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.

IPR2019-01278
Patent 8,020,083 B1

Before JAMES A. WORTH, AMBER L. HAGY, and SHARON FENICK, *Administrative Patent Judges.*

FENICK, *Administrative Patent Judge*.

JUDGMENT
Final Written Decision
Determining No Challenged Claims Unpatentable
35 U.S.C. § 318(a)
Granting-In-Part Petitioner's Motion to Strike
37 C.F.R. 42.5

I. INTRODUCTION

This is a Final Written Decision in this *inter partes* review challenging the patentability of claims 1–16 of U.S. Patent No. 8,020,083 B1 (Ex. 1001, "the '083 patent"). We have jurisdiction under 35 U.S.C. § 6(b)(4). 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) (2018); 37 C.F.R. § 42.1(d) (2018). Having reviewed the parties' arguments and supporting evidence, for the reasons discussed below, we find that Petitioner has not demonstrated by a preponderance of the evidence that any of claims 1–16 are unpatentable. Additionally, for the reasons discussed below, in Section III.G, we grant-in-part Petitioner's Motion to Strike (Paper 31).

II. BACKGROUND AND SUMMARY

A. Procedural History

Lenovo Holding Company, Inc., Lenovo (United States) Inc., and Motorola Mobility LLC ("Petitioner") filed a Petition for an *inter partes* review of claims 1–16 ("the challenged claims") of the '083 patent. Paper 2 ("Pet."). DoDots Licensing Solutions LLC ("Patent Owner") did not file a Preliminary Response. In view of the preliminary record, we concluded that Petitioner satisfied the burden, under 35 U.S.C. § 314(a), to show that there was a reasonable likelihood that Petitioner would prevail with respect to at least one of the challenged claims. Accordingly, we instituted an *inter*

partes review of all the challenged claims, on all of the asserted grounds. Paper 8 ("Inst. Dec.").

Patent Owner filed its Response. Paper 20 ("PO Resp."). Petitioner filed a Reply. Paper 22 ("Reply"). After receiving authorization, Patent Owner filed a motion to strike certain portions of the Reply and exhibits referenced, and Petitioner filed an opposition. Paper 24; Paper 25. In an order relating to this motion to strike, we granted Patent Owner's motion and determined that a certain portion of the Reply was untimely and, along with certain exhibits, would not be considered. Paper 26, 4–7.

Patent Owner filed a Sur-reply. Paper 28 ("Sur-reply"). After receiving authorization, Petitioner filed a motion to strike Patent Owner's Sur-reply and a supplemental declaration filed with the Sur-reply. Paper 31 ("Pet. Mot." or "Petitioner's Motion to Strike"). Patent Owner filed an opposition. Paper 32 ("PO Opp."). We address Petitioner's Motion to Strike, *infra* Section III.G, and grant the motion with respect to the supplemental declaration, but deny the motion with respect to the Sur-reply.

On October 28, 2020, we held an oral hearing, the transcript of which is of record. Paper 36 ("Tr.").

B. Real Parties in Interest

Petitioner indicates that Lenovo Holding Company, Inc., Lenovo (United States) Inc., and Motorola Mobility LLC are the real parties-in-interest. Pet. 65.

Patent Owner indicates that DoDots Licensing Solutions, LLC is the real party-in-interest. Paper 5 (Patent Owner's Mandatory Notices), 2.

C. Related Matters

According to Petitioner and Patent Owner, the '083 patent at issue here is also asserted in *DoDots Licensing Solutions LLC v. Lenovo Holding*

Company, Inc., et al., No. 18-098-MN (D. Del.) ("the related district court action"). Pet. 65–66; Paper 5, 2. Petitioner notes that the related district court action also involves U.S. Patent Nos. 9,369,545 ("the '545 patent") and 8,510,407 ("the '407 patent"), and that Petitioner filed a petition for *inter partes* review of the patentability of certain claims in the '545 patent in IPR2019-00988 (final written decision finding no claims unpatentable issued, *see* IPR2019-00988, Paper 37 (Sept. 9, 2020)) and a petition for an *inter partes* review of the patentability of certain claims in the '407 patent (final written decision finding no claims unpatentable issued, *see* IPR2019-01279, Paper 37 (Jan. 5, 2021)). Pet. 66.

D. The '083 Patent

The title of the '083 patent is "System and Methods for Creating and Authoring Internet Content Using Application Media Packages." Ex. 1001, code (54). The '083 patent discloses, in part, a software component for accessing and displaying network content. *Id.* at code (57). This component, termed an "Application Media Package" or "Dot," is a "fully configurable frame with one or more controls" with content optionally presented through the frame. *Id.* at 3:57–59, 5:40–48. When a Dot is opened by a user, the frame is presented in the user's display, and network content is retrieved and presented in a viewer enclosed by the frame. *Id.* at 23:5–17. The network content may be identified via URLs included in the Dot. *Id.* at code (57), 13:47–52, 14:14–16. The Specification describes that the Dot "stands in contrast to present web browsers, which are branded by the browser vendor and which have limited means by which to alter the controls associated with the browser." *Id.* at 5:44–48.

A server may store a number of Dots and provide a Dot to a client system upon request. *Id.* at 7:5–23, 20:63–21:42, 22:53–23:19, Figs. 1, 6, 8. A user at the client system may then store or use the Dot. *Id.* at 23:20–62.

E. Illustrative Claim

Claims 1 and 9 are the only independent claims among the challenged claims. Claim 1 is reproduced below with Petitioner's limitation designations added in brackets for ease of reference:

1. [1.Preamble] A client device, the client device comprising:

[1.A] electronic storage having stored thereon a plurality of networked information monitor templates defining a plurality of networked information monitors, the plurality of networked information monitor templates comprising a first networked information monitor template defining a first networked information monitor, wherein the first networked information monitor template comprises:

[1.B] (1) a content reference that comprises a network location at which content for the first networked information monitor is accessible via a TCP/IP protocol;

[1.C] (2) a definition of a graphical user interface of the first networked information monitor that lacks controls for manually navigating a network, and that includes a frame within which content received from the network location can be displayed, and frame characteristics defining one or more a color, a size, or a position on the electronic display of the frame; and

[1.D] (3) instructions configured (i) to cause the first networked information monitor to request content from the network location in the content reference via the TCP/IP protocol, and [1.E] (ii) to cause the first networked information monitor to generate the graphical user interface of the first networked information monitor with the content received from

the network location via the TCP/IP protocol within the frame;

[1.F] an electronic display; and

[1.G] one or more processors configured to access the first networked information monitor template, and to execute the first networked information monitor template such that the graphical user interface of the first networked information monitor is presented to a user on the electronic display having content received from the content reference therein.

F. Evidence

Petitioner relies on the following references:

Reference	Description	Date	Exhibit
Van Hoff et al. ("Hoff")[1]	US 5,919,247	Issued July 6, 1999	Ex. 1004
Berg	Cliff Berg, *How Do I Create a Signed Castanet Channel?*, DR. DOBB'S JOURNAL	Jan. 1, 1998	Ex. 1007
Razavi et al. ("Razavi")	US 6,401,134 B1	Issued June 4, 2002	Ex. 1009
Andersen	US 5,999,941	Issued Dec. 7, 1999	Ex. 1006

[1] The last name of the first-named inventor is Van Hoff, but, for consistency with the Petition, we refer to this patent as "Hoff."

G. Asserted Grounds

Petitioner asserts that claims 1–16 would have been unpatentable on the following grounds:

Claim(s) Challenged	35 U.S.C. §[2]	Reference(s)/Basis
1–16	103	Hoff, Berg
1–16	103	Razavi, Andersen

III. ANALYSIS

A. Legal Standards

It is a petitioner's burden to demonstrate unpatentability. *See Dynamic Drinkware*, 800 F.3d at 1378 (citing *Tech. Licensing Corp. v. Videotek, Inc.*, 545 F.3d 1316, 1326–27 (Fed. Cir. 2008)).

A patent claim is unpatentable under 35 U.S.C. § 103(a) if the differences between the claimed subject matter and the prior art are "such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains." *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved 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 skill in the art; and (4) objective evidence of nonobviousness, i.e., secondary considerations. *See Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966). "To 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

[2] Because the claims at issue have an effective filing date prior to the effective date of the AIA's amendments to 35 U.S.C. § 103, we apply the pre-AIA version of § 103 in this Decision.

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 the principles stated above 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 corresponding industry work experience." Pet. 5 (citing Ex. 1003 ¶ 39). Patent Owner does not provide an alternative description of the proper level of ordinary skill or comment on Petitioner's proposal.

Petitioner's proposal appears to be consistent with the prior art of record. *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). We adopt this proposal for this Final Written Decision.

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) (setting forth claim construction standard in civil actions). 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 three claim terms need to be construed: "networked information monitor," "networked information monitor template" (or "NIM template"), and "execute" or "executing" (as used, for example, in the claim terms "execute the first networked information monitor template" in claim 1, "executing the first networked information monitor template" in claim 9, and similarly in dependent claims 5, 8, 12, and 16). PO Resp. 6–8; Reply 2–9; Sur-reply 2–7 ("The heart of the dispute between the parties with respect to claim construction relates to the term 'template' as used in the phrase 'networked information monitor . . . template.'"). Each term is introduced in each of the two independent claims from among the challenged claims. Ex. 1001, 47:42–48:8, 48:64–49:33. We address these terms here.

1. "networked information monitor"

The claims use the term "networked information monitor," which is not found in the Specification. Petitioner and Patent Owner agree that the term "application media package" appearing in the Specification is synonymous with "networked information monitor." Pet. 2 n.1; PO Resp. 7; Reply 2 & n.1. Petitioner additionally argues that the term "Dot" used in the Specification is synonymous with "networked information monitor," and Patent Owner appears to use the terms synonymously as well. Pet. 2 n.1; PO Resp. 3, 4, 12; Reply 2 & n.1.

Patent Owner argues that "[t]he inventors defined [a] NIM in the specification" as "a fully configurable frame with one or more controls; the frame through which content is optionally presented." PO Resp. 7 (quoting Ex. 1001, 5:40–43); Ex. 2004 ¶ 22. Petitioner agrees that "networked information monitor" is defined. Reply 2–3 (citing Ex. 1010 ('407 patent), 2:59–61, 5:18–29); Tr. 14:20–23 (Petitioner's counsel stating that "[t]he patentee set out a clear and explicit definition of the term, networked information monitor or NIM, said it refers to a fully configurable frame . . . with one or more controls"); *see* Ex. 1003 ¶ 33.

The definition of Application Media Package provided in the Specification describes it as including a frame "through which content is optionally presented." Ex. 1001, 5:41–44; *see* Ex. 1010, 5:21–24. Claim 1 describes a NIM as including "a graphical user interface . . . that lacks controls for manually navigating a network, and that includes a frame within which content received from [a] network location can be displayed." *Id.* at 47:53–57. The definition of NIM provided in the Specification is consistent with the use in the claim. With respect to the word "optionally" in the Specification definition, we note that, in the claims, content is recited as being presented on an electronic display within a NIM's graphical user interface (element 1.G and the last element of claim 9). *Id.* at 48:3–8; *see also id.* at 49:28–33.

For these reasons, we determine that the correct construction of a NIM is "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.

2. *"networked information monitor template"* and *"execute"/"executing"*

a) The Parties' Contentions

Patent Owner asserts: "the NIM template 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. 7. Petitioner, while not presenting a proposed construction, argues that Patent Owner's construction should be rejected as not supported by a definition in the '083 patent, and specifically argues that Patent Owner's proposed definition is flawed because it excludes an executable program from being a NIM template. Reply 1–10.

Patent Owner additionally asserts that "'execute'/'executing' as used in the claims . . . means 'use/using the information from the NIM template in connection with specified operations.'" PO Resp. 8–9 (citing Ex. 2004 ¶ 66). Petitioner argues that "execute" should be construed to have a plain and ordinary meaning, "namely executing an 'executable program' or 'executable application' with a processor or through an emulator." Reply 4–5 (citing Ex. 1019, 15:8–16:23, 20:15–21:8, 59:5–7).

With respect to NIM template, Patent Owner supports its proposed constructions with references to the Specification. Patent Owner references the description in the Specification that "[e]ach Application Media Package template defines the characteristics of a specific Application Media Package." Ex. 1001, 7:17–23 (quoted at Ex. 2004 ¶ 49); PO Resp. 8. With respect to "the definition of the NIM," Patent Owner cites the Specification's statement that the definition is "content, rather than compiled code" and cites additionally Figure 8, which shows that a "Dot Frame" is "buil[t]" on a client computer after the "Dot Definition" is retrieved from a server. PO Resp. 5–6 (citing Ex. 2004 ¶¶ 61–62); Ex. 1001, 4:64–57, 14:34–35, 23:1–11. Patent Owner argues that "NIM templates are

significantly smaller than the NIMs they define." PO Resp. 7 (citing Ex. 2004 ¶ 54 (quoting the Specification's statement that "a Dot Definition typically has a small file size (˜2 KB)" (Ex. 1001, 21:48–54))). Patent Owner additionally relies on the testimony of its expert, Dr. Earl Sacerdoti, regarding the plain and ordinary meaning of the word "template," and on Dr. Sacerdoti's testimony that, according to the '083 patent, a NIM template is not compiled code, and cannot be an executable application or applet. *Id.* at 7–8 (citing Ex. 2004 ¶¶ 38–45, 55).

With respect to "NIM template," Petitioner argues that the plain and ordinary meaning of the term should control. Reply 1. Petitioner argues that the language of the claims, in which NIM templates are "execut[ed]," contradicts Patent Owner's urged construction, which excludes executable NIM templates. *Id.* at 4–5. Petitioner argues further that NIM templates are claimed as comprising "instructions" and are therefore executable. *Id.* at 5; *see* Ex. 1001, 47:48–49, 47:60–67, 49:6–7, 49:18–25. With respect to the Specification, Petitioner argues that the portions cited by Patent Owner relate to non-limiting examples of NIM templates, such as one in which NIM definitions use Extensible Markup Language (XML) as opposed to providing any specific general limitations. Reply 5–7 (citing Ex. 1010, 21:45–50, Fig. 13). Thus, Petitioner argues, Patent Owner improperly reads limitations from the examples in the Specification, which Petitioner contends are non-limiting, into its definition of "NIM template." *Id.* at 5–7. Petitioner argues that the Specification describes that a Dot definition is a "software entity" and therefore cannot be limited to a data structure. *Id.* at 7 (referring to Ex. 1001, 10:11).

Petitioner additionally argues that Patent Owner's proposed construction improperly excludes disclosed embodiments. *Id.* at 7–9.

Petitioner quotes the ’407 patent’s reference to “[a] second executable module” that “defines a NIM frame for the NIM using the definition.” *Id.* at 8 (quoting Ex. 1010, 3:8–10) (emphasis omitted). Petitioner also discusses the portion of the Specification of the ’407 patent that describes users sharing NIMs via a database that stores “Share Module[s]” including “multiple . . . individual [NIM] definition modules” or “multiple packs of NIMs that have been shared . . . containing multiple NIM definition modules.” Ex. 1010, 34:4–15, Fig. 24 (discussed and quoted-in-part at Reply 8–9). Petitioner argues that Dr. Sacerdoti “confirmed that a person of ordinary skill in the art would understand that ‘[a] module would be a chunk of code’ and that an ‘executable module’ is ‘executable computer code.’” Reply 9 (quoting Ex. 1019, 69:22–70:13). Petitioner also argues that Patent Owner’s definition is contradicted by Patent Owner’s statements in the prosecution history of other related patents and by Patent Owner’s infringement allegations against Petitioner in the related district court action. *Id.* at 9–10 (citing Ex. 1015, 6, 7, 9–10). As discussed in our analysis below, Petitioner’s arguments are not persuasive.

b) Construction

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

Turning to the usage of NIM template in the claims: from the language of claim 1, we understand that the NIM template defines a NIM and comprises a content reference, a definition of a graphical user interface

including a frame, and instructions configured to cause the NIM to request content from the network location in the content reference and to generate the graphical user interface ("GUI") with received content within the frame. Ex. 1001, 47:42–48:8; *see also id.* at 48:64–49:33 (similar limitations in claim 9). From our examination of the claims, 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 '083 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 '083 patent does address the meaning of NIM template. The Specification states that the creation of a Dot "is fundamentally different than rendering internet content in a viewer application or alternatively, developing, distributing, and supporting a custom client-side application." Ex. 1001, 13:1–10. The Specification states that "[e]ach Application Media Package template defines the characteristics of a specific Application Media Package, including fully configurable frame characteristics, viewer and control characteristics, and Application Media Package content references." *Id.* at 7:19–23; *see also id.* at 24:12–14 ("The Dot Definition, as discussed above, includes the Dot frame definition and the definition of the controls for filling the viewer within the frame with content.").

The Specification states that "*[u]nlike a downloadable, custom, client-application* (e.g., for delivering custom web applications to users' desktops), *an Application Media Package is entirely content*. That is, the entirety of a Dot package, referred to as its definition, is in a browser-readable language."

Id. at 8:53–57 (emphases added) (cited at Ex. 2004 ¶ 23). The Specification further states:

> As previously mentioned, *Dot Definition 104 is typically XML code*. These definitions are quite simple to author, and to edit if needed. *The definition is content, rather than compiled code, which provides additional flexibility at the client side* should it be desired to modify the definition (e.g., allow a user to edit the network reference).

Id. at 14:45–60 (emphases added) (cited at Ex. 2004 ¶ 20). The Specification describes that "[a] A Dot developer can . . . author a new Dot application by developing web content (HTML, GIF files, etc.) and by packaging that content in a Dot Definition, eliminating the need for compilers and consequently, downloading executables." *Id.* at 40:24–28. From these disclosures, we understand that the Specification prohibits the NIM template from using compiled code or being an executable application. Our review of the Specification did not identify disclosure of use of compiled code or an executable application as the NIM template.

As discussed, Petitioner argues that XML embodiments described are exemplary rather than limiting. Reply 6–7 (citing *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1117 (Fed. Cir. 2004) ("[P]articular embodiments appearing in the written description will not be used to limit claim language that has broader effect.")). Petitioner's argument is not persuasive. Although we agree with Petitioner that the XML embodiment 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 statements that a NIM template is content, rather

than compiled code, and that using a Dot Definition eliminates the need for downloading executables apply to all NIM templates, not just one particular embodiment. The Specification does not describe any NIM template that uses compiled code or executable applications. While Petitioner argues that a NIM template "might contain any binary content, including executable code," Petitioner's argument is not persuasive. Reply 7 (citing Ex. 1010, 33:59–61). Petitioner's contention is attorney argument unsupported by persuasive expert testimony. *In re Geisler*, 116 F.3d 1465, 1470–71 (Fed. Cir. 1997) (argument by counsel cannot take the place of evidence); *In re Pearson*, 494 F.2d 1399, 1405 (CCPA 1974) ("Attorney's argument in a brief cannot take the place of evidence.").

With respect to the "second executable module" and "NIM definition modules" described in the '407 patent, Petitioner's arguments are again not persuasive. Reply 7–9. Petitioner does not identify, and we do not find, any portion of the '407 patent's disclosure that describes that the second executable module contains compiled code. Rather, the "second executable module," described as acting to "define[] a NIM frame for the NIM using the definition," is preceded by the description of a first executable module that "identif[ies] a definition of a Networked Information Monitor." Ex. 1010, 3:6–9. Although Petitioner argues that the second executable module *is* a NIM template, the second executable module is described in the Specification as "*using* the definition" that was identified by the first module. *Id.* (emphasis added). Petitioner only highlights the described action of the second executable module to "define a NIM frame" but does not explain the interaction with the first executable module, or support the assertion that the second executable module *is* a NIM template or that the discussed NIM definition modules are executable modules. *See* Reply 7.

Although Petitioner cites Dr. Sacerdoti's deposition testimony relating to the word "module," Petitioner's contentions about the meaning of NIM template, and whether the "second executable module" or "NIM definition module" are NIM templates or executable modules, are attorney argument unsupported by persuasive expert testimony. *See Geisler*, 116 F.3d at 1470–71. The Specification does not describe any NIM template that uses compiled code or executable applications. Rather, the Specification provides that "[t]he Dot Definition 104 contains just enough information to define, layout, and initialize a Dot's components (frame, controls, etc.)" and "[t]he definition is content, rather than compiled code." Ex. 1001, 21:48–50, 14:34–35; Ex. 2004 ¶¶ 51, 54.

Petitioner's argument regarding the claim terms "execute" or "executing," e.g., in claim 1's "one or more processors configured to access the first networked information monitor template, and to execute the first networked information monitor template," does not present any testimony regarding whether one of ordinary skill in the art, reading these claims, would determine that the networked information monitor template is described as executable code. Reply 4; Ex. 1001, 48:2–8. Petitioner's contentions about the meaning of this term 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. *See Geisler*, 116 F.3d at 1470–71. Petitioner does not explain how execution applies to portions of a NIM template such as "a content reference that comprises a network location" (limitation 1.B) and "a definition of a [GUI]" (limitation 1.C). As such, Petitioner's argument is not persuasive. Rather, we are persuaded, in determining the proper construction of "NIM template," by Patent Owner's argument that "execute"

as used with respect to a template has a different meaning than "execute" as used with respect to an application. PO Resp. 8–9 (citing Ex. 2004 ¶ 66 (testifying that executing a template would mean using the information in the template in connection with specified operations).

With respect to Petitioner's argument that Dr. Sacerdoti's construction of NIM template is contradicted by the claim's requirement that the NIM template comprise "instructions," we note again that this is attorney argument, as Petitioner presents no testimony that the instructions referred to in the claim are executable instructions. Reply 5 (quoting Ex. 2004 ¶ 25); *see also* Ex. 2004 ¶ 64 (describing the NIM template as containing instructions for downloading content). Dr. Sacerdoti describes that the NIM template may include data specifying, e.g., the dimensions of a frame, but that producing a specific user experience from data value "provides no evidence concerning whether those characteristics were produced from data or from operating executable code." Ex. 2004 ¶ 25; *see also* Ex. 2004 ¶ 90 (contrasting instructions that are executable code with instructions in a data structure).

Lastly, Petitioner's argument with respect to the positions taken by Patent Owner in the related district court action, in which, according to Petitioner, "Patent Owner has contended that each step of Claim 1 is performed by the use of" an "app," is again attorney argument. *See* Reply 9–10. Although Petitioner cites the Second Amended Complaint, that document, with respect to the '083 patent, describes generally that "Lenovo's YogaBook . . . infringes Claim 1 of the '083 patent" without specific mapping to the NIM template. Ex. 1015, 8–10. Petitioner's argument is not persuasive because it does not present any evidence about how these apps work and how they apply to the disputed NIM template. In

addition, Petitioner's contentions about the meaning of the disputed terms and apps are attorney argument unsupported by persuasive evidence. *See Geisler*, 116 F.3d at 1470–71. A party's infringement allegations do not override the meaning of the claims based on the intrinsic evidence.

For the reasons above, we determine that a NIM template is a data structure that defines the characteristics of a NIM, including the NIM frame, view and control characteristics, and that excludes executable applications/compiled code. With respect to the claim terms "execute" and "executing," while we have discussed arguments relating to these terms with respect to our construction of "NIM template," because our ultimate decision does not rest on the construction of these claim terms, we do not construe them. *See Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999) ("[O]nly those terms need be construed that are in controversy, and only to the extent necessary to resolve the controversy."); *Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (applying *Vivid Techs.* in the context of an *inter partes* review).

D. Obviousness over Hoff and Berg

Petitioner contends that the subject matter of claims 1–16 would have been obvious over the combined teachings of Hoff and Berg. Pet. 18–37. We first describe the prior art that Petitioner seeks to combine to show that these claims are obvious, and then turn to the merits of the combination.

1. Hoff

Hoff is titled "Method for the Distribution of Code and Data Updates," and issued on July 6, 1999. Ex. 1004, codes (54), (45). Petitioner contends Hoff is prior art under 35 U.S.C. § 102(e). Pet. 8. Patent Owner does not dispute the prior-art status of Hoff.

Hoff describes a system and method for distributing software applications and data to thousands of clients over a network. Ex. 1004, code (57). In Hoff, an application is called a "channel," the server that distributes the channel is called the "transmitter," and the client receiving the channel is called the "tuner." *Id.* at code (57), 2:54–67. An end user, using a client/tuner, "subscribes" to a channel, the associated code and data are downloaded to the tuner, and then the channel can be executed many times without requiring further network access. *Id.* at code (57), 3:1–9. Any necessary software and data updates for the channel can be automatically downloaded and installed in the background at regular intervals by the tuner; the end user is not required to manually install software updates. *Id.* at code (57), 3:10–14, 5:4–28. 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.* at code (57).

2. Berg[3]

Berg is an article by Clifford Berg titled "How Do I Create a Signed Castanet Channel?" Ex. 1007, 1. Petitioner asserts that Berg was published

[3] The parties dispute whether Petitioner has met its burden of proof in the Petition that Berg was publicly accessible as of the critical date (April 26, 1999), and, therefore, available as a prior art printed publication. Pet. 6 (citing Ex. 1005 ¶¶ 2–3); *see also* Papers 23–26 (relating to and granting a motion to strike Petitioner's arguments in the Reply concerning this issue as not properly responsive to any argument or evidence in the Patent Owner Response); Reply 12–14. 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

on January 1, 1998, and is prior art under 35 U.S.C. § 102(b). Pet. 6; *see* Ex. 1005 (Declaration of Clifford Berg).

Berg discloses using Marimba's Castanet, the "Java-centric (but not limited to Java) push technology," to distribute content to users. Ex. 1007, 1. Castanet is "a technology for deploying highly scalable applications, with centralized update and administration capabilities." *Id.* at 2. Berg states:

> 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 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 describes, as an example, "a Castanet channel that opens a window on the screen, and allows a user to select from one of a small set of web locations to view." *Id.* at 3. The list of allowable locations is hard-coded into the program. *Id.* at 4. Once the user selects a location from the provided list, the application fetches data via the corresponding address and displays the content within a web-viewing window, implemented with an HTML renderer. *Id.* at 3, 4. The frame containing the choice selector (for choosing the web location) and the window in which the content is viewed

also includes an "X" window-close control, which allows a user to close the frame. *Id.* at 4.

3. Analysis of Claims 1–16

In support of Petitioner's contention that claims 1–16 would have been obvious over the combined teachings of Hoff and Berg, Petitioner provides an element-by-element analysis showing where Petitioner contends each element of the challenged claims is in Hoff and Berg. Pet. 18–37. Petitioner also provides supporting testimony by Dr. Vijay K. Madisetti (Ex. 1003). Patent Owner, relying on supporting testimony by Dr. Sacerdoti (Ex. 2004), argues that Petitioner does not show that the claims 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.[4] PO Resp. 1–2, 9–12, 14–15. For reasons set forth below, we determine that Petitioner has not shown that Hoff and Berg teach or suggest the limitations of claims 1–16.

[4] Patent Owner asserts that objective evidence of non-obviousness — commercial success — supports a finding of non-obviousness of the '083 patent. PO Resp. 14–15; Ex. 2003. 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] address[ed]" because the court "affirm[ed the] Board's findings regarding the failure of the prior art to teach or suggest all [claim] limitations").

a) Claims 1 and 9 – "networked information monitor template"

Claim 1 recites a NIM and a NIM template in several limitations, including in limitation 1.A:

> [1.A] electronic storage having stored thereon a plurality of networked information monitor templates defining a plurality of networked information monitors, the plurality of networked information monitor templates comprising a first networked information monitor template defining a first networked information monitor, wherein the first networked information monitor template comprises . . . .

Ex. 1001, 47:43–49. Limitations 1.B through 1.D describe that the first NIM template of limitation 1.A comprises a content reference, a definition of a GUI, and instructions configured to cause the first NIM to request content and generate the GUI. *Id.* at 47:50–67. Claim 9 contains similar descriptions of a NIM and NIM template. *Id.* at 49:1–25.

Petitioner asserts that Hoff teaches the first NIM template of claims 1 and 9 in the code and data downloaded to local storage when a channel is subscribed to. Pet. 19–20 (citing Ex. 1004, 2:45–48, 2:56–67, 3:1–5, 4:47–49, Fig. 1B), 32. Petitioner asserts that Berg also discloses a tuner that is used to subscribe to channels, and that both Berg's and Hoff's channels include instructions and data used to create a GUI and display content therein, and that they therefore include a networked information monitor template. *Id.* at 20 (citing Ex. 1007, 2; Ex. 1003 ¶ 96). Petitioner asserts that both limitation 1.C, requiring that the first NIM template includes a definition of a GUI and a substantially identical limitation of claim 9 are taught by Berg, citing Berg's disclosures of an application (Castanet channel) that includes a definition of an interface with a frame in which content is presented and of rendering that presented content from HTML. *Id.* at 22–23 (citing Ex. 1003 ¶ 103; Ex. 1007, 3–4), 32.

Petitioner's arguments are not persuasive because Petitioner does not show persuasively that Hoff's and Berg's channel application comprises a data structure that defines the characteristics of a NIM, including the NIM frame, view, and control characteristics, but that exclude executable applications/compiled code. *See supra* III.C.2.b (claim construction of "networked information monitor template"). Petitioner admits that Hoff relates to distribution of software applications, such as Hoff's channels that are downloaded and installed and then executed as a "normal application." Pet. 5 (quoting Ex. 1004, 2:59; also citing Ex. 1004, code (54), 2:38–41, 2:54–67, 3:1–10, 4:8–10, 4:19–24, 4:37–47, 4:51–57); Reply 11 (describing Hoff's channel code and data as the NIM template). Petitioner describes Berg's Castanet channel as an application that is deployed via Castanet and that can "do 'all the things a traditional installed application would do.'" Pet. 6–7 (citing Ex. 1007, 2–4, 6).

Petitioner's showing is also deficient because it fails to account for the fact that, as both Petitioner and Patent Owner agree, the NIM and the NIM template are separate and distinct elements. Reply 2; PO Resp. 7; Tr. 16:14–19, 63:10–13. 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. 20; Ex. 1003 ¶ 162 ("Specifically, the channel applications [disclosed in Hoff and Berg] contain instructions and data used to create a GUI and display content therein. Therefore, the 'channel' applications in Hoff and Berg include the claimed NIM template."). We also credit Dr. Sacerdoti's testimony that, under Petitioner's interpretation in which Hoff's and Berg's channel application (NIM) contains the claimed NIM template, Hoff and Berg still do not teach a

NIM and a NIM template that are separate and distinct elements. Ex. 2004 ¶¶ 74 ("Even were a NIM template to be contained within the application that the petition identifies as the channel, the petition does not identify any data structure contained within the channel that could define the NIM. Not having identified any particular data structure, neither the petition nor Dr. Madisetti have identified a NIM definition that is disclosed by Hoff." (emphasis omitted)), 79 ("As with Hoff, neither Dr. Madisetti nor the petition asserts what in Berg might be the NIM template (channel template) that is distinct from the NIM (channel)." (emphasis omitted)).

Thus, for the reasons discussed above, we conclude that Petitioner has not demonstrated by a preponderance of the evidence that claims 1 and 9 would have been obvious over the combination of Hoff and Berg.

b) Claims 2–8 and 10–16

Each of claims 2–8 and 10–16 depends, directly or indirectly, from independent claim 1 or independent claim 9, and, therefore, requires a "NIM template." Ex. 1001, 48:9–63, 49:34–50:43. Thus, for the same reasons discussed above with respect to Petitioner's challenge of claims 1 and 9, we also conclude that Petitioner has not demonstrated by a preponderance of the evidence that claims 2–8 and 10–16 would have been obvious over Hoff and Berg.

c) Summary

For the reasons above, Petitioner has not shown that Hoff and Berg, either singly or in combination with each other, teach or suggest a NIM template comprising a data structure separate and distinct from a NIM that defines the characteristics of a NIM, including the NIM frame, view and control characteristics, and that excludes executable applications/compiled

code. Thus, Petitioner has not shown by a preponderance of the evidence that claims 1–16 are unpatentable over Hoff and Berg.

E. Obviousness over Razavi and Andersen

Petitioner contends that the subject matter of claims 1–16 would have been obvious over the combined teachings of Razavi and Andersen. Pet. 37–65. We first describe the prior art that Petitioner seeks to combine to show that these claims would have been obvious, and then turn to the merits of the combination.

1. Razavi

Razavi is titled "Detachable Java Applets," and issued on June 4, 2002. Ex. 1009, codes (54), (45). Petitioner contends Razavi is prior art under 35 U.S.C. § 102(e). Pet. 7.

Razavi describes "detaching Java applets from the constraints of the application such as a browser which provides the Java engine for executing those applets." Ex. 1009, code (57). In Razavi, a Java applet will be detachable from the application in which it was spawned and have the functionality of any ordinary application window running in the operating environment, including modifying the interface to suit the peculiarities of the applet. *Id.* at 4:41–56, 5:64–6:20. According to Razavi, the applet must be launched in the virtual machine of the application, and is detached if the user activates a detach user interface element. *Id.* at 5:48–63. Figure 4, reproduced below, is Razavi's illustration of a detached applet as rendered on a display screen. *Id.* at 7:8–9.

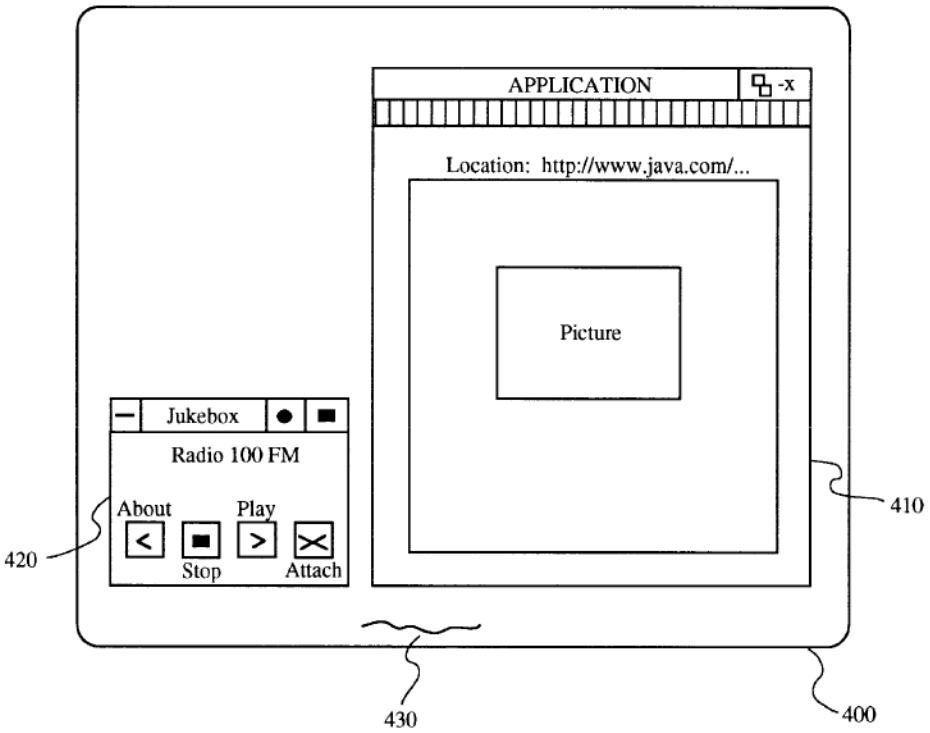

FIGURE 4

Figure 4 depicts application window 410 and detached applet 420 named "Jukebox" displayed on display 400. *Id.* at 7:10–12, 7:29–33. Application window 410 is running over an operating environment desktop 430, which also controls the general look-and-feel of the window for detached applet 420. *Id.* at 7:17–19, 17:39–41. Detached applet 420 contains applet controls "About," "Stop," and "Play," and a control called "Attach," which closes the detached applet 420 and "collapse[s] the applet back into application window 410." *Id.* at 7:34–35, 8:10–14.

The exemplary detached applet described in Razavi, the Jukebox applet, is a streaming audio applet that "creates VCR-type controls that allow the user to stop, play, or rewind the audio stream or to jump to a different selection" and optionally provides an image, such as a CD cover, to

be displayed, associated with each audio selection. *Id.* at 4:25–26, App'x A col. 1.

2. Andersen

Andersen is titled "Database Access Using Active Server Pages," and issued on December 7, 1999. Ex. 1006, codes (54), (45). Petitioner contends Andersen is prior art under 35 U.S.C. § 102(e). Pet. 9. Andersen describes an applet on a client computer that allows a database query to be embedded in an URL in order to obtain query results in HTML form. Ex. 1006, code (57), 3:5–29, 5:3–33. Andersen provides an example of a stock price quoting system implemented using a Java applet. *Id.* at 1:62–63, 1:67–2:30. The applet requests one or more stock prices from a server and the server responds with an HTML file into which data returned by the database is inserted in response to the query. *Id.* at 5:34–7:5. This allows an advantage over a system in which stock prices are available directly from an HTML page rather than from a database, because "storing the stock price data in static HTML pages can be quite inefficient, and data stored in this manner is not amenable to incremental updates and easy and efficient ad hoc searching and manipulation." *Id.* at 2:59–3:4.

3. Analysis of Claims 1–16

In support of Petitioner's contention that claims 1–16 would have been obvious over the combined teachings of Razavi and Andersen, Petitioner provides an element-by-element analysis showing where Petitioner contends each element of the challenged claims is in Razavi and Andersen. Pet. 37–65. Petitioner also provides supporting testimony by Dr. Madisetti (Ex. 1003). Patent Owner, relying on supporting testimony by Dr. Sacerdoti (Ex. 2004), argues that Petitioner does not show that claims 1–16 are unpatentable because Razavi and Andersen teach accessing Java

applets through a web browser, and thus, as with the ground involving Hoff and Berg, Patent Owner therefore argues that: (1) the combination of Razavi and Andersen does not teach a NIM template, and (2) the combination of Razavi and Andersen does not teach a separate NIM and NIM template. PO Resp. 1–2, 9–13. Patent Owner additionally argues that one of ordinary skill would not have been motivated to combine Razavi and Andersen. *Id.* at 2, 13. For reasons set forth below, we determine that Petitioner has not shown that Razavi and Andersen, either singly or in combination with each other, teaches or suggests the limitations of claims 1–16.

a) Claims 1 and 9 – "networked information monitor template"

Petitioner asserts that the client device of the preamble of claims 1 and 9 is taught by Razavi's and Andersen's disclosure of "similar computer-implemented methods in which an 'applet' is downloaded onto a client computing device, retrieves content from a server over a network, such as the internet, and presents the content within a GUI on a display." Pet. 37 (citing Ex. 1009, 1:1–41; Ex. 1006, 1:10–2:30; Ex. 1003 ¶ 269), 59. Petitioner asserts that Razavi teaches the NIM template of claims 1 and 9 in Razavi's Java applets, downloaded in a pre-compiled state, and then executed at a client device. Pet. 38–39 (citing Ex. 1009, 1:9–25, 5:51–56, 7:29–33; Ex. 1003 ¶¶ 274–277), 59–60.

Petitioner's arguments are not persuasive because Petitioner does not show persuasively that Razavi's and Andersen's applets comprise a data structure that defines the characteristics of a NIM, including the NIM frame, view, and control characteristics, but that excludes executable applications/compiled code. Razavi relates to distribution of executable platform-independent Java applets. Ex. 1009, 1:13–16 (platform-independent applets are downloaded as pre-compiled Java byte-codes),

1:26–30 (applet runs on a platform's virtual machine capable of executing applet code), 3:13–15; Ex. 1003 ¶ 98; Ex. 2004 ¶ 83.

Petitioner's showing is also deficient because it fails to account for the fact that, as discussed previously, both Petitioner and Patent Owner agree that the NIM and the NIM template are separate and distinct elements. Reply 2; PO Resp. 8; Tr. 18:1–7, 56:18–19, 69:10–11. However, neither Petitioner nor Dr. Madisetti identify what in Razavi or Andersen might be a NIM template separate and distinct from the NIM. To the contrary, Petitioner argues that the received applet in Razavi contains definitions for the GUI generated by the applet. Pet. 42–43; Ex. 1003 ¶ 284. In addition, Dr. Sacerdoti's unrebutted testimony is that a person of ordinary skill in the art would understand that Razavi's and Andersen's Java applets disclose no separate definition of or template for applets that might teach or suggest a distinct NIM template. Ex. 2004 ¶ 98; *see id.* ¶ 89 ("Applets and applications were known in the art to be executable code."). Thus, for the reasons discussed above, we conclude that Petitioner has not demonstrated by a preponderance of the evidence that claims 1 and 9 would have been obvious over the asserted prior art.

b) Claims 2–8 and 10–16

Each of claims 2–8 and 10–16 depends, directly or indirectly, from independent claim 1 or independent claim 9, and, therefore, requires a "NIM template." Ex. 1001, 47:9–48:63, 49:34–50:43. Thus, for the same reasons discussed above with respect to Petitioner's challenge of claims 1 and 9, we also conclude that Petitioner has not demonstrated by a preponderance of the evidence that claims 2–8 and 10–16 would have been obvious over Razavi and Andersen.

c) Summary

For the reasons above, Petitioner has not shown that Razavi and Andersen, either singly or in combination with each other, teach or suggest a NIM template comprising a data structure that defines the characteristics of a NIM, including the NIM frame, view and control characteristics, and that excludes executable applications/compiled code. Thus, Petitioner has not shown by the preponderance of the evidence that claims 2–8 and 10–16 are unpatentable over Razavi and Andersen.

F. Patent Owner's "'Secret' Prior Art" Argument

Patent Owner argues that, because Hoff and Razavi were published after the critical date for the '083 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. 15–16. 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 Patent Owner 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. Additionally, we decline to address these arguments because we have examined the unpatentability of the challenged claims over Hoff and Berg (Section III.D) and over Razavi and Andersen (Section III.E) and found, in each case, that the Petitioner has not established the unpatentability of the claims over the asserted prior art. *See, e.g., Hamilton Beach Brands*, 908 F.3d at 1343.

G. Petitioner's Motion to Strike

As discussed *supra*, Petitioner's Motion to Strike requested that we strike Patent Owner's Sur-reply and a supplemental declaration of Dr. Sacerdoti (Ex. 2007, "Supplemental Declaration") filed with the Sur-

reply. Pet. Mot. 1. Petitioner argues that filing of the Supplemental Declaration contravenes our Practice Guide governing the conduct of this proceeding that a sur-reply "may not be accompanied by new evidence other than deposition transcripts of the cross-examination of any reply witness." *Id.* (quoting Patent Trial and Appeal Board Consolidated Trial Practice Guide November 2019 ("Consolidated TPG") 73). Patent Owner argues that the Consolidated TPG is only a guide and that its statements are not controlling or binding rules. PO Opp. 1. Patent Owner additionally argues, generally, that the Supplemental Declaration was necessary to address "arguments raised" in Petitioner's Reply, providing only one general example: that "Petitioners argued in their Reply that Patent Owner's Response was inconsistent with positions Patent Owner has taken in the district court litigation." *Id.* at 2–3. However, the Supplemental Declaration only discusses this issue in one paragraph, its last one.

As we indicated during the hearing (Tr. 4:18–5:2), we grant-in-part the Motion to Strike, with respect to striking the Supplemental Declaration, which constitutes new evidence filed with the Sur-reply. With respect to the Sur-reply itself, the Consolidated TPG notes that "[t]he Board is not required to attempt to sort proper from improper portions of the reply or sur-reply" and that a reply that raises a new issue might not be considered. Consolidated TPG 74. However, "striking the entirety or a portion of a party's brief is an exceptional remedy that the Board expects will be granted rarely," and we are capable of disregarding any new issues exceeding the proper scope of reply. *Id.* at 80. We determine that this is not a case requiring that exceptional remedy, and that the Sur-reply need not be stricken.

Thus, we grant-in-part and deny-in-part the Motion to Strike. Specifically, we grant the motion with respect to the Supplemental Declaration but deny the motion with respect to the Sur-reply.

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.

In summary:

Claims	35 U.S.C. §	Reference(s)/Basis	Claims Shown Unpatentable	Claims Not Shown Unpatentable
1–16	103	Hoff, Berg		1–16
1–16	103	Razavi, Andersen		1–16
Overall Outcome				1–16

V. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that claims 1–16 of the ’083 patent have not been shown to be unpatentable;

FURTHER ORDERED that Petitioner’s Motion to Strike (Paper 31) is granted-in-part and denied-in-part as discussed above;

FURTHER ORDERED that the Supplemental Declaration of Dr. Earl Sacerdoti (Ex. 2007) is stricken from the record; 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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