limited by the state of the application in which the applets are spawned." *Id.* at 3:5–10. Razavi discloses Java source code for a Jukebox streaming audio applet in Appendix A. *Id*. at 4:18–25. Razavi discloses that when "an applet is defined/created, its source code can be modified to include methods for detaching the applet." *Id*.

2. Overview of Banthia (Ex. 1009)

Banthia is a patent titled "System and Method for Providing Information to Applets in a Virtual Machine," and was filed on June 12, 1997. Ex. 1009, codes (54), (22). Petitioner contends Banthia is prior art under 35 U.S.C. § 102(e). Pet. 15.

Banthia discloses a system and method for simultaneously displaying a set of display applets while optimizing the number of server connections. Ex. 1009, code (57). Banthia discloses displaying multiple applets—i.e., a "controlling applet" and "display applets"—in communication with a server and one another. *Id*. at 3:35–44. The controlling applet establishes a connection from a client to a server and sends data to the display applets. *Id.* at 3:51–56; 3:64–4:6. Banthia's display applets may be "torn off" from the browser window and moved to a portion of the display, while being "continually updated by the controlling applet." *Id.* at 2:44–49; 5:7–20.

3. Claims 1, 6, 7, 10, 12–15—Obviousness Over Razavi and Banthia

In support of Petitioner's contention that claims 1, 6, 7, 10, and 12–15 are obvious over the combined teachings of Razavi and Banthia, Petitioner provides an element-by-element analysis showing where each element of the challenged claims allegedly appears in Razavi and Banthia. Pet. 44–57. Petitioner also provides supporting testimony by Dr. Madisetti (Ex. 1005). Patent Owner, relying on supporting testimony by Dr. Sacerdoti (Ex. 2001), argues that Petitioner does not show that the challenged are unpatentable because, in part: (1) Razavi and Banthia do not have a NIM template, (2) Razavi and Banthia do not have a separate NIM and NIM template, and (3) objective evidence of non-obviousness such as commercial success

undermines Petitioner's arguments of unpatentability. For reasons set forth below, we determine that Petitioner has not shown that Razavi and Banthia teach or suggest the limitations of claims 1, 6, 7, 10, and 12–15.

a) Claim 1 — The NIM Template Limitation

Petitioner asserts that the Java applets disclosed in Razavi and Banthia contain the claimed NIM template. Pet. 47 (citing Ex. 1005 ¶ 204). According to Petitioner, "while the source code for the applets in Banthia is not disclosed, a POSA would understand that the functionality of the applets (i.e., generating a GUI and retrieving content over the network to be included in the GUI) indicates the applets contain instructions and data used to enable such functionality." *Id*. Petitioner explains that the "applets are written in Java, and Java GUIs are capable of presenting text and images, which are readable by web browsers, as well as HTML web pages (e.g., through the HotJavaBean)." *Id*. at 48 (citing Ex. 1005 ¶ 208).

Petitioner's arguments are not persuasive because Petitioner does not show persuasively that Razavi's and Banthia's Java applets containing the alleged NIM template comprise a data structure which defines the characteristics of a NIM, including the NIM frame, view and control characteristics, and which excludes executable applications/compiled code. Indeed, Petitioner admits that the asserted "NIM template" in Razavi and Banthia contains compiled "instructions and data." Reply 11–12; Pet. 47–48. Razavi and Banthia both pertain to executable Java applets. Ex. 1008, 3:13–15 (explaining that Razavi's invention is a method and system "for detaching Java applets from the constraints of the application which provides the Java virtual machine for executing those applets"); Ex. 1009, 2:34–36 (explaining that Banthia's invention "provides systems and methods

for simultaneously displaying a set of applets while optimizing the number of server connections"). As Banthia explains, a Java "applet is a small program with a single purpose designed to be distributed across a network, . . . often to add extra functionality to some other program." Ex. 1009, 1:61–63. Finally, Dr. Sacerdoti's unrebutted testimony is that a person of ordinary skill in the art would understand that Razavi's and Banthia's Java applets are "compiled byte code, not a data structure that defines the characteristics of a specific NIM." Ex. 2001 ¶ 71; *see id*. at ¶ 63 ("Applets and applications were known in the art to be executable code, distinct from data structures such as a NIM template. One of skill in the art would understand that *Razavi* discloses no applet template or definition of an applet that is distinct from the applet itself.").

Both Petitioner and Patent Owner agree that the NIM and the NIM template are separate and distinct elements. Reply 2; PO Resp. 8. However, neither Petitioner nor Dr. Madisetti identify what in Razavi and Banthia might be a NIM template separate and distinct from the NIM. To the contrary, Petitioner argues that the Java applets (i.e., the NIM) contain the NIM template. *See, e.g*., Pet. 13–14 (Razavi), 15 (Banthia), 46–47; Ex. 1005 ¶¶ 198 ("Razavi discloses . . . that webpage includes an applet ('NIM')."), 200 ("the applets disclosed in Razavi and Banthia contain the claimed NIM template"). We also credit Dr. Sacerdoti's testimony that, under Petitioner's interpretation, Razavi's and Banthia's Java applets (NIM) contain the claimed NIM template, but Razavi and Banthia do not disclose a NIM and a NIM template that are separate and distinct elements. *See, e.g*., Ex. 2001 ¶¶ 63 ("*Razavi* discloses downloading applets, and nothing else, over the Internet. Applets and applications were known in the art to be executable

code, distinct from data structures such as a NIM template. One of skill in the art would understand that *Razavi* discloses no applet template or definition of an applet that is distinct from the applet itself."), 66 ("Because *Razavi* discloses Java applets, but discloses no separate definition of or template for Java applets, it cannot possibly disclose or render obvious claims that require both NIMs and distinct NIM templates.").

b) Claims 6, 7, 10, and 12–15

Each of claims 6, 7, 10, and 12–15 depend, directly or indirectly, from independent claim 1, and, therefore, require a "NIM template." Ex. 1001, 43:5–44:31. Thus, for the same reasons discussed above with respect to Petitioner's challenge of claim 1, we also conclude that Petitioner has not demonstrated by a preponderance of the evidence that claims 6, 7, 10, and 12–15 would have been obvious over the asserted prior art.

c) Summary of Claims 1, 6, 7, 10, and 12–15

For the reasons above, Petitioner has not shown that Razavi and Banthia, either singly or in combination with each other, disclose a NIM template comprising a data structure which defines the characteristics of a NIM, including the NIM frame, view and control characteristics, and which excludes executable applications/compiled code. Thus, Petitioner has not shown by the preponderance of the evidence that claims 1, 6, 7, 10, and 12–15 are unpatentable over Razavi and Banthia.

G. Grounds 6–7: Claims 2–5, 8, and 9

As mentioned above, Petitioner also challenges the patentability of (1) claims 2–5 and 9 over the combination of Razavi, Banthia, Dang, and Berry, and (2) claim 8 over the combination of Razavi, Banthia, and Cordell. Pet. 58–63. Each of claims 2–5, 8, and 9 depend, directly or indirectly, from independent claim 1, and, therefore, require a "NIM template." Ex. 1001, 43:5–44:31. Petitioner does not argue that Dang, Berry, or Cordell remedy the deficiencies of Razavi and Banthia. Thus, for the same reasons discussed above with respect to Petitioner's challenge of claim 1, we also conclude that Petitioner has not demonstrated by a preponderance of the evidence that claims 2–5, 8, and 9 would have been obvious over the asserted prior art.

H. Patent Owner's Secret Prior Art Argument

Patent Owner argues that, because Hoff, Razavi, Banthia, and Dang were published after the critical date for the '545 patent (April 26, 1999), they are "secret prior art" because they were not available to one of ordinary skill in the art as of the critical date. PO Resp. 14–15. Patent Owner acknowledges that under current Federal Circuit precedent these patents are considered prior art despite not being publicly accessible as of the critical date, but DoDots contends that the law should be changed. *Id.*

Because we must follow the law as it stands, we decline to address Patent Owner's arguments.

IV. CONCLUSION

For the reasons expressed above, we determine that Petitioner has not proven by a preponderance of the evidence that the challenged claims are unpatentable, as summarized in the following table:

Claims	**35 U.S.C. §**	**Reference(s)/Basis**	**Claims Shown Unpatentable**	**Claims Not shown Unpatentable**
1, 2, 10, 14	103	Hoff, Berg		1, 2, 10, 14
2–5, 9	103	Hoff, Berg, Dang, Berry		2–5, 9
6, 7, 12, 13, 15	103	Hoff, Berg, Razavi, Banthia		6, 7, 12, 13, 15
8	103	Hoff, Berg, Razavi, Banthia, Cordell		8
1, 6, 7, 10, 12–15	103	Razavi, Banthia		1, 6, 7, 10, 12–15
2–5, 9	103	Razavi, Banthia, Dang, Berry		2–5, 9
8	103	Razavi, Banthia, Cordell		8
Overall Outcome				1–10, 12–15

V. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that claims 1–10 and 12–15 of the ’545 patent have not been shown to be unpatentable; and

FURTHER ORDERED that, because this is a Final Written Decision, 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.

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