

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

NETFLIX, INC.,
PETITIONER,

v.

GOTV STREAMING, LLC,
PATENT OWNER.

CASE IPR2023-00757
PATENT 8,989,715

PATENT OWNER'S NOTICE OF APPEAL OF
FINAL WRITTEN DECISION
37 C.F.R. § 90.2

Patent Owner/Appellant GoTV Streaming, LLC (“Patent Owner”) hereby provides notice of its appeal to the United States Court of Appeals for the Federal Circuit from the Final Written Decision (Paper 39) entered on November 5, 2024, (“FWD”) attached as Exhibit A; the January 17, 2025, Order Denying Director Review of the FWD (Paper 42) attached as Exhibit B; and all underlying findings, determinations, rulings, opinions, orders, issues, and decisions regarding the finding that Claims 1, 2, 4–10, and 12–16 are unpatentable in *inter partes* review of U.S. Patent No. 8,989,715 (“’715 Patent”). *See* 35 U.S.C. §§ 141(c), 142, and 319; 37 C.F.R. §§ 90.2–.3; Federal Rule of Appellate Procedure 15, and Federal Circuit Rule 15.

This Notice is timely under 37 C.F.R. § 90.3, having been filed no later than sixty-three (63) days after the Order Denying Patent Owner’s Request for Director Review. 37 C.F.R. §§ 90.3(b)(1), 42.75 (e)(3).

In accordance with 37 C.F.R. § 90.2(a)(3)(ii), Patent Owner states that the issues on appeal include, but are not limited to:

- whether the Board erred in concluding that Petitioner showed Claims 1, 2, 4–10, and 12–16 of the ’715 Patent were unpatentable under pre-AIA 35 U.S.C. § 103 as obvious over the combination of US 2007/0150617 A1 to Hariki (“Hariki”) and US 2003/0023755 A1 to Harris (“Harris”);

- any findings or determinations by the Director or the Board supporting or relating to the issue(s) above, including the Board’s consideration of expert testimony, prior art, and other evidence on record; the Board’s claim constructions and applications thereof; and the Board’s factual findings, conclusions of law, and other determinations supporting or related to issue(s) listed above; including,
 - Whether the Board legally erred by construing:
(1) “wherein said compiled content is generated in part from execution of said application” to include a program that only triggers a separate application’s execution to generate compiled content; (2) “customized to said application” as not being “created for” the application; and/or (3) the claims as not limited to covering “remote” applications, including by using the wrong legal standard;
 - Whether the Board erred by, or is in violation of Patent Owner’s due process rights/the Administrative Procedure Act (“APA”) for, *sua sponte* relying heavily on new evidence and argument in the Final Written Decision to which Patent Owner had no chance to consider and respond;

- Whether the Board erred by, or is in violation of the APA for, failing to give proper weight to the *ex parte* reexamination prosecution history where the Central Reexamination Unit adopted Patent Owner’s interpretation of “customized to said application”;
- Whether the Board erred by, or is in violation of the APA for, (a) allowing Petitioner to take diametrically opposed claim construction positions before the PTAB and the district court, and (b) failing to consider evidence of the irreconcilable positions and controlling caselaw supporting that a Petitioner may not; and
- all other issued decided adversely to Patent Owner in any orders, decisions, rulings, or opinions underlying or supporting the Final Written Decision.

This Notice of Appeal is being e-filed with the Clerk’s Office for the United States Court of Appeals for the Federal Circuit, along with the payment of required docketing fees. In addition, a true and correct copy of this Notice of Appeal is being filed concurrently with the Director of the United States Patent and Trademark Office.

Dated: March 21, 2025

Respectfully submitted,

/Joshua S. Wyde/

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APPENDIX A—FINAL WRITTEN DECISION

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

NETFLIX, INC.,
Petitioner,

v.

GOTV STREAMING, LLC,
Patent Owner.

IPR2023-00757
Patent 8,989,715 B2

Before RICHARD M. LEBOVITZ, BRIAN J. McNAMARA, and
STEVEN M. AMUNDSON, *Administrative Patent Judges*.

AMUNDSON, *Administrative Patent Judge*.

JUDGMENT

Final Written Decision

Determining Some Challenged Claims Unpatentable
Dismissing Petitioner's Motion to Exclude Evidence
35 U.S.C. § 318(a)

I. INTRODUCTION

Netflix, Inc. (“Petitioner”) filed a Petition requesting an *inter partes* review of claims 1–20 in U.S. Patent No. 8,989,715 B2 (Exhibit 1001, “the ’715 patent”) under 35 U.S.C. §§ 311–319. Paper 2 (“Pet.”). GoTV Streaming, LLC (“Patent Owner”) filed a Preliminary Response. Paper 8 (“Prelim. Resp.”).

In the Institution Decision, we instituted review based on all challenged claims and all challenges included in the Petition. Paper 11 (“Inst. Dec.”). We have jurisdiction under 35 U.S.C. § 6. We issue this Final Written Decision under 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73. For the reasons explained below, Petitioner has shown by a preponderance of the evidence that claims 1, 2, 4–10, and 12–16 are unpatentable, but Petitioner has not shown by a preponderance of the evidence that claims 3, 11, and 17–20 are unpatentable. *See* 35 U.S.C. § 316(e) (2018).

II. BACKGROUND

A. Procedural History

After we instituted review, Patent Owner filed a Response to the Petition. Paper 21 (“Resp.”). Petitioner filed a Reply to Patent Owner’s Response. Paper 26 (“Reply”). Patent Owner filed a Sur-reply to Petitioner’s Reply. Paper 27 (“Sur-reply”).

Further, Petitioner filed a motion to exclude Exhibits 2023 to 2027. Paper 31. Patent Owner filed an opposition to Petitioner’s motion. Paper 32. And Petitioner filed a reply to Patent Owner’s opposition. Paper 33.

On August 6, 2024, we held an oral hearing, and the record includes the hearing transcript. Paper 36 (“Tr.”).

B. Real Parties in Interest

Petitioner identifies the following real parties in interest: Netflix, Inc. and Netflix Streaming Services, Inc. Pet. 78. Patent Owner identifies itself as the sole real party in interest. Paper 4, 2. Additionally, “although Patent Owner does not believe Phunware Inc. (‘Phunware’) is a real party-in-interest to this proceeding, out of an abundance of caution, Patent Owner discloses Phunware.” *Id.* The parties do not raise any issue about real parties in interest.

C. Related Matters

Petitioner and Patent Owner identify the following civil action as a related matter involving the ’715 patent: *GoTV Streaming, LLC v. Netflix, Inc.*, No. 2:22-cv-07556 (C.D. Cal. filed Oct. 17, 2022) (the “California case”). Pet. 1, 75 n.18, 78; Paper 4, 2; Paper 9, 2; Paper 10, 2.

Patent Owner identifies the following Office proceedings as related matters:

- *Netflix, Inc. v. GoTV Streaming, LLC*, IPR2023-00758 (PTAB filed April 7, 2023) (Patent 8,478,245 B2); and
- *Netflix, Inc. v. GoTV Streaming, LLC*, IPR2023-00759 (PTAB filed April 20, 2023) (Patent 8,103,865 B2).

Paper 4, 2; Paper 10, 2.

Petitioner and Patent Owner identify the following Office proceeding as a related matter: *ex parte* reexamination no. 90/019,276. Paper 9, 2; Paper 10, 2.

D. The ’715 Patent (Exhibit 1001)

The ’715 patent, titled “Method and System for Rendering Content on a Wireless Device,” issued on March 24, 2015, from an application filed on April 18, 2013. Ex. 1001, codes (22), (45), (54). The patent identifies that

application as a continuation of an application filed on August 1, 2007. *Id.* at 1:6–7, code (63). The patent states that “embodiments of the present invention relate to a method and system for rendering applications on a wireless device.” *Id.* at 1:14–16; *see id.* at code (57).

The ’715 patent describes problems with rendering conventional applications on wireless devices. *See* Ex. 1001, 1:20–2:14, 5:47–50. Specifically, an “increase in the number of wireless devices has also increased the demand for various applications to run on various wireless devices.” *Id.* at 1:25–27; *see id.* at 5:47–48. Because “each wireless device is unique,” however, “each application must be tailored in accordance with the wireless device attributes to fully utilize the capabilities of the wireless device.” *Id.* at 1:37–40; *see id.* at 5:48–50. For instance, “to utilize the entire display of the wireless device, the application must be tailored to render the application in accordance with the display size and resolution of the wireless device.” *Id.* at 1:40–43.

Tailoring “each application to a given wireless device type has increased the cost of developing applications.” Ex. 1001, 1:45–47. And “the increase in cost of developing applications due to the need to tailor each application to all the specific brands and models of wireless devices has hindered and limited the number of titles that a software vendor can produce annually.” *Id.* at 1:58–62.

The ’715 patent identifies the following needs:

- (1) “to provide generic applications regardless of the wireless device type, thereby relieving software vendors from having to tailor their applications for each given wireless device type”;

- (2) “to provide an output that is device specific based on the wireless device attributes where the output is generated from a generic application”; and
- (3) “to update and patch various applications without” accessing “each wireless device individually.”

Ex. 1001, 2:18–28.

Embodiments of the invention address one or more of the identified needs because a server “tailors the output of a generic application based on the wireless device capability.” Ex. 1001, 2:33–36, 5:50–54; *see id.* at 4:17–21, 6:34–37, 20:10–21. For instance, a server may tailor the output of a generic application by sending a wireless device basic commands for rendering application content “written in a device independent syntax but tailored based on the wireless device capability.” *Id.* at 2:44–47, 3:57–58, 3:66–67, 7:42–45, 10:65–11:1, 15:66–16:2.

The '715 patent's Figure 1A (reproduced below) depicts an exemplary communication system according to an embodiment of the invention:

100A

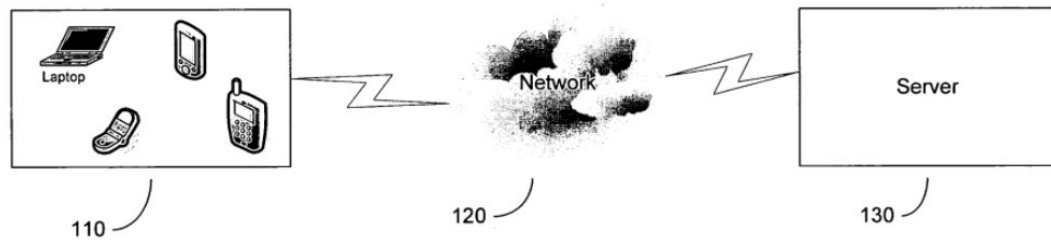


FIGURE 1A

Figure 1A illustrates “an exemplary communication system 100A” including wireless devices 110 coupled through network 120 to server 130. Ex. 1001, 5:61–66, Fig. 1A. A wireless device 110 includes a software program or “client” that, among other things, “sends user input and other data to” server 130 for processing. *Id.* at 6:11–13, 6:16–20; *see id.* at 7:38–39, 7:50–54.

Server 130 “executes a generic application” in that “it is not specific to any device or any set of device capabilities.” Ex. 1001, 6:6–9.

Server 130 “translate[s] the output of the application to a device specific set

of commands for transmission to the device 110 for rendering,” thereby “tailoring the output of the generic application based on the wireless device type.” *Id.* at 6:9–11, 6:24–27.

For example, server 130 provides a “series of basic commands, precompiled and ready for audio and video rendering by the wireless device.” Ex. 1001, 6:27–29; *see id.* at 13:13–17, 15:66–16:2, 19:66–67, Fig. 7 (step 780). The “basic commands are discrete low level rendering commands” for the wireless device and specify “page layout information” for “display and audio rendering” at the wireless device. *Id.* at 6:29–31, 13:20–23; *see id.* at 2:44–47, 3:61–63, 16:61–62, 17:65–18:2, 18:11–12, 19:61–62. The “basic commands are written in a device independent syntax but tailored based on the wireless device rendering capability” such that “the parameters of the basic commands are based on the wireless device capability.” *Id.* at 7:43–45, 18:58–61; *see id.* at 10:65–11:1, 13:17–20, 18:7–11, 19:63–65.

The '715 patent's Figure 1B (reproduced below) depicts an exemplary wireless device protocol stack with device-generic and device-specific software:

100B

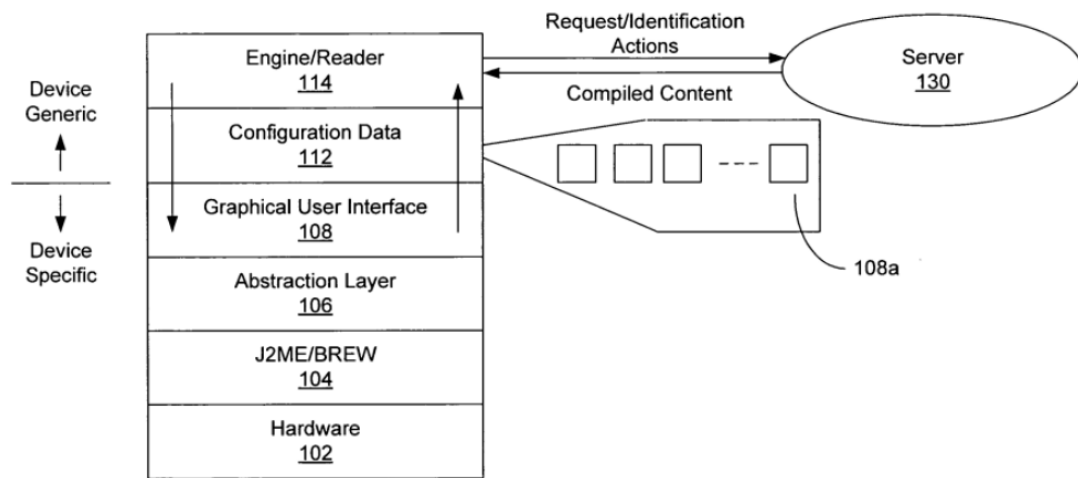


FIGURE 1B

Figure 1B illustrates “an exemplary wireless device protocol or software stack 100B” including the following components:

- “a hardware component 102”;
- “a binary runtime for wireless device (BREW) and/or Java platform (J2ME) J2ME/BREW 104”;
- “an abstraction layer 106”;
- “a graphical user interface 108”;
- “a configuration data 112”; and

- “a reader/engine 114.”

Ex. 1001, 6:45–52, Fig. 1B. In one embodiment, “the graphical user interface 108, abstraction layer 106, J2ME/BREW 104 and the hardware layer 102 are device specific,” while “the engine/reader 114 and the configuration data 112 may be device generic in terms of the syntax they use to operate.” *Id.* at 6:52–57, Fig. 1B.

As Figure 1B shows, graphical user interface 108 includes “a number of individual rendering blocks 108a that perform discrete rendering operations to render a received page description” provided by server 130. Ex. 1001, 7:18–20, Fig. 1B; *see id.* at 3:29–41. Examples of rendering blocks 108a include “an edit box for entering text, static text for displaying text, an image, a pop-up menu which may appear in response to a user interaction, a drop-down menu list,” “sound for controlling audio,” “video to display a video with visual control panel,” a “check box/radio button to enable selection/de-selection of items,” “a table for displaying data in a tabular form,” and “a calendar for displaying and enabling selection/de-selection of a date.” *Id.* at 8:25–41; *see id.* at 8:44–10:55.

Configuration data 112 “may be a set of low level instructions” programmed into rendering blocks 108a that cause “the graphical user interface to operate and render data (e.g., ‘look’) a certain way.” Ex. 1001, 7:59–63, 8:19–20; *see id.* at 10:56–58, 18:40–42. Configuration data 112 “may include text fonts, text colors, background colors, background images, border thickness, border colors,” and images, e.g., images of icons. *Id.* at 8:3–15; *see id.* at 8:44–10:55, 12:64–13:6. The ’715 patent uses the terms “configuration data” and “custom configuration” interchangeably. *Id.* at 7:67–8:2.

Engine/reader 114 on the wireless device communicates with server 130 via “a device generic syntax to read the basic commands of a page description” sent by server 130. Ex. 1001, 7:29–34. Engine/reader 114 may send the following information to server 130:

- (1) “a message that includes a request to access a generic application as well as the identification of the wireless device type”; and
- (2) “user actions and other state information.”

Id. at 7:34–39. Engine/reader 114 may receive from server 130 “compiled content” that “includes a series of basic commands for rendering the requested application.” *Id.* at 7:39–42; *see id.* at 2:44–47, 10:62–65.

Engine/reader 114 may receive from graphical user interface 108 “additional data” in response to “a user interaction (e.g., selecting an icon) and may transmit that data to the server as an event.” *Id.* at 7:50–54.

A “page description contains basic commands” that may specify “the horizontal and vertical coordinates, the width, the height, the type of component to be displayed (e.g., text, image, video, audio and the like),” and “the unique identification of the rendering block to be used to render the component.” Ex. 1001, 13:24–32. Graphical user interface 108 uses a page description obtained from the server to “render the page of the application based on the received basic commands and the customized preprogrammed plurality of rendering blocks.” *Id.* at 11:1–3; *see id.* at 18:62–19:3, Fig. 6 (steps 650 and 660).

The '715 patent's Figure 3 (reproduced below) depicts an exemplary wireless device:

300

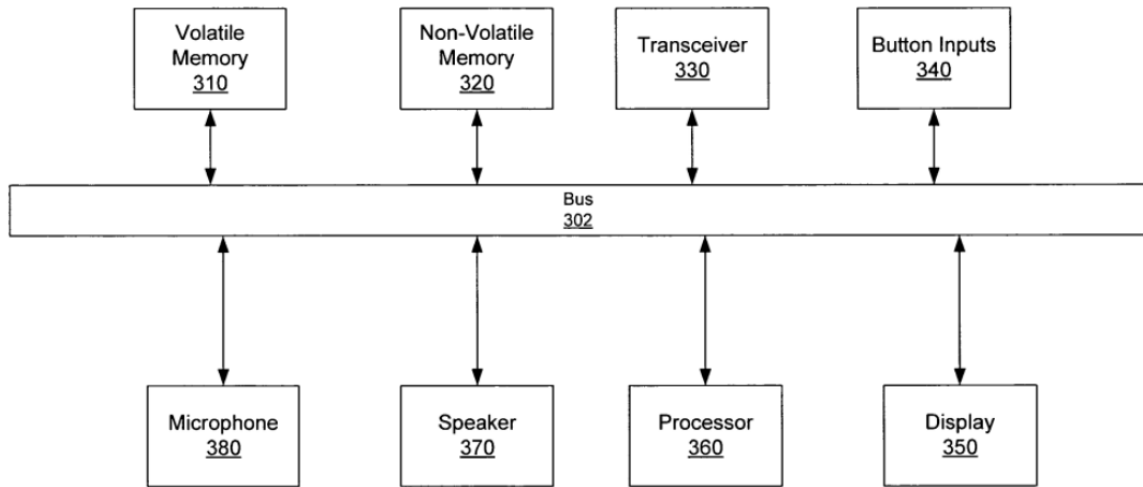


FIGURE 3

Figure 3 illustrates exemplary wireless device 300 including the following components coupled to bus 302:

- volatile memory 310;
- non-volatile memory 320;
- transceiver 330;
- button inputs 340;
- display 350;
- processor 360;
- speaker 370; and

- microphone 380.

See Ex. 1001, 15:1–53, Fig. 3.

Transceiver 330 facilitates “wireless communication with a remote server.” Ex. 1001, 15:36–37. For instance, transceiver 330 “may receive a series of basic commands from a remote server that may be used to render application and/or content on the display 350.” *Id.* at 15:38–40.

Button inputs 340 “may be used to navigate a website, enter email addresses, enter telephone numbers and the like.” Ex. 1001, 15:43–45. Button inputs 340 may include “soft key buttons, a plurality of mechanical buttons, a rotating input component, a sliding input component, a voice activation component and the like.” *Id.* at 15:45–48.

A client on a wireless device may cache “downloaded compiled content such that it can be retrieved at a later time.” Ex. 1001, 13:36–38. For instance, a client on a wireless device may cache a “displayed page such that the client can browse back without having to download the page again” when “surfing the Internet.” *Id.* at 13:38–40. Additionally, “[d]uring the user navigation, the client may keep the path history of the user such that the user can press the ‘back’ key to go to the previous screen without requesting for the page to be downloaded again.” *Id.* at 14:45–48.

The '715 patent's Figure 4 (reproduced below) depicts an exemplary compiled page description received from the server:

400

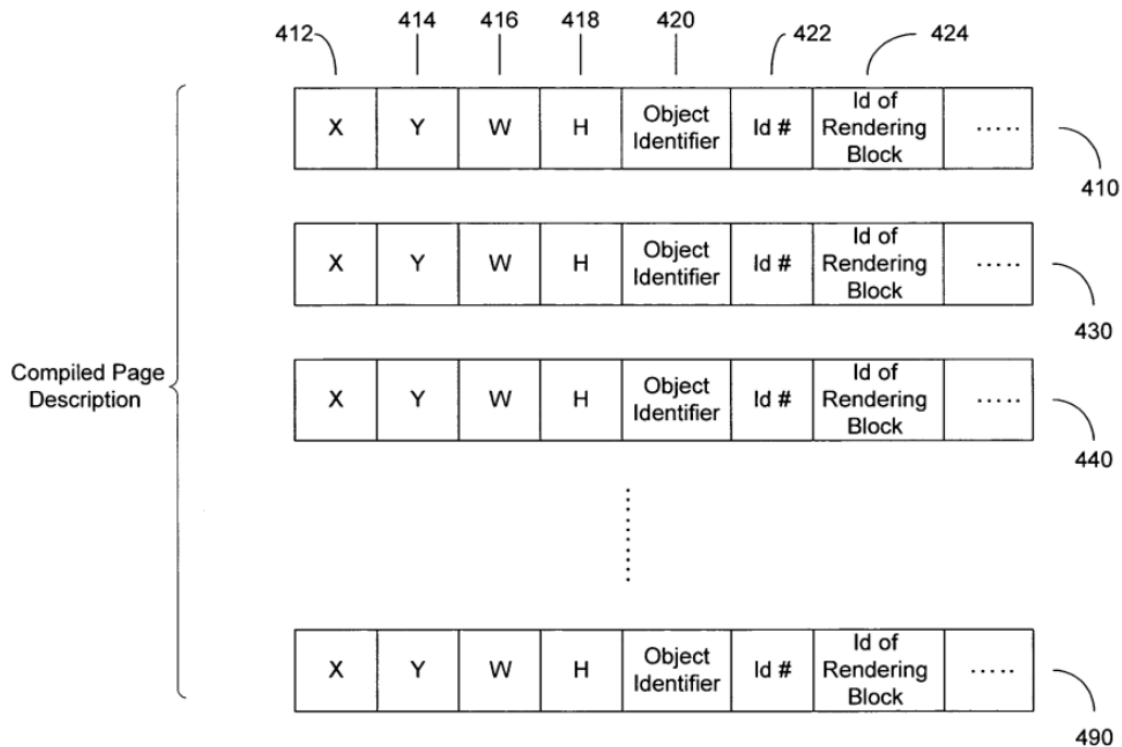


FIGURE 4

Figure 4 illustrates "an exemplary received compiled page description 400" including a "series of basic commands," e.g., commands 410, 430, 440, and 490. Ex. 1001, 15:54–57, 15:63–65, 18:12–14, Fig. 4. "Each basic command may describe a given component on the page of the requested application to be rendered." *Id.* at 15:57–59. The "series of basic commands" in a compiled page description forms "a single unified page to be rendered by the wireless device." *Id.* at 15:63–65.

As an example, “basic command 410 may be a description for rendering an image” and with “descriptions for rendering [the] image by specifying” (1) “the Cartesian coordinates 412 and 414 of a screen region” and (2) “the width 416 and the height 418 of the screen region to include [the] image.” Ex. 1001, 15:60–61, 16:2–7. As another example, “basic command 430 may be the description for rendering a video clip.” *Id.* at 15:61–62.

As Figure 4 shows, a basic command may include the following:

- “an object identifier 420” for an object or renderable component, such as an image;
- “an identification number 422” for the object or renderable component; and
- “an identification of a rendering block 424” to be used to render the object or renderable component.

Ex. 1001, 16:16–24, Fig. 4; *see id.* at 13:29–30.

The '715 patent's Figure 5 (reproduced below) depicts an exemplary remote server:

500

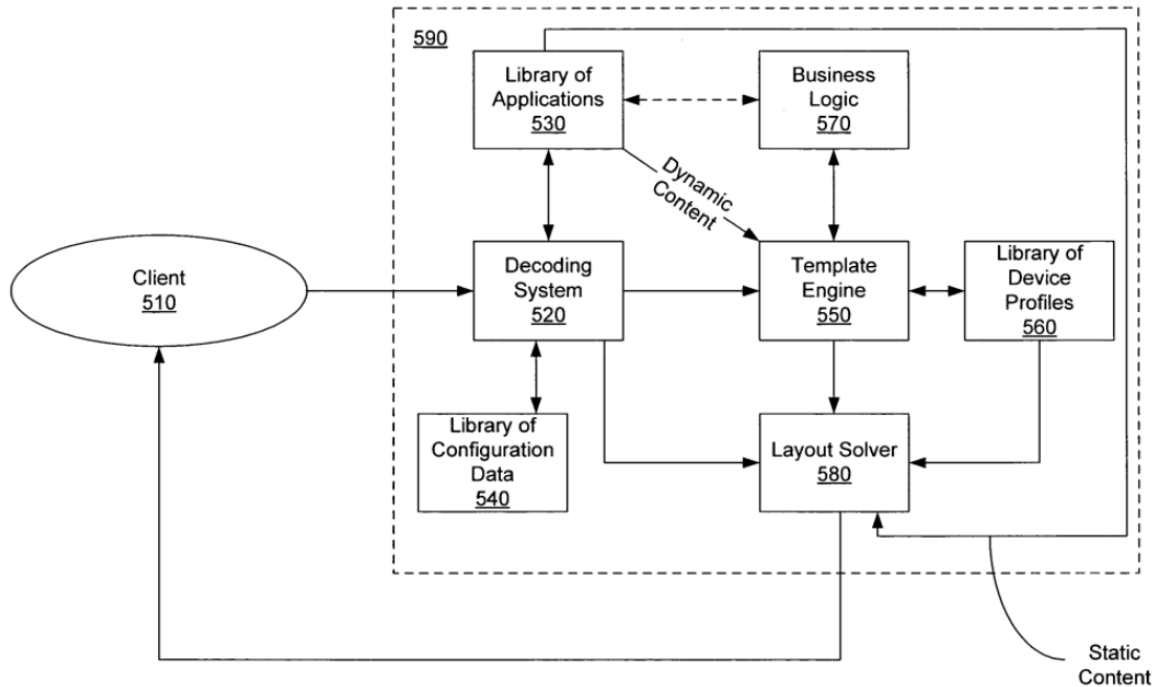


FIGURE 5

Figure 5 illustrates exemplary remote server 590 including the following components:

- decoding system 520;
- library of applications 530;
- library of configuration data 540;
- template engine 550;
- library of device profiles 560;
- business logic 570; and
- layout solver 580.

See Ex. 1001, 16:31–17:64, Fig. 5.

When decoding system 520 receives a request from client 510, decoding system 520 accesses (1) library of applications 530 to “locate and execute the requested application” and (2) library of configuration data 540 “where each application may have a corresponding custom configuration.” Ex. 1001, 16:39–41, 16:50–52; *see id.* at 19:25–29. Then, decoding system 520 sends a message to client 510 “identifying the custom configuration.” *Id.* at 16:53–56; *see id.* at 19:32–34.

Template engine 550 receives the following: (1) a generic template from either decoding system 520 or library of applications 530 and (2) dynamic data from business logic 570. Ex. 1001, 17:3–6, 17:8–10, 17:17–18, 17:48. Template engine 550 merges the dynamic data and the generic template. *Id.* at 17:6–8; *see id.* at 3:31–34.

After merging the dynamic data and the generic template, template engine 550 sends a “high level and dynamic template,” e.g., in extensible markup language (XML) format, to layout solver 580. Ex. 1001, 17:22–26, 17:53–54; *see id.* at 3:34–40. Also, decoding system 520 may send a “static page” to layout solver 580. *Id.* at 16:64–66; *see id.* at 3:48–50, 17:54–56.

After receiving a “high level and dynamic template” and/or “static page,” layout solver 580 “translates the template and/or static page into a series of basic commands based on the device profile and device capabilities.” Ex. 1001, 3:54–57, 17:56–59. Layout solver 580 may access library of device profiles 560 to determine the device capabilities and then tailor the received information based on the device capabilities. *Id.* at 17:60–64; *see id.* at 3:51–54, 19:48–51, 19:54–57.

Server 590 transmits the series of basic commands to “client 510 for rendering.” Ex. 1001, 18:11–12, 19:66–67. For example, “the basic commands are the compiled page description 400” as illustrated in Figure 4. *Id.* at 18:12–14, Fig. 4.

E. The Challenged Claims

Petitioner challenges the following claims in the ’715 patent:

- independent claim 1 for a method of generating content that is renderable by a wireless device;
- claims 2–8 that depend directly or indirectly from claim 1;
- independent claim 9 for a non-transitory computer-readable medium;
- claims 10–16 that depend directly or indirectly from claim 9;
- independent claim 17 for a server programmed to generate content that is renderable by a wireless device; and
- claims 18–20 that depend directly from claim 17.

Pet. 1–2, 25–73.

Claims 1 and 17 exemplify the challenged claims and read as follows (with formatting added for clarity and with bracketed numbers and letters added for reference purposes):¹

1. [1pre] A method of generating content that is renderable by a wireless device, said method comprising:

[1a] transmitting, to said wireless device, an identification of a custom configuration of a plurality of rendering blocks of said wireless device,

¹ We use the same numbers and letters that Petitioner uses to identify the claim language. *See* Pet. vi, ix–x (Listing of Challenged Claims).

[1b] wherein said custom configuration is associated with an application and configures said plurality of rendering blocks to render content in a manner customized to said application; and

[1c] transmitting, to said wireless device, compiled content comprising (i) first compiled content specific to a first page of said application and (ii) second compiled content specific to a second page of said application,

[1d] wherein said compiled content is generated in part from execution of said application,

[1e] wherein said compiled content comprises render commands expressed in a syntax that is generic to said wireless device, and

[1f] wherein said custom configuration is applicable to said first and second compiled content,

[1g] wherein said compiled content and said custom configuration are usable by a graphical user interface comprising said plurality of rendering blocks to generate renderable content based on said compiled content and said custom configuration.

17. [17pre] A server that is programmed to generate content that is renderable by a wireless device, comprising:

[17a] a library of applications;

[17b] a library of custom configuration data comprising a custom configuration that configures a plurality of rendering blocks of said wireless device to render content in a manner customized to an application from said library of applications requested by said wireless device; and

[17c] a layout solver that transmits compiled content to said wireless device, said compiled content comprising (i) first compiled content specific to a first page of said application and (ii) second compiled content specific to a second page of said application,

[17d] wherein said compiled content is generated in part from execution of said application by said server,

[17e] wherein said compiled content comprises render commands expressed in a syntax that is generic to said wireless device, and

[17f] wherein said custom configuration is applicable to said first and second compiled content,

[17g] wherein said compiled content and said custom configuration are usable by a graphical user interface comprising said plurality of rendering blocks to generate renderable content based on said compiled content and said custom configuration.

Ex. 1001, 20:40–62, 22:19–43.

F. The Asserted References

For its challenge, Petitioner relies on the following references:

Name	Reference	Exhibit
Hariki	US 2007/0150617 A1, published June 28, 2007 (based on an application filed July 25, 2006)	1006
Harris	US 2003/0023755 A1, published January 30, 2003 (based on an application filed December 18, 2001)	1007

Pet. 2, 25–73. Petitioner asserts that Hariki qualifies as prior art under § 102(a) and that Harris qualifies as prior art under § 102(b). *Id.* at 2; *see* 35 U.S.C. § 102(a)–(b) (2006).²

Patent Owner does not dispute that each reference qualifies as prior art. *See, e.g.*, Resp. 35–57; Sur-reply 11–20.

² The Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112-29, 125 Stat. 284 (2011), amended 35 U.S.C. § 102 and § 103 effective March 16, 2013. Because the effective filing date of the challenged claims predates the AIA’s amendments to § 102 and § 103, this decision refers to the pre-AIA versions of § 102 and § 103.

G. The Asserted Challenge to Patentability

Petitioner asserts the following challenge to patentability:

Claim(s) Challenged	35 U.S.C. §	Reference(s)/Basis
1–20	103(a)	Hariki, Harris

Pet. 2, 25–73.

H. Testimonial Evidence

To support its challenges, Petitioner relies on the declaration of Benjamin B. Bederson, Ph.D. (Exhibit 1002). Dr. Bederson states, “I received a B.S. degree in Computer Science with a minor in Electrical Engineering in 1986 from the Rensselaer Polytechnic Institute. I received M.S. and Ph.D. degrees in Computer Science in 1989 and 1992, both from New York University,” and “am currently Professor Emeritus of Computer Science at the University of Maryland.” Ex. 1002 ¶¶ 6, 31. Dr. Bederson also states, “I have been retained by counsel for” Petitioner and “have been asked to opine on whether the ’715 patent is anticipated and/or rendered obvious by the prior art.” *Id.* ¶¶ 1–2.

To support its positions, Patent Owner relies on the Declaration of Mr. Stuart J. Lipoff (Exhibit 2022). Mr. Lipoff states, “I have bachelor’s degrees in electrical engineering and in engineering physics, both from Lehigh University,” and “also have a master’s degree in electrical engineering from Northeastern University, and an MBA degree from Suffolk University.” Ex. 2022 ¶ 6. Mr. Lipoff also states, “I have been retained by” Patent Owner “to provide my expert assessment and technical opinions in connection with” this proceeding. *Id.* ¶ 1.

Additionally, Petitioner submits Mr. Lipoff’s deposition testimony, and Patent Owner submits Dr. Bederson’s deposition testimony. *See*

Ex. 1025 (Apr. 2, 2024, Lipoff Dep. Tr.); Ex. 2031 (Jan. 10, 2024, Bederson Dep. Tr.).

I. Burden

In an *inter partes* review, a petitioner bears the burden of persuasion to prove “unpatentability by a preponderance of the evidence.” *Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015) (quoting 35 U.S.C. § 316(e)); *see* 37 C.F.R. § 42.1(d) (2024).

III. PATENTABILITY ANALYSIS

A. Legal Principles: Obviousness

A patent may not be obtained “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.” 35 U.S.C. § 103(a) (2006). An obviousness analysis involves underlying factual inquiries including (1) the scope and content of the prior art; (2) differences between the claimed invention and the prior art; (3) the level of ordinary skill in the art; and (4) where in evidence, objective indicia of nonobviousness, such as commercial success, long-felt but unsolved needs, and failure of others. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18, 35–36 (1966); *Apple Inc. v. Samsung Elecs. Co.*, 839 F.3d 1034, 1047–48 (Fed. Cir. 2016) (en banc). When evaluating a combination of references, an obviousness analysis should address “whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007).

We analyze the obviousness issues according to these principles.

B. Level of Ordinary Skill in the Art

Factors pertinent to determining the level of ordinary skill in the art include (1) the educational level of the inventor; (2) the type of problems encountered in the art; (3) prior-art solutions to those problems; (4) the rapidity with which innovations are made; (5) the sophistication of the technology; and (6) the educational level of workers active in the field. *Envtl. Designs, Ltd. v. Union Oil Co.*, 713 F.2d 693, 696–97 (Fed. Cir. 1983). Not all factors may exist in every case, and one or more of these or other factors may predominate in a particular case. *Id.* These factors are not exhaustive, but merely a guide to determining the level of ordinary skill in the art. *Daiichi Sankyo Co. v. Apotex, Inc.*, 501 F.3d 1254, 1256 (Fed. Cir. 2007). Moreover, the prior art itself may reflect an appropriate skill level. *Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001).

Petitioner asserts that a person of ordinary skill in the art at the time of the alleged invention “would have had a bachelor’s degree in electrical or computer engineering, or a closely related scientific field such as computer science, and two to three years of work experience with remote page display rendering and/or remote server applications.” Pet. 18. Petitioner also asserts that “any lack of work experience could be remedied with additional education (e.g., a Ph.D.) concentrating on multimedia content transmission and/or remote server applications, and likewise, a lack of education can be remedied with additional work experience in multimedia content transmission and/or remote server applications (e.g., 4–5 years).” *Id.* (emphases omitted). Dr. Bederson’s testimony supports Petitioner’s assertions. *See* Ex. 1002 ¶¶ 36–38.

Regarding an ordinarily skilled artisan’s educational level, Patent Owner “generally concurs” with Petitioner that the skilled artisan would have had “an electrical/computer engineering degree or a degree in a closely related field.” Resp. 14–15 (quoting Pet. 18). Regarding an ordinarily skilled artisan’s experience level, Patent Owner asserts that the skilled artisan would have had “a couple of years’ experience in the ‘field of wireless communication systems’ and ‘[m]ore particularly, . . . method[s] and system[s] for rendering applications on a wireless device.’” *Id.* at 15 (alterations by Patent Owner) (quoting Ex. 1001, 1:13–16). Patent Owner also asserts that “[m]ore education may substitute for experience, and vice versa.” *Id.*

Regarding an ordinarily skilled artisan’s experience level, Petitioner’s description requires slightly more experience (“two to three years”) than Patent Owner’s description (“a couple of years”). *See* Pet. 18; Resp. 15. As for the type of experience, we discern no material difference between Petitioner’s description (“remote page display rendering and/or remote server applications”) and Patent Owner’s description (“wireless communication systems” and “[m]ore particularly, . . . method[s] and system[s] for rendering applications on a wireless device”). *See* Pet. 18; Resp. 15.

We adopt Patent Owner’s description of an ordinarily skilled artisan because it comports with the technology and claims in the ’715 patent as well as the asserted references. *See, e.g.*, Ex. 1001, 1:11–4:25, 20:40–22:52; Ex. 1006 ¶¶ 3–9; Ex. 1007 ¶¶ 2–6. We note that our analysis would not change if we adopted Petitioner’s description of an ordinarily skilled artisan, which requires slightly more experience (“two to three years”) than Patent

Owner's description ("a couple of years"). *See* Pet. 18; Resp. 15. Someone with a higher skill level will understand the technology at least as well as someone with a lower skill level. *See Innovention Toys, LLC v. MGA Entm't, Inc.*, 637 F.3d 1314, 1323 (Fed. Cir. 2011); *Tokai Corp. v. Easton Enters., Inc.*, 632 F.3d 1358, 1369 (Fed. Cir. 2011). Hence, "it is generally easier to establish obviousness under a higher level of ordinary skill." *Kinetic Concepts, Inc. v. Smith & Nephew, Inc.*, 688 F.3d 1342, 1366 (Fed. Cir. 2012).

C. Claim Construction

1. BACKGROUND

(a) General Principles

We construe claim terms "using the same claim construction standard" that district courts use to construe claim terms in civil actions under 35 U.S.C. § 282(b). *See* 37 C.F.R. § 42.100(b). Under that standard, claim terms "are given their ordinary and customary meaning, which is the meaning the term would have to a person of ordinary skill in the art at the time of the invention." *Power Integrations, Inc. v. Fairchild Semiconductor Int'l, Inc.*, 904 F.3d 965, 971 (Fed. Cir. 2018) (citing *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–13 (Fed. Cir. 2005) (en banc)). The meaning of claim terms may be determined by "look[ing] principally to the intrinsic evidence of record, examining the claim language itself, the written description, and the prosecution history, if in evidence." *DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 469 F.3d 1005, 1014 (Fed. Cir. 2006) (citing *Phillips*, 415 F.3d at 1312–17).

The "person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed

term appears, but in the context of the entire patent, including the specification.” *Phillips*, 415 F.3d at 1313. “Properly viewed, the ‘ordinary meaning’ of a claim term is its meaning to the ordinary artisan after reading the entire patent.” *Id.* at 1321.

(b) Petitioner’s Position

Petitioner contends that “no express constructions of the claims are necessary to assess whether the prior art reads on the challenged claims” given the “close correlation” between the asserted references and the challenged claims. Pet. 19. Therefore, according to Petitioner, “the claims should be given their plain and ordinary meaning.” *Id.*; *see id.* at 42 n.11.

(c) Patent Owner’s Position

Patent Owner requests that the Board decide the following claim-construction issues:

- whether “customized to said application” in limitations 1b and 9b means “created for” the “application”;
- whether limitations 1d and 9d (“wherein said compiled content is generated in part from execution of said application”) require the “application” to produce or output the “compiled content”;
- whether claims 1 and 9 require the “application” to operate “remote” from the “wireless device”; and
- whether § 112’s means-plus-function provision applies to claim 17’s “layout solver.”

See Resp. 16–33; Sur-reply 1–10; 35 U.S.C. § 112 ¶ 6 (2006).

(d) Previous Constructions

In September 2023, when deciding summary-judgment motions, the district court in the California case provided explicit constructions for the

following claim terms in the '715 patent: “custom configuration” and “rendering blocks.” Ex. 3004, 9–10; *see* Resp. 15. Patent Owner “does not believe that these terms are in controversy in this proceeding.” Resp. 15. Petitioner does not contend that these terms are in controversy in this proceeding. *See* Reply 1–14.

2. “CUSTOMIZED TO SAID APPLICATION” IN CLAIMS 1 AND 9

Limitations 1b and 9b recite “wherein said custom configuration is associated with an application and configures said plurality of rendering blocks to render content in a manner customized to said application.” Ex. 1001, 20:44–47 (limitation 1b), 21:25–28 (limitation 9b).

(a) Patent Owner’s Contentions

Patent Owner contends that “customized to said application” in limitations 1b and 9b means “created for” the “application.” *See* Resp. 16–17; Sur-reply 1–4. In particular, Patent Owner argues that the “natural reading of the limitation in context is that ‘customized to said application’ means ‘tailored to an application,’ ‘designed for the application,’ or ‘made with the application in mind.’” Resp. 16; *see* Sur-reply 3–4. Patent Owner also argues that “in the software context, customized to an application, is the equivalent of application-specific, meaning ‘created or written for a specific application.’” Resp. 16 (quoting Ex. 2027 (Wiktionary)) (citing Ex. 2031, 84:17–85:1). According to Patent Owner, “it is proper to use words not found in the specification to capture the meaning in light of the patent’s teachings.” Sur-reply 3.

Further, Patent Owner asserts that the '715 patent’s specification supports its position that “customized to said application” means “created for” the “application” because the specification teaches that:

- (1) “the custom configuration can only be determined after the application is known”; and
- (2) “there is a corresponding custom configuration the server chooses based upon the application.”

Resp. 16; Sur-reply 3 (citing Ex. 2022 ¶ 122); *see* Resp. 16–17. As support, Patent Owner quotes that specification’s disclosures that the “server may identify a custom configuration to be used for the requested application” and the “library of custom configuration data [is] where each application may have a corresponding custom configuration data to customize the appearance of the application.” Resp. 16–17 (alteration by Patent Owner) (emphases omitted) (quoting Ex. 1001, 3:9–10, 16:50–53) (citing Ex. 1001, 16:53–56, 19:25–29).

Additionally, Patent Owner contends that “the custom configuration ‘corresponds’ to an individual application (i.e., was consciously designed and is chosen with the application in mind) and is not merely a configuration that happens to be applied to an application.” Resp. 17 (citing Ex. 2022 ¶ 122).

(b) Petitioner’s Contentions

Petitioner contends that “customized to said application” in limitations 1b and 9b requires no construction because an ordinarily skilled artisan “can readily understand its plain and ordinary meaning.” Reply 2; *see id.* at 5. In particular, Petitioner argues that:

- (1) limitations 1b and 9b “state that the ‘custom configuration is associated with an application’”; and
- (2) the “associated with” relationship “dictates how the custom configuration is applied to render content in a manner customized to the application.”

Id. at 2 (emphasis omitted). According to Petitioner, “the claims plainly state that the rendering blocks are configured to render content for the application to the extent that the custom configuration is ‘associated with’ the application, which defines the relevant relationship between the custom configuration and the application, such that the rendering blocks will be customized.” *Id.* at 5.

Further, Petitioner asserts that the ’715 patent’s specification “does not limit ‘customized to said application’ to ‘created for’ an application.” Reply 3. Petitioner also asserts that the specification does not use the phrase “created for.” *Id.* at 3–4. According to Petitioner, the specification “simply discloses that there is a correspondence between a custom configuration and an application that allows for rendering content on a mobile device.” *Id.* at 4 (citing Ex. 1001, 2:52–54, 7:56–59, 11:4–6, 18:40–42).

Additionally, Petitioner contends that Patent Owner proposes an “already narrow construction” requiring “created for” and then offers “additional constructions that further narrow the scope, including ‘consciously designed for,’ ‘tailored to,’ ‘designed for’ an application, and ‘made with the application in mind.’” Reply 4 (citing Resp. 16–17). Petitioner adds that “‘customized to said application’ should not be limited to any of these constructions.” *Id.*

(c) Analysis

Based on the intrinsic evidence, we disagree with Patent Owner that “customized to said application” in limitations 1b and 9b means “created for” the “application.” See Resp. 16–17; Sur-reply 1–4.

Claim construction starts with the claim language. *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1116

(Fed. Cir. 2004). The claim language does not support Patent Owner’s position that “customized to said application” means “created for” the “application.” *See* Resp. 16–17.

Limitations 1b and 9b recite “wherein said custom configuration is associated with an application and configures said plurality of rendering blocks to render content in a manner customized to said application.” Ex. 1001, 20:44–47, 21:25–28. Thus, limitations 1b and 9b specify the relationship between the “custom configuration” and the “application,” in particular, that the “custom configuration” is “associated with” the “application.” *Id.* The phrase “associated with” differs in its plain meaning from the phrase “created for.”

According to limitations 1b and 9b, the “custom configuration” configures the “plurality of rendering blocks to render content in a manner customized to said application.” Ex. 1001, 20:44–47, 21:25–28. According to limitations 1a and 9a, the “rendering blocks” reside on the “wireless device.” *Id.* at 20:42–44, 21:23–25. Thus, according to limitations 1a–1b and 9a–9b, the “render[ed] content” on the “wireless device” is “customized to” the “application.” *Id.* at 20:42–47, 21:23–28.

Hence, the claim language requires only an association between the “custom configuration” and the “application” such that the “render[ed] content” on the “wireless device” is “customized to” the “application,” not necessarily “created for” the “application.” Ex. 1001, 20:42–47, 21:23–28.

The ’715 patent’s specification does not support Patent Owner’s position that “customized to said application” means “created for” the “application.” *See* Resp. 16–17. Consistent with the claim language, the specification explains that the “custom configuration customizes the look

and feel of the content displayed on the wireless device.” Ex. 1001, 18:40–42; *see id.* at 3:14–15, 4:11–13. As an example, a custom configuration may modify “a ‘submit’ icon to look like an airplane flying away when pressed.” *Id.* at 7:63–65. A custom configuration according to that example could modify a wide variety of applications, e.g., that also provide a “submit” icon for a user to press without necessarily being “created for” any of those applications.

Patent Owner misinterprets the ’715 patent’s specification when asserting that the specification supports its position that “customized to said application” means “created for” the “application.” *See* Resp. 16–17 (quoting Ex. 1001, 3:9–10, 16:50–53) (citing Ex. 1001, 16:53–56, 19:25–29); Sur-reply 3. For instance, Patent Owner quotes the specification’s disclosure that the “server may identify a custom configuration to be used for the requested application.” Resp. 16–17 (emphasis omitted) (quoting Ex. 1001, 3:9–10). But the disclosure that the server may identify a “custom configuration” for the “application” indicates that the “custom configuration” is being selected for and therefore “associated with” the “application,” just like the claim language. *See* Ex. 1001, 3:9–10; *see also id.* at 16:50–56, 19:25–29.

The ’715 patent’s prosecution history does not support Patent Owner’s position that “customized to said application” means “created for” the “application.” *See* Resp. 16–17. During prosecution of the parent for the application that issued as the ’715 patent, the Examiner rejected

independent application claims 1 and 13 as anticipated by Kembel.³ Ex. 1005, 209–10, 214–15; *see* Ex. 3005 (Kembel).⁴ Just like limitations 1b and 9b, application claims 1 and 13 recited “wherein said custom configuration is associated with an application and configures said plurality of rendering blocks to render content in a manner customized to said application.” Ex. 1005, 391 (application claim 1), 394 (application claim 13).

In rejecting application claims 1 and 13 as anticipated by Kembel, the Examiner mapped the “custom configuration” to Kembel’s application media packages (or dots) and mapped the “application” to Kembel’s application media viewer. Ex. 1005, 209–10, 214–15; *see* Ex. 3005 ¶¶ 19–25, 44–45, 56–61 (explaining how the application media viewer interacts with the application media packages to render Internet content on a client computer). The applicants did not dispute the Examiner’s mappings. *See* Ex. 1005, 196–98.

Regarding the claimed “associated with” relationship between the “custom configuration” and the “application,” the Examiner reasoned that “an application media viewer (an application) parses and executes the application media package (therefore the package/configuration is associated with the viewer/application).” Ex. 1005, 209–10, 215. Thus, in rejecting application claims 1 and 13, the Examiner did not apply a “created for”

³ *See* U.S. Patent Application Publication No. 2008/0134018, titled “Component for Coordinating the Accessing and Rendering of an Application Media Package,” to John A. Kembel et al. (“Kembel”).

⁴ Prior art “cited in the prosecution history of the patent constitutes intrinsic evidence.” *Kumar v. Ovonic Battery Co.*, 351 F.3d 1364, 1368 (Fed. Cir. 2003).

relationship between the “custom configuration” and the “application.” *Id.* The Examiner’s implicit claim construction during prosecution conflicts with Patent Owner’s contentions.

For the reasons discussed above, we disagree with Patent Owner that “customized to said application” in limitations 1b and 9b means “created for” the “application.” *See* Resp. 16–17; Sur-reply 1–4.

During the oral hearing, Patent Owner noted that less than one week earlier in an *ex parte* reexamination of four claims in the parent patent for the ’715 patent the Examiner construed “customized to the application” to mean “created or written for a specific application.” *See* Tr. 28:17–21; IPR2023-00758, Ex. 2032, 1, 7.⁵ In particular, Patent Owner proposed that construction when responding to an Office action rejecting the claims, and the Examiner adopted that construction as the broadest reasonable interpretation. IPR2023-00758, Ex. 2032, 3–4, 7.

For the reasons discussed above in this section, applying the *Phillips* standard in this proceeding, we disagree with the construction proposed by Patent Owner and adopted by the Examiner in the reexamination of the parent patent for the ’715 patent.

3. “WHEREIN SAID COMPILED CONTENT IS GENERATED IN PART FROM EXECUTION OF SAID APPLICATION” IN CLAIMS 1 AND 9

Limitations 1d and 9d recite “wherein said compiled content is generated in part from execution of said application.” Ex. 1001, 20:52–53 (limitation 1d), 21:33–34 (limitation 9d).

⁵ For IPR2023-00758, Ex. 2032 (July 31, 2024, Office communication), we cite to the page numbers that Patent Owner applied to the exhibit.

(a) Patent Owner's Contentions

Patent Owner contends that limitations 1d and 9d require “the identified application to ‘produce’ or ‘output’ the compiled content during its execution,” i.e., “said application produces/outputs some part of the compiled content during its execution.” Resp. 45; Sur-reply 4, 16; *see* Resp. 33. Patent Owner explains that “when the generating application is ‘executing,’ the application ‘produces’ or ‘outputs’ (i.e., is the source of), at least in part, the compiled content.” Resp. 28–29 (citing Ex. 2022 ¶ 113); *see id.* at 31–33.

Further, Patent Owner asserts that an ordinarily skilled artisan would understand that:

- (1) “the term ‘generate’ when discussing an application means: that which is *produced* during execution according to an algorithm, program, or set of rules”; and
- (2) “this data ‘generated’ or produced at a software level is also referred to as *output*.”

Resp. 29 (emphases in original) (citing Ex. 2022 ¶ 116).

Patent Owner next contends that “only an application that actually generates from its execution some compiled content” as an output meets limitations 1d and 9d. Resp. 33. According to Patent Owner, the following applications do not meet limitations 1d and 9d:

- (1) applications that “merely prompt the generating application to produce output during the execution of the generating application”; and
- (2) applications that “merely affect the compiled content the generating application produces or outputs during the execution of the generating application.”

Id.

As for the '715 patent's specification, Patent Owner asserts that the following disclosures in the specification show that the word "from" in limitations 1d and 9d means "the source of" the generated "compiled content" instead of "the starting point," "the cause of," or "basis for" the generated "compiled content":

- (1) "the server may execute the requested application";
- (2) "[t]he server may then determine whether the executed application produces dynamic or static content"; and
- (3) "[d]uring the execution of an application, the server determines whether the executed application produces dynamic or static pages."

Resp. 29–31 (alterations by Patent Owner) (emphases omitted) (quoting Ex. 1001, 3:29–31, 19:39–40) (citing Ex. 2022 ¶ 114; Ex. 2025 (Merriam-Webster.com)); Sur-reply 5–6 (alteration by Patent Owner) (emphases omitted) (quoting Ex. 1001, 19:38–40). Patent Owner also asserts that "[t]his 'production' (i.e., sourcing or origination) of pages 'during' the executing application's 'execution' on the server corresponds to the limitation language." Resp. 30.

Moreover, Patent Owner argues that "the specification mirrors the claims where the 'generated' compiled content is the 'output' of (read: 'produced by') the application executing on the server that is transmitted to, and received by, the wireless device." Resp. 30 (citing Ex. 1001, 2:25–26, 5:53–54, 6:9–11, Fig. 6 (item 640); Ex. 2022 ¶¶ 115, 117). According to Patent Owner, the specification:

- (1) "does not teach the client software 'generates' the compiled content as an initiating cause"; and

- (2) “makes clear that it is the remote application on the server that is executed and generates the compiled content sent to the client.”

Id. at 31 (citing Ex. 2022 ¶ 114); Sur-reply 5 (citing Ex. 1001, 19:38–40).

Patent Owner also argues that “the ‘in part’ language does not change what ‘generate . . . from’ requires.” Resp. 32 (ellipsis in original); *see* Sur-reply 4. According to Patent Owner, “an application’s generation only need be ‘in part from execution’ to meet” limitations 1d and 9d. Resp. 32.

(b) Petitioner’s Contentions

Petitioner contends that limitations 1d and 9d require no construction because their scope “is clear from the words of the claims themselves.” Reply 12. Petitioner also contends that limitations 1d and 9d encompass software that triggers generating the “compiled content” or generates the “compiled content” as “an initiating cause.” *Id.* at 12, 14, 21.

Regarding the claim language, Petitioner asserts that “the plain and ordinary meaning of ‘from’ in the context of the claim language is the ‘starting point of an activity’ or ‘upon.’” Reply 13 (emphasis omitted) (citing Ex. 1028 (Merriam-Webster’s Collegiate Dictionary (11th ed. 2007))). Based on the language “from execution of the application” in limitations 1d and 9d, Petitioner asserts that an ordinarily skilled artisan would understand that “the recited generation occurs upon execution, and not that the generated compiled content is ‘from’ the application.” *Id.* According to Petitioner, requiring that the generated compiled content is “from” the application “would read out the term ‘execution.’” *Id.*

Regarding the claim language, Petitioner asserts that Patent Owner “improperly attempts to group ‘in part’ with the generated compiled content rather than the triggering event of execution.” Reply 12 (citing Resp. 29);

see id. at 13–14. Petitioner asserts that “in part” modifies “the triggering action (execution of said application) such that the compiled content results at least due to the occurrence of application execution.” *Id.* at 13–14.

Regarding the ’715 patent’s specification, Petitioner asserts that the specification supports the interpretation that limitations 1d and 9d encompass software that triggers generating the compiled content or “generates” the “compiled content” as “an initiating cause.” *See* Reply 12–14. As support in the specification, Petitioner identifies Figure 7 showing step 750 where an application is “initially executed” and then “triggers a series of generation and transmission steps that ultimately lead to transmission of the compiled content to a client” in step 780. *Id.* at 12 (citing Ex. 1001, 19:38–20:9, Fig. 7); *see id.* at 14. As further support in the specification, Petitioner quotes the disclosure that “[d]uring application execution, pages are generated for display on the wireless device.” *Id.* at 12 (quoting Ex. 1001, 16:61–62) (alteration by Petitioner); *see id.* at 14.

Additionally, Petitioner contends that Mr. Lipoff defined the word “generated” as including producing something as a “side effect of the execution of an algorithm or program.” Reply 12–13 (quoting Ex. 2022 ¶ 100).

(c) Analysis

Based on the intrinsic evidence, we agree with Petitioner that limitations 1d and 9d encompass software that triggers generating the “compiled content” or generates the “compiled content” as “an initiating cause.” *See* Reply 12, 14.

Regarding the claim language, “[o]ther claims of the patent in question . . . can also be valuable sources of enlightenment as to the meaning

of a claim term.” *Phillips*, 415 F.3d at 1314. And “[d]ifferences among claims can also be a useful guide in understanding the meaning of particular claim terms.” *Id.*

Limitations 1d and 9d recite “wherein said compiled content is generated in part from execution of said application.” Ex. 1001, 20:52–53, 21:33–34. In contrast to limitations 1d and 9d, limitation 17d recites “wherein said compiled content is generated in part from execution of said application by said server.” *Id.* at 22:32–34. Limitation 17d parallels the ’715 patent’s disclosure about “compiled content generated in part from execution of the requested application by the server.” *Id.* at 18:56–58, Fig. 6 (step 640 “Receiving compiled content generated in part from execution of the application by the server”).

Hence, as in limitation 17d and the ’715 patent’s disclosure, the patentee during prosecution could have included the limiting language “by said server” in limitations 1d and 9d to specify that the “server” remote from the “wireless device” executes the “application” to generate the “compiled content.” But the patentee did not include the limiting language “by said server” in limitations 1d and 9d. The absence of that limiting language in limitations 1d and 9d indicates that the patentee intended claims 1 and 9 to have a broader scope than Patent Owner now advocates.

In essence, Patent Owner asserts that limitations 1d and 9d require that the “compiled content” be “generated in part **by** execution of said application.” *See* Resp. 28–33; Sur-reply 4–6. The Response includes the following heading: “The Pages of Compiled Content Must Be in Part Generated **by** the Executing Remote Application.” Resp. 28. The Sur-reply

includes the following heading: “The Compiled Content Must Be in Part Generated **by** the Executing Application.” Sur-reply 4.

But the claim language does not support Patent Owner’s position because limitations 1d and 9d require that the “compiled content” be “generated in part **from** execution of said application,” not “generated in part **by** execution of said application.” Ex. 1001, 20:52–53, 21:33–34. The word “from” differs in meaning from the word “by.” The word “from” may act as “a function word to indicate the source, cause, agent, or basis.” Ex. 1028, 502–03.⁶ Choosing to use the word “from” instead of the word “by” in limitations 1d and 9d also indicates that the patentee during prosecution intended claims 1 and 9 to have a broader scope than Patent Owner now advocates, e.g., to encompass software that triggers generating the “compiled content” or generates the “compiled content” as “an initiating cause.

As for the ’715 patent’s specification, it explains that the descriptions and drawings are “to be regarded in an illustrative rather than a restrictive sense.” Ex. 1001, 20:35–37. The specification also explains that “no limitation, element, property, feature, advantage or attribute that is not expressly recited in a claim should limit the scope of such claim in any way.” *Id.* at 20:33–35; *see id.* at 4:55–63. Hence, the specification indicates that the disclosed embodiments should not limit the claim scope.

Ordinarily, a claim construction “should not limit ‘the claimed invention to preferred embodiments or specific examples in the specification.’” *Littelfuse, Inc. v. Mersen USA EP Corp.*, 29 F.4th 1376,

⁶ For Exhibit 1028 (Merriam-Webster’s Collegiate Dictionary (11th ed. 2007)), we cite to the page numbers that appear in the publication.

1381 (Fed. Cir. 2022) (quoting *Teleflex, Inc. v. Ficoso N. Am. Corp.*, 299 F.3d 1313, 1328 (Fed. Cir. 2002)). Federal Circuit case law “counsels against incorporating a feature of a preferred embodiment into the claims.” *Arthrex, Inc. v. Smith & Nephew, Inc.*, 935 F.3d 1319, 1330 (Fed. Cir. 2019).

“Even when the specification describes only a single embodiment, the claims of the patent will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using ‘words or expressions of manifest exclusion or restriction.’” *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 906 (Fed. Cir. 2004) (quoting *Teleflex*, 299 F.3d at 1327). The patentee may demonstrate a clear intention to limit the claim scope “either in the specification or during prosecution.” *Thorner v. Sony Comput. Ent. Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012).

Here, Patent Owner does not identify in the ’715 patent’s specification “words or expressions of manifest exclusion or restriction” that preclude limitations 1d and 9d from encompassing software that triggers generating the “compiled content” or generates the “compiled content” as “an initiating cause.” *See* Resp. 29–31; Sur-reply 5–6.

The ’715 patent’s prosecution history does not support Patent Owner’s position that the “application” must generate “from its execution some compiled content” as an output to meet limitations 1d and 9d. *See* Resp. 33. During prosecution of the parent for the application that issued as the ’715 patent, the Examiner rejected independent application claims 1 and 13 as anticipated by Kembel. Ex. 1005, 209–10, 214–15; *see* Ex. 3005 (Kembel). Similar to limitations 1d and 9d, application claims 1 and 13 recited “receiving compiled content generated in part from execution of said

application.” Ex. 1005, 391 (application claim 1), 394 (application claim 13).

In rejecting application claims 1 and 13 as anticipated by Kembel, the Examiner mapped the “compiled content” to Internet content and mapped the “application” to Kembel’s application media viewer. Ex. 1005, 209–10, 214–15; *see* Ex. 3005 ¶¶ 19–25, 44–45, 56–61 (explaining how the application media viewer interacts with the application media packages to render Internet content on a client computer). The applicants did not dispute the Examiner’s mappings. *See* Ex. 1005, 196–98.

Kembel explains that the application media viewer on a client computer parses and executes web-browser-readable code called application media packages to display content on the client computer. Ex. 3005 ¶ 19; *see id.* ¶¶ 25, 44, 49, 56–61. The application media packages “are programmed to access and display web data including media content.” *Id.* ¶ 20. The application media viewer “effectively takes the place of a browser application when rendering Internet content via” the application media packages. *Id.* ¶ 61.

In rejecting application claims 1 and 13 as anticipated by Kembel, the Examiner reasoned that “the execution of the application media package by the application media viewer causes the application media package to be able to present Internet content (therefore, the Internet content is received/generated from the execution).” Ex. 1005, 210, 215. Thus, for “compiled content generated in part from execution of said application,” the Examiner relied on the application media viewer (the “application”) executing the application media package to cause the application media package to retrieve Internet content (the “compiled content”). *Id.* Contrary to Patent

Owner's contentions, the Examiner did not require the application media viewer (the "application") to generate "from its execution some compiled content" as an output. *Id.*; *see* Resp. 33. The Examiner's implicit claim during prosecution construction conflicts with Patent Owner's contentions.

For the reasons discussed above, we agree with Petitioner that limitations 1d and 9d encompass software that triggers generating the "compiled content" or generates the "compiled content" as "an initiating cause." Reply 12, 14.

4. WHETHER CLAIMS 1 AND 9 REQUIRE THE "APPLICATION" TO
OPERATE "REMOTE" FROM THE "WIRELESS DEVICE"

(a) Patent Owner's Contentions

Patent Owner contends that claims 1 and 9, e.g., limitations 1c and 9c, require the "application" to operate "remote" from the "wireless device" for several reasons. *See* Resp. 18–28; Sur-reply 6–10.

As support in the claim language, Patent Owner cites limitations 1c and 9c that recite "transmitting, to said wireless device, compiled content comprising (i) first compiled content specific to a first page of said application and (ii) second compiled content specific to a second page of said application." Resp. 18; Sur-reply 6; Ex. 1001, 20:48–51 (limitation 1c), 21:29–32 (limitation 9c). Patent Owner asserts that limitations 1c and 9c "require the application content pages initially be remote, because, if the application content pages were already on the wireless device, it would make no sense to 'transmit' them to where the pages were already located." Resp. 18 (citing Ex. 2022 ¶ 98); *see* Sur-reply 7 (citing Ex. 2022 ¶ 98).

As additional support in the claim language, Patent Owner cites limitations 1d and 9d that recite "wherein said compiled content is generated

in part from execution of said application.” Resp. 18; Sur-reply 6; Ex. 1001, 20:52–53 (limitation 1d), 21:33–34 (limitation 9d). Patent Owner asserts that limitations 1d and 9d require an “application” generating “at least in part, the remote pages that are transmitted to” the “wireless device” that “must also be remote.” Resp. 18 (citing Ex. 2022 ¶¶ 99–100).

Further, Patent Owner asserts that claim differentiation does not undermine its position that claims 1 and 9 require the “application” to operate “remote” from the “wireless device.” *See* Resp. 21–23; Sur-reply 9. In particular, Patent Owner acknowledges that claim 3 (depending directly from claim 1) and claim 11 (depending directly from claim 9) recite “wherein said compiled content is partially resultant from said application operating on a remote server.” Resp. 19 n.4, 22; Ex. 1001, 20:65–67 (claim 3), 21:47–50 (claim 11).

Patent Owner contends, however, that claims 3 and 11 differ from claims 1 and 9, respectively, because claims 3 and 11 require the “application” to operate on a “remote server,” while claims 1 and 9 require the “application” to operate “remote” from the “wireless device” but not necessarily on a “server.” Resp. 22; *see* Sur-reply 9. According to Patent Owner, “not all remote applications are on a server.” Resp. 23; *see* Sur-reply 9. Patent Owner also contends that “construing claims 1 and 9 to require a ‘remote’ application would not render the ‘server’ language of claims 3 and 11 superfluous.” Resp. 22.

Patent Owner next contends that “because the ‘presumption of differentiation in claim scope is not a hard and fast rule,’ ‘any presumption created by the doctrine of claim differentiation will be overcome by a

contrary construction dictated by the written description.” Resp. 22–23 (emphasis omitted) (quoting *Littelfuse*, 29 F.4th at 1380).

Patent Owner also contends that the ’715 patent’s specification supports its position that claims 1 and 9 require the “application” to operate “remote” from the “wireless device” because “the specification pervasively advocates only one invention where the application is remotely running on a server.” Resp. 19 (citing Ex. 2022 ¶ 104); *see* Sur-reply 7. As support, Patent Owner cites various portions of the specification. *See* Resp. 19–20 (citing Ex. 1001, 2:3–14, 2:38–41, 5:56–62, 6:34–42, 20:21–25). According to Patent Owner, the specification “*exclusively* notes the embodied ‘application is executed on the server.’” *Id.* at 20–21 (emphasis by Patent Owner) (quoting Ex. 1001, 3:8–9) (citing Ex. 1001, 5:54–56, 6:6–7, 6:29–31, 6:38–39, 13:11–13, 16:44–45, 18:56–58, 19:38–39, Figs. 1B, 2A–2B, 5–7).

Further, Patent Owner asserts that the ’715 patent’s specification “sets forth the problems that arise when ‘a wireless device runs the application locally’” and disparages the “application” operating locally on the “wireless device.” Resp. 20 (quoting Ex. 1001, 2:3–4); Sur-reply 8. According to Patent Owner, the specification “teaches a solution that only comes about ‘since applications and basic commands for rendering applications are performed and generated on the server.’” Resp. 20 (emphasis omitted) (quoting Ex. 1001, 4:21–23).

Additionally, Patent Owner contends that “a construction that encompasses an application executed on the wireless device would be invalid for lack of written description support.” Resp. 21 (citing Ex. 2022 ¶¶ 104–105); *see* Sur-reply 8–9. Patent Owner also contends that “claims

are not properly construed to have a meaning or scope that would lead to their invalidity for failure to satisfy the requirements of patentability.”

Resp. 21 (quoting *Wang Lab ’ys, Inc. v. Am. Online, Inc.*, 197 F.3d 1377, 1383 (Fed. Cir. 1999)).

Patent Owner argues that (1) Petitioner has “materially changed” its claim-construction position based on statements made during an October 2023 trial in the California case and (2) Petitioner’s “new” position is inconsistent with the position in the Petition that “the ‘application’ is not limited to one residing only on a client or only on a server.” *See* Pet. 36 n.10; Resp. 23–27 (citing Ex. 2019, 209:12–14, 216:8–10, 222:10–12, 225:11–12, 228:6–9, 229:4–6, 243:4–24; Ex. 2020, 39:7–13, 42:12–13, 46:10–17; Ex. 2021, 6:2–3). According to Patent Owner, Petitioner “explicitly differentiated the claimed application from anything that could be called an application on the wireless device” during the trial. Resp. 24–25 (quoting Ex. 2019, 243:4–24). Patent Owner argues that Petitioner “unreservedly adopted this position as its own” during the trial and “simply noted that Patent Owner’s position was the same.” *Id.* at 25 (citing Ex. 2022 ¶¶ 106–107).

Also, Patent Owner asserts that Dr. Bederson admitted that the ’715 patent concerns “remotely running applications” because he referenced “remote server applications” when discussing the level of ordinary skill in the art. Resp. 27 (emphasis omitted) (quoting Ex. 1002 ¶ 38).

(b) Petitioner’s Contentions

Petitioner contends that Patent Owner’s position that claims 1 and 9 require the “application” to operate “remote” from the “wireless device” does not construe the term “application” but instead “adds a material

limitation” to the term. Reply 5. Petitioner also contends that claims 1 and 9 “are purposefully broad and do not claim a remote application in order to capture all possible locations of the application.” *Id.* at 9 (citing Ex. 1001, 20:28–35). According to Petitioner, “the scope of ‘application’ is clear from the words of the claims and the specification, and the term should not be improperly or unnecessarily limited to ‘remote application.’” *Id.* at 11.

Regarding limitations 1c and 9c that recite “transmitting, to said wireless device, compiled content,” Petitioner asserts that these limitations “do not require that an application transmit compiled content to” the “wireless device.” Reply 6. Petitioner asserts that these limitations require only that “compiled content be transmitted” to the “wireless device” from “some source,” not necessarily the “application.” *Id.* at 6–7. Petitioner does not offer an example of another “source.” *Id.* Petitioner also asserts that “[t]here is no claim language that requires the application to transmit the compiled content.” *Id.* at 6.

Further, Petitioner asserts that “even if a particular embodiment in the patent discloses a remote application transmitting the compiled content to a mobile device, it would be improper to import that embodiment into the claim.” Reply 6–7 (citing *SuperGuide Corp. v. DirecTV Enters., Inc.*, 358 F.3d 870, 875 (Fed. Cir. 2004)).

Citing claim 3 (depending directly from claim 1) and claim 11 (depending directly from claim 9), Petitioner asserts that “claim differentiation further supports Petitioner’s position.” Reply 7; *see* Pet. 36 n.10. In particular, Petitioner argues that claims 3 and 11 “first introduce the limitation that the application resides on a remote server” and invoke “the presumption that the application is not required to be remote from” the

“wireless device” in claims 1 and 9. Reply 7. Petitioner notes that claims 1 and 9 do not include either the term “remote” or the term “server.” *Id.*

Additionally, Petitioner disputes that it has “materially changed” its claim-construction position based on statements made during the October 2023 trial in the California case and has taken inconsistent positions before the Board and the district court. *See* Reply 9–10; Tr. 47:4–49:5. Petitioner explains that during the trial it “was characterizing and addressing [Patent Owner’s] asserted infringement theory.” Reply 9; *see* Tr. 47:4–49:5. Petitioner also explains that its “statements during trial that the ‘application lives on the server’ were made in the context of the infringement positions argued by” Patent Owner during the trial, i.e., “the accused application is on a remote server.” Reply 9–10 (citing Ex. 1026, 28:8–17, 70:16–20); *see* Tr. 47:4–49:5. According to Petitioner, its statements during trial “related to explanations of why Petitioner could not infringe under [Patent Owner’s] theories, not any assertions as to the scope of the claim in all contexts.” Reply 10.

As for Dr. Bederson’s testimony, Petitioner asserts that he “expressly explained in his deposition that the application does not necessarily have to be remote and can reside on the mobile device.” Reply 11 (citing Ex. 2031, 60:7–17).

(c) Analysis

Based on the intrinsic evidence, we disagree with Patent Owner that claims 1 and 9 require the “application” to operate “remote” from the “wireless device.” *See* Resp. 18–28; Sur-reply 6–10. As for the claim language, neither claim 1 nor claim 9 includes the term “remote.” *See* Ex. 1001, 20:40–62 (claim 1), 21:19–43 (claim 9).

Moreover, “[o]ther claims of the patent in question . . . can also be valuable sources of enlightenment as to the meaning of a claim term.” *Phillips*, 415 F.3d at 1314. And “[d]ifferences among claims can also be a useful guide in understanding the meaning of particular claim terms.” *Id.*

Regarding limitations 1c and 9c that recite “transmitting, to said wireless device, compiled content,” these limitations do not specify the entity that transmits the “compiled content” to the “wireless device.” *See* Ex. 1001, 20:48–51, 21:29–32. In contrast to limitations 1c and 9c, limitation 17c specifies that the “layout solver” transmits the “compiled content” to the “wireless device.” *Id.* at 22:27–31.

Hence, the patentee during prosecution could have specified in limitations 1c and 9c the entity that transmits the “compiled content” to the “wireless device,” e.g., the “application,” but did not do so. This indicates that the patentee intended claims 1 and 9 to have a broader scope than Patent Owner now advocates.

Regarding limitations 1d and 9d that recite “wherein said compiled content is generated in part from execution of said application,” the claim language does not require the “application” to operate “remote” from the “wireless device.” *See* Ex. 1001, 20:52–53, 21:33–34. These limitations do not require “transmitting.” *See id.* Rather, for the reasons discussed above, limitations 1d and 9d encompass software, e.g., software on the “wireless device,” that triggers generating the “compiled content” or generates the “compiled content” as “an initiating cause.” *See supra* § III.C.3(c).

Additionally, “the presence of a dependent claim that adds a particular limitation raises a presumption that the limitation in question is not found in the independent claim.” *Liebel-Flarsheim*, 358 F.3d at 910. “This

presumption is especially strong where the limitation in dispute is the only meaningful difference between an independent and dependent claim.” *Hill-Rom Servs., Inc. v. Stryker Corp.*, 755 F.3d 1367, 1374 (Fed. Cir. 2014).

Here, claim 3 (depending directly from claim 1) and claim 11 (depending directly from claim 9) require that “said compiled content is partially resultant from said application operating on a remote server.” Ex. 1001, 20:65–67 (claim 3), 21:47–50 (claim 11). The requirement in claims 3 and 11 for a “remote” application is the only meaningful difference between these dependent claims and the respective independent claims.

Although Patent Owner asserts that “not all remote applications are on a server,” Patent Owner does not explain where a “remote” application could reside if not on a server. *See* Resp. 21–23. Mr. Lipoff explains that a broadcasting system “is transmitting content remotely that is not a server.” Ex. 2022 ¶ 102. But the ’715 patent does not concern a broadcasting system. *See, e.g.*, Ex. 1001, 2:16–22:52. Also, as discussed above in this section, limitations 1c and 9c do not specify the entity that transmits the “compiled content” to the “wireless device.” *See* Ex. 1001, 20:48–51, 21:29–32.

Mr. Lipoff states that a broadcasting system may send “stock ticker” information and that the ’715 patent discloses a wireless device receiving “stock ticker” information. Ex. 2022 ¶ 103 (citing Ex. 1001, 7:46–50). But the ’715 patent discloses a wireless device receiving “stock ticker” information from a server, not from a broadcasting system. Ex. 1001, 7:46–50; *see id.* at 18:21–24. Specifically, the patent states, “The engine/reader 114 may also receive updates from the requested application based on

changes of the server state,” such as “an update for the ticker periodically.” *Id.* at 7:46–50.

Preferably, a claim construction should not render claim language “void, meaningless, or superfluous.” *Wasica Fin. GmbH v. Cont’l Auto. Sys., Inc.*, 853 F.3d 1272, 1288 n.10 (Fed. Cir. 2017); *see Ortho-McNeil Pharm., Inc. v. Mylan Lab’ys, Inc.*, 520 F.3d 1358, 1362 (Fed. Cir. 2008). Construing claims 1 and 9 to require the “application” to operate “remote” from the “wireless device” would render claims 3 and 11 essentially meaningless.

As for the ’715 patent’s specification, it indicates that the disclosed embodiments should not limit the claim scope for the reasons discussed above. Ex. 1001, 20:33–37; *see id.* at 4:55–63; *supra* § III.C.3(c). Moreover, Patent Owner does not identify “words or expressions of manifest exclusion or restriction” in the ’715 patent’s specification that would limit the “application” to operate “remote” from the “wireless device.” *See* Resp. 19–21; Sur-reply 7–9.

Further, we disagree with Patent Owner that the ’715 patent’s specification disparages the “application” operating locally on the “wireless device.” *See* Resp. 20; Sur-reply 8; Ex. 1001, 1:11–4:25. To the contrary, the patent states that “embodiments of the present invention relate to a method and system for rendering applications on a wireless device.” Ex. 1001, 1:14–16.

The ’715 patent describes problems with rendering conventional applications on wireless devices. *See* Ex. 1001, 1:20–2:14, 5:47–50. Specifically, an “increase in the number of wireless devices has also increased the demand for various applications to run on various wireless

devices.” *Id.* at 1:25–27; *see id.* at 5:47–48. Because “each wireless device is unique,” however, “each application must be tailored in accordance with the wireless device attributes to fully utilize the capabilities of the wireless device.” *Id.* at 1:37–40; *see id.* at 5:48–50.

Tailoring “each application to a given wireless device type has increased the cost of developing applications.” Ex. 1001, 1:45–47. And “the increase in cost of developing applications due to the need to tailor each application to all the specific brands and models of wireless devices has hindered and limited the number of titles that a software vendor can produce annually.” *Id.* at 1:58–62.

Also, “the task of producing all the required versions of a title is not only time consuming and laborious but it also tends to limit upgrades and patches to existing titles.” Ex. 1001, 2:1–3. If “a wireless device runs the application locally and renders the result,” updating applications “requires a patch/update to be specially developed for and provided to each wireless device individually.” *Id.* at 2:3–7.

The ’715 patent identifies the following needs:

- (1) “to provide generic applications regardless of the wireless device type, thereby relieving software vendors from having to tailor their applications for each given wireless device type”;
- (2) “to provide an output that is device specific based on the wireless device attributes where the output is generated from a generic application”; and
- (3) “to update and patch various applications without” accessing “each wireless device individually.”

Ex. 1001, 2:18–28.

Embodiments of the invention address one or more of the identified needs because a server “tailors the output of a generic application based on the wireless device capability.” Ex. 1001, 2:33–36, 5:50–54; *see id.* at 4:17–21, 6:34–37, 20:10–21. For instance, a server may tailor the output of a generic application by sending a wireless device basic commands for rendering application content “written in a device independent syntax but tailored based on the wireless device capability.” *Id.* at 2:44–47, 3:57–58, 3:66–67, 7:42–45, 10:65–11:1, 15:66–16:2.

The ’715 patent does not preclude a generic application from operating locally on a wireless device as a solution to a problem in the prior art. *See, e.g.*, Ex. 1001, 2:18–4:25, 5:47–60. To the contrary, the patent explains that the “wireless device has software stored therein to implement the embodiments of the present invention.” *Id.* at 2:60–62. For example, the patent discloses an embodiment where the wireless device includes a “binary runtime for wireless device (BREW)” software platform to permit “portability of applications,” such as applications for “playing games, sending messages, sharing photos and the like.” *Id.* at 6:45–52, 6:63–66, 7:3–7, Fig. 1B.

The ’715 patent does not disparage the “application” operating locally on the “wireless device” by either:

- (1) explaining that if “a wireless device runs the application locally and renders the result,” updating applications “requires a patch/update to be specially developed for and provided to each wireless device individually”; or
- (2) identifying a need “to update and patch various applications without” accessing “each wireless device individually.”

See Ex. 1001, 2:3–7, 2:26–28. Further, even if the “application” operating locally on the “wireless device” does not address the need “to update and patch various applications without” accessing “each wireless device individually,” there is no requirement to construe each of the claims as “limited to structures that are capable of achieving all of the objectives.” *See Liebel-Flarsheim*, 358 F.3d at 908–09. Patentees are “not required to include within each of their claims all of [the] advantages or features described as significant or important in the written description.” *Golight, Inc. v. Wal-Mart Stores, Inc.*, 355 F.3d 1327, 1331 (Fed. Cir. 2004).

The ’715 patent’s prosecution history does not support Patent Owner’s position that claims 1 and 9 require the “application” to operate “remote” from the “wireless device.” *See* Resp. 18–28. During prosecution of the parent for the application that issued as the ’715 patent, the Examiner rejected independent application claims 1 and 13 as anticipated by Kembel. Ex. 1005, 209–10, 214–15; *see* Ex. 3005 (Kembel).

For application claims 1 and 13 with language similar to claims 1 and 9, the Examiner mapped the “wireless device” to Kembel’s client computer and mapped the “application” to Kembel’s application media viewer. Ex. 1005, 209–10, 214–15; *see id.* at 391 (application claim 1), 394 (application claim 13); Ex. 3005 ¶¶ 19–25, 44–45, 56–61 (explaining how the application media viewer interacts with the application media packages to render Internet content on a client computer). The applicants did not dispute the Examiner’s mappings. *See* Ex. 1005, 196–98.

Kembel describes the application media viewer as “an installed client application” for rendering Internet content on “a client computer” by parsing and executing the application media packages. Ex. 3005 ¶¶ 19, 25, 44, 61.

Kembel's Figure 1 depicts application media viewer 119 residing on client computer 20, not on server 50 or server 82, and application media packages 104-1 to 104-n also residing on client computer 20. *Id.* ¶¶ 45, 49, Fig. 1.

Thus, in rejecting application claims 1 and 13, the Examiner considered the application media viewer (the “application”) residing on the client computer (the “wireless device”) as covered by the claims. *See* Ex. 1005, 209–10, 214–15. The Examiner's implicit claim construction during prosecution conflicts with Patent Owner's contentions.

As for Patent Owner's contention that “a construction that encompasses an application executed on the wireless device would be invalid for lack of written description support,” “validity construction should be used as a last resort, not a first principle.” *See MBO Lab 'ys, Inc. v. Becton, Dickinson & Co.*, 474 F.3d 1323, 1332 (Fed. Cir. 2007); Resp. 21. A claim is construed to preserve validity only if, “after applying all the available tools of claim construction,” the claim is “still ambiguous.” *Liebel-Flarsheim*, 358 F.3d at 911.

Here, claims 1 and 9 are not “still ambiguous” after considering the intrinsic evidence discussed above. Also, as discussed above, the '715 patent explains that the “wireless device has software stored therein to implement the embodiments of the present invention.” Ex. 1001, 2:60–62; *see id.* at 6:45–52, 6:63–66, 7:3–7, Fig. 1B.

As for Patent Owner's argument that Petitioner has “materially changed” its claim-construction position based on statements made during the October 2023 trial in the California case and has taken inconsistent positions before the Board and the district court, the evidence here does not

persuade us to agree with Patent Owner. *See* Ex. 1026; Ex. 2019; Ex. 2020; Ex. 2021.

In November 2023, Patent Owner requested rehearing of the Institution Decision due to an alleged change in Petitioner’s claim-construction position based on statements made during the October 2023 trial in the California case. *See* Paper 13. As support for the alleged position change, Patent Owner cited the same transcript and brief pages that Patent Owner cites in the Response. *Compare* Resp. 23–25 (citing Ex. 2019, 209:12–14, 216:8–10, 222:10–12, 225:11–12, 228:6–9, 229:4–6, 243:4–24; Ex. 2020, 39:7–13, 42:12–13, 46:10–17; Ex. 2021, 6:2–3), *with* Paper 13, 4–6 (citing Ex. 2019, 209:12–14, 216:8–10, 222:10–12, 225:11–12, 228:6–9, 229:4–6, 243:4–24; Ex. 2020, 39:7–13, 42:12–13, 46:10–17; Ex. 2021, 6:2–3).

In December 2023, we denied Patent Owner’s rehearing request. *See* Paper 18. In doing so, we noted that “it is unclear from” the evidence that Patent Owner submitted “whether Petitioner advocated a claim construction or whether Petitioner attempted to identify flaws in Patent Owner’s infringement position based on a claim construction originating from Patent Owner.” *Id.* at 7–8 (citing Ex. 2019; Ex. 2020; Ex. 2021).

In the Response, Patent Owner did not attempt to clarify the record by citing or submitting additional evidence from the California case. *See* Resp. 23–27. In the Reply, Petitioner explained that its “statements during trial that the ‘application lives on the server’ were made in the context of the infringement positions argued by” Patent Owner during the trial, i.e., “the accused application is on a remote server.” Reply 9–10 (citing Ex. 1026,

28:8–17, 70:16–20). In the Sur-reply, Patent Owner did not address Petitioner’s explanation. *See* Sur-reply 6–10.

In light of Petitioner’s explanation and the evidence from the California case submitted by the parties, we do not find (1) that Petitioner has “materially changed” its claim-construction position based on statements made during the October 2023 trial in the California case or (2) that Petitioner has taken inconsistent positions before the Board and the district court. *See* Resp. 23–27; Reply 9–10; Ex. 1026; Ex. 2019; Ex. 2020; Ex. 2021; Tr. 47:4–49:5.

As for Dr. Bederson’s testimony about the level of ordinary skill in the art that Patent Owner cites, his explanation that an ordinarily skilled artisan would have had “at least two to three years of work experience with remote page display rendering and/or remote server applications” does not imply a limit on the scope of claims 1 and 9 because other claims recite a “remote server.” *See* Ex. 1001, 20:65–67 (claim 3), 21:47–50 (claim 11); Ex. 1002 ¶ 38; Resp. 27 (citing Ex. 1002 ¶ 38).

For the reasons discussed above, we disagree with Patent Owner that claims 1 and 9 require the “application” to operate “remote” from the “wireless device.” *See* Resp. 18–28; Sur-reply 6–10.

5. CLAIM 17’S “LAYOUT SOLVER”

Patent Owner asserts that § 112’s means-plus-function provision does not apply to claim 17’s “layout solver.” Resp. 33. Patent Owner asserts that an ordinarily skilled artisan would have understood that “the claim term is used in the pertinent field to designate the class of structures,” i.e., “specific software/hardware.” *Id.* at 33–34 (citing Ex. 2022 ¶¶ 28–31, 125). Additionally, Patent Owner notes that the “absence of the word ‘means’

creates a presumption that the term is not a means-plus-function limitation.” *Id.* at 34 (citing *Williamson v. Citrix Online, LLC*, 770 F.3d 1371, 1378 (Fed. Cir. 2014) (en banc)).

Petitioner asserts that § 112’s means-plus-function provision applies to claim 17’s “layout solver.” Pet. 69 n.15. But Petitioner makes no attempt to rebut the presumption resulting from the absence of the word “means” that claim 17’s “layout solver” is not a means-plus-function limitation. *Id.*

We need not decide whether § 112’s means-plus-function provision applies to claim 17’s “layout solver.” As explained in the patentability analysis below, whether Petitioner satisfies the “preponderance of the evidence” standard for proving claim 17’s unpatentability does not depend on claim 17’s “layout solver.” *See infra* § III.D.6(c).

6. SUMMARY

“[O]nly those terms need be construed that are in controversy, and only to the extent necessary to resolve the controversy.” *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999); *see Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017). Above, we discussed the scope of certain claim language. *See supra* §§ III.C.2(c), III.C.3(c), III.C.4(c). We determine that no other claim language requires a discussion of scope or an explicit construction to decide whether Petitioner satisfies the “preponderance of the evidence” standard for proving unpatentability.

D. Alleged Obviousness over Hariki and Harris: Claims 1–20

Petitioner contends that claims 1–20 are unpatentable under § 103(a) as obvious over Hariki and Harris. *See* Pet. 2, 25–73; Reply 14–26. Patent

Owner disputes Petitioner’s contentions. *See* Resp. 1–2, 35–60; Sur-reply 1, 11–22.

Below, we provide overviews of Hariki and Harris. Then, we consider the obviousness issues. For the reasons explained below, we agree with Petitioner that claims 1, 2, 4–10, and 12–16 are unpatentable under § 103(a) as obvious over Hariki and Harris but disagree that claims 3, 11, and 17–20 are unpatentable based on these references.

1. OVERVIEW OF HARIKI (EXHIBIT 1006)

Hariki is a U.S. patent application publication titled “Resource Application Program Interface Utility for Changing User Interface Elements on Wireless Devices,” filed on July 25, 2006, and published on June 28, 2007. Ex. 1006, codes (12), (22), (43), (54). Hariki states that the invention concerns “a user interface generation system for mobile communication devices.” *Id.* ¶ 3; *see id.* ¶¶ 18–19, code (57).

Hariki explains that “certain mobile phone service and equipment providers provide user interface (UI) customization capabilities that allow users to personalize their phones or mobile devices with custom ringtones, background displays (wallpaper), menu configurations, and the like,” thus enhancing “the marketability of a device.” Ex. 1006 ¶ 5. A “customized user interface is referred to as a ‘UI skin.’” *Id.* ¶ 24; *see id.* ¶ 5. “In general, UI skins allow a user to customize the ‘look and feel’ or application program environment of a device by altering display and/or sound output aspects of the device, such as backgrounds, title bars, buttons, alert sounds, and so on.” *Id.* ¶ 24.

Hariki identifies deficiencies in conventional UI customization schemes. Ex. 1006 ¶¶ 6–7. Among other things, the “customization features

of present devices typically do not allow the user to customize features related to the execution of downloadable application programs or utilities, or provide comprehensive customization over all of the functions that may be integrated in the device.” *Id.* ¶ 6. Hariki identifies a need for “a mobile device configuration system that allows modification of mobile device user interfaces or application programs without modification of the application programs themselves.” *Id.* ¶ 9.

To address deficiencies in conventional UI customization schemes, Hariki discloses (1) a user interface authoring tool executed by a content-providing server and (2) a resource application programming interface (API) on a mobile device. Ex. 1006 ¶¶ 18–19, code (57). The resource API downloads from a content-providing server a UI content package that may customize “files, links to files, and/or data or program objects associated with the configurable aspect of the user interface for each mobile device.” *Id.* ¶ 19, code (57).

Hariki's Figure 1 (reproduced below) depicts a communications network system implementing a user interface authoring tool:

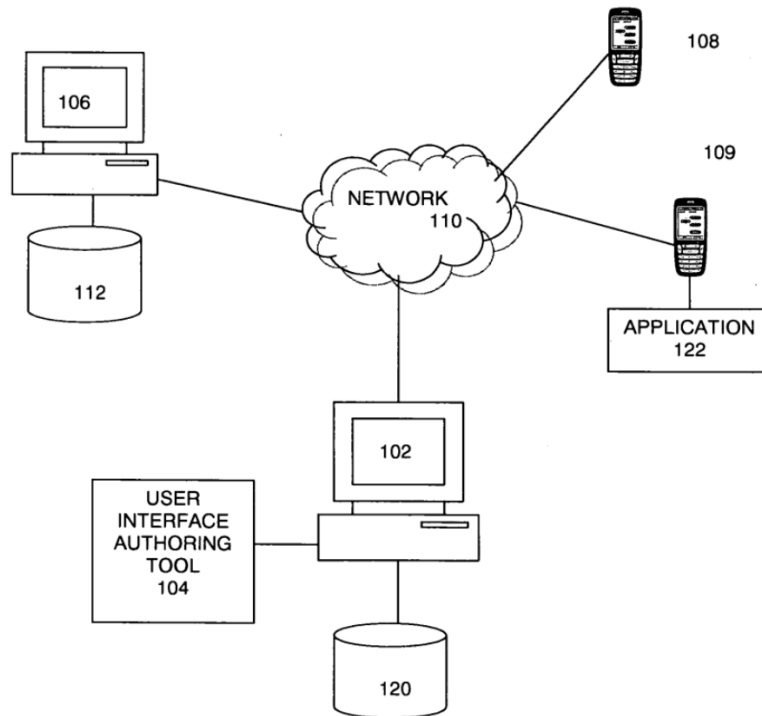


FIGURE 1

Figure 1 “illustrates a communications network system 100” including the following components:

- (1) content-providing server 102 that “provides content data, application programs, diagnostic tools, program components, or any other content or executable objects” to mobile devices;
- (2) user interface authoring tool 104 executed by server 102;
- (3) server 106 that may provide content or function as a workstation;
- (4) mobile devices 108 and 109, e.g., cellular phones “made by different manufacturers” or “any type of devices that have different user interface elements from one another”;

- (5) network 110, e.g., “a comprehensive telecommunications network that includes both a cellular phone network and the Internet”;
- (6) data store 112 for server 106, e.g., for storing “resource profiles and other associated data files”;
- (7) data store 120 for server 102, e.g., for storing “resource profiles and resource files for the different mobile devices”; and
- (8) application program 122 that may “utilize[] the resources provided by the content provider” and may be (i) an object “displayed on the screen of the mobile device” or “played through a playback circuit (sound or video) of the mobile device,” (ii) “an executable module (applet) executed by the mobile device,” or (iii) “any program that can playback or perceive the image, video, sound files, etc. of the resources provided by” a UI content package.

Ex. 1006 ¶¶ 11, 20–22, 24–27, 31, 38, 40, 45–46, Fig. 1.

Server 102 “can be a World-Wide Web (WWW) server that stores data in the form of web pages and transmits these pages as Hypertext Markup Language (HTML) files over the Internet 110.” Ex. 1006 ¶ 21. For instance, server 102 may execute “a web server process to serve web pages over network 110.” *Id.* Additionally, mobile devices 108 and 109 may run “a web browser program to access the web pages served by” server 102, server 106, or “any other available content provider or supplemental server.” *Id.*

Server 102 may provide a customized user interface or UI skin “developed by third party vendors, device manufacturers, application writers, and so on.” Ex. 1006 ¶ 24; *see id.* ¶¶ 26, 28. For instance, “UI content objects are generated and made available for download through”

user interface authoring tool 104 executed by server 102. *Id.* ¶ 27. User interface authoring tool 104 “can represent a program or suite of programs, or even hardware circuits, or any combination thereof embodying instructions executed by one or more processing units in server 102.” *Id.*

Hariki’s Figure 2 (reproduced below) depicts a user interface authoring tool:

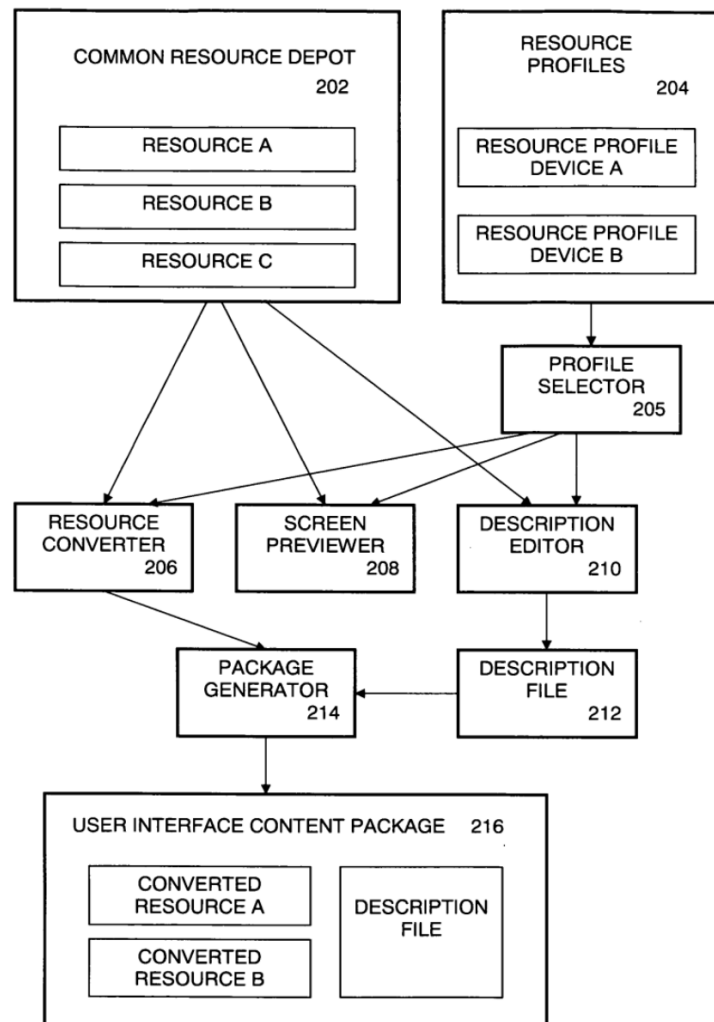


FIGURE 2

Figure 2 illustrates a user interface authoring tool including common resource depot 202, resource profiles 204, profile selector 205, resource converter 206, screen previewer 208, description editor 210, description

file 212, package generator 214, and UI content package 216. Ex. 1006 ¶¶ 12, 28–33, Fig. 2.

Common resource depot 202 contains resources comprising “files, links to files, and/or data or program objects associated with the configurable aspect of the user interface for each mobile device,” such as “image files, sound files, screen layouts, icons, movies, and so on.” Ex. 1006 ¶ 31; *see id.* ¶ 19, code (57). Each resource “(also referred to as a ‘resource file’) in resource depot 202 represents a file, location, directory, link, document, or similar object.” *Id.* ¶ 31.

Resource profiles 204 comprise “user interface specifications for each mobile device” that “generally describe all relevant aspects of a UI element with regard to the device and any application programs that may be used on the device.” Ex. 1006 ¶ 30; *see id.* ¶ 35. As shown in Figure 2, “a resource profile is provided for device A,” e.g., corresponding to Figure 1’s mobile device 108, and “a resource profile is provided for device B,” e.g., corresponding to Figure 1’s mobile device 109. *Id.* ¶ 30. Among other things, a resource profile may “specify the type, format, size, placement, and various other parameters for each user interface element for the device.” *Id.* ¶ 35; *see id.* ¶ 19, code (57).

Profile selector 205 “selects a resource profile 204 depending upon the device model.” Ex. 1006 ¶ 32. The “corresponding resource 202 for that model is then converted by resource converter 206” into “a format that corresponds to the appropriate resource profile 204.” *Id.* ¶¶ 32, 35; *see id.* ¶ 36, Fig. 4. For instance, resource converter 206 performs “various different types of conversion operations, such as converting file formats (e.g., PNG [portable network graphics] to JPEG [joint photographic experts

group]], changing color formats (e.g., monochrome to 8-bit color), and so on.” *Id.* ¶ 32; *see id.* ¶ 36. Thus, “if the resource is an image, it is converted to the appropriate size and file format,” e.g., PNG to JPEG, that corresponds to the appropriate resource profile 204. *Id.* ¶ 35.

Screen previewer 208 “provides a utility to preview the user interface for the device based on the resource files.” Ex. 1006 ¶ 32. Description editor 210 produces description file 212 “based on the selected resource profile 204 and resource file 202.” *Id.* ¶ 33; *see id.* ¶ 36, Fig. 4. “In general, a description file describes the information of the resource files contained in” a UI content package and includes references to the converted resources, e.g., by specifying a resource ID, a file path (location), and a file type. *Id.* ¶¶ 46, 48; *see id.* ¶¶ 33, 48–50, Fig. 6.

Hariki discloses an example description file that includes references to three converted resources, i.e., Resource A, Resource B, and Resource C, as follows:

```
<item id=“ID_1” path=“Resource A” type=“Flash”/>  
<item id=“ID_2” path=“Resource B” type=“PNG”/>  
<item id=“ID_3” path=“Resource C” type=“JPEG”/>
```

Ex. 1006 ¶ 48, Fig. 6.

A description file may include references to (1) “resources contained within the same UI content package” or (2) “resources in other content packages that are either in pre-installed” on a mobile device or available “on an external server computer.” Ex. 1006 ¶ 46; *see id.* ¶ 50.

Package generator 214 creates UI content package 216 by processing (1) the description file from description editor 210 and (2) “the converted resource output from resource converter 206.” Ex. 1006 ¶ 33; *see id.* ¶ 36, Fig. 4. UI content package 216 “comprises the appropriate converted

resources and the description file,” i.e., “the UI skin for the target mobile device” and “images or data for the various UI elements, such as image files, movie files, and/or sound files.” *Id.* ¶ 33.

A UI content package “contains information specific to the type of device, manufacturer of the device, operating system, application programs, and other relevant information regarding the mobile device.” Ex. 1006 ¶ 28. A content-providing server may provide a UI content package, or “it may be UI content produced and provided by an alternate method.” *Id.* ¶ 40; *see id.* ¶ 45.

Hariki's Figure 5 (reproduced below) depicts a mobile device with a resource application programming interface (API) for downloading resources for a UI content package:

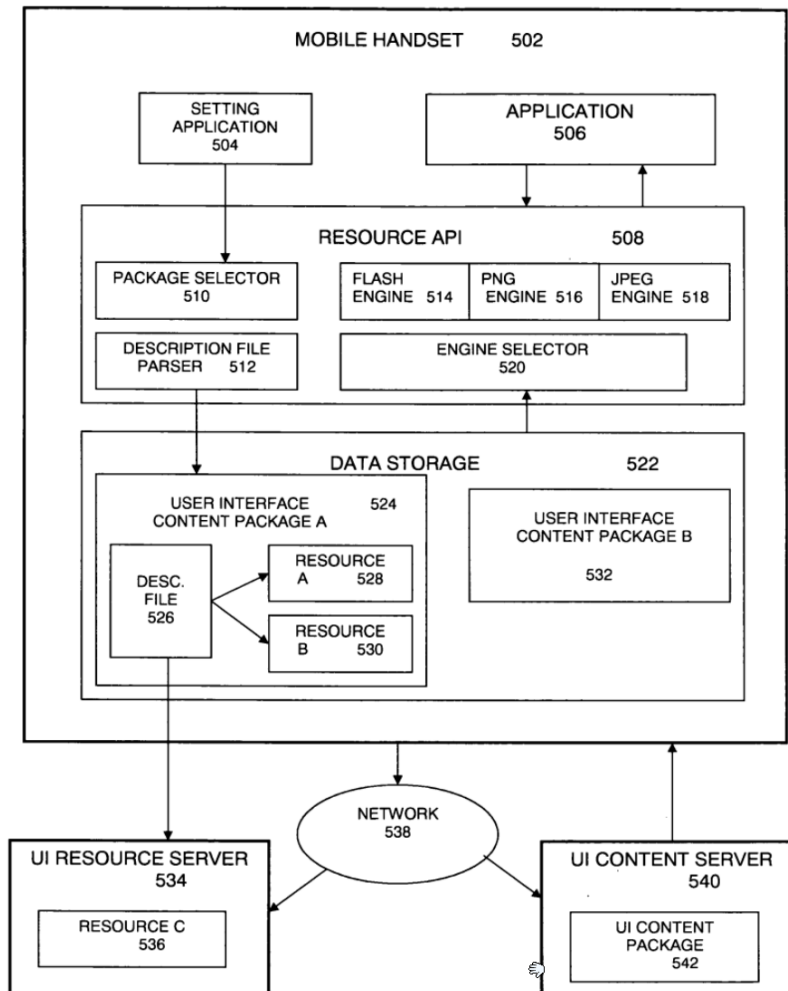


FIGURE 5

Figure 5 illustrates mobile handset 502 executing application program 506, e.g., “a software program or utility that alters the appearance or functionality of the mobile device” or “a program that, when executed, provides a service to the user.” Ex. 1006 ¶¶ 15, 41, Fig. 5.

As Figure 5 shows, mobile handset 502 includes setting application 504, resource API 508 “functionally coupled” to application

program 506, and data storage 522. Ex. 1006 ¶¶ 43–45, Fig. 5. Data storage 522 contains two UI content packages, i.e., UI content package A 524 and UI content package B 532. *Id.* ¶ 45, Fig. 5. Each UI content package contains description file 526 and one or more converted resources, e.g., converted resource A 528 and converted resource B 530. *Id.* ¶¶ 45–46, Fig. 5.

As Figure 5 also shows, resource API 508 includes “a number of functional components such as package selector 510, description file parser 512, an engine selector 520, and one or more engines, such as Flash engine 514, PNG (portable network graphics) engine 516, JPEG (joint photographic experts group) engine 518, and any other similar engines.” Ex. 1006 ¶ 43, Fig. 5. The engines in resource API 508 process the converted resources in a UI content package using an appropriate format “depending upon the type of data or program elements in the resource.” *Id.* ¶ 43.

A user of mobile handset 502 may select a UI content package for downloading to mobile handset 502. Ex. 1006 ¶ 44. After a user selects a UI content package for downloading, setting application 504 sets or changes “the UI content package data for the application program,” i.e., “the UI package file path.” *Id.* ¶¶ 44, 50, Fig. 7 (step 701). Application program 506 “requests a resource by specifying the resource ID (e.g., ID_1)” rather than “by file name or directory (storage location) path.” *Id.* ¶¶ 41, 50, Fig. 7. Using the UI package file path from setting application 504 and the resource ID from application program 506, package selector 510 and description file parser 512 “locate the appropriate UI

content package containing the referenced resource.” *Id.* ¶ 50; *see id.* ¶¶ 44, 46.

To customize the user interface for application program 506, resource API 508 “reads the description file for the selected UI content package” and “retrieves each resource referenced by the description file selected for the UI content package” as located by package selector 510 and description file parser 512. Ex. 1006 ¶¶ 47, 50–51, Fig. 7; *see id.* ¶ 19, code (57). After resource API 508 “retrieves each resource referenced by the description file selected for the UI content package,” engine selector 520 in resource API 508 “selects the proper engine” for processing each resource. *Id.* ¶¶ 47, 51; *see id.* ¶ 19, code (57). Then, a selected engine converts the “applicable resource” to “a format or embodiment that is compatible with” application program 506. *Id.* ¶¶ 43, 47. “The application dictates the format of the resource in terms of parameters such as image size, color, position, and so on.” *Id.* ¶ 47. After appropriate formatting, resource API 508 provides “all referenced resources to” application program 506 for display or sound output. *Id.* ¶ 51, Fig. 7; *see id.* ¶ 24.

Hence, application program 506 “can gain access to local or external resources by simply specifying a resource ID, rather than the location of a resource.” Ex. 1006 ¶ 51, Fig. 7. “In this manner, changes can be made to resources through the use of different content packages or implementation in updateable UI resource servers, without requiring any change to the application program 506 itself.” *Id.* ¶ 51; *see id.* ¶ 19, code (57).

2. OVERVIEW OF HARRIS (EXHIBIT 1007)

Harris is a U.S. patent application publication titled “System and Method for Delivering Content to Mobile Devices,” filed on December 18,

2001, and published on January 30, 2003. Ex. 1007, codes (12), (22), (43), (54). Harris states that the invention “relates generally to the delivery of content to mobile devices, and more particularly to the delivery of the same content to multiple mobile devices using different device protocols.” *Id.* ¶ 2; *see id.* ¶ 14, code (57).

Harris describes various “content variables” that “content providers must take into account when delivering content to wireless devices.” Ex. 1007 ¶¶ 3–5. “Content variables include differences in device languages, device display characteristics, device input methods, character encoding methods, and user preferences.” *Id.* ¶ 3.

Harris identifies deficiencies in conventional methods for dealing with content variables when delivering content to wireless devices. Ex. 1007 ¶ 6. Among other things, “[m]aintaining multiple versions of a web site for different wireless devices is costly from both a time, human capital and monetary perspective.” *Id.* Additionally, “HTML content from a standard web site is not readily adaptable for mobile devices,” e.g., because translated HTML content may be “imperfect and difficult to navigate on a requesting mobile device (possibly producing gibberish or unintelligible text).” *Id.*

To address deficiencies in conventional methods for dealing with content variables when delivering content to wireless devices, Harris discloses a Mobile Content Framework (MCF) on a server that “facilitates abstracting content and behavior from the rendering of content on a requesting device.” Ex. 1007 ¶ 7; *see id.* ¶ 14, code (57). The MCF provides “a platform that enables a content developer to distribute uniform content to multiple types of requesting mobile devices” without “providing different versions of the content.” *Id.* at code (57); *see id.* ¶¶ 25, 35.

With the MCF, content is (1) “generated specifically for each device, both from a display standpoint and a content navigation standpoint,” and (2) “tailored to take into account the limited resources of certain devices such as mobile devices.” Ex. 1007 ¶ 7; *see id.* ¶¶ 14–15, code (57). Further, the “interface may be dynamically personalized to the taste of the individual.” *Id.* ¶ 7; *see id.* ¶ 24.

The MCF includes “a generic markup language” called Wireless Abstract XML (WAX). Ex. 1007 ¶ 7; *see id.* ¶¶ 8–9, 14, code (57). “Content is first translated into WAX from the original language of the content provider, or is created in WAX originally, and then converted into a device appropriate language for a requesting mobile device,” such as HTML. *Id.* ¶ 7; *see id.* ¶¶ 14, 18, 24–25, 27, code (57). If content is translated into WAX, “the MCF ensures the best type and length of text is used, the best type and size of image is used, and that the content is well suited and customized for the device attributes.” *Id.* ¶ 7; *see id.* ¶¶ 22, 25.

Harris's Figure 1 (reproduced below) depicts an environment suitable for implementing the MCF:

Figure 1

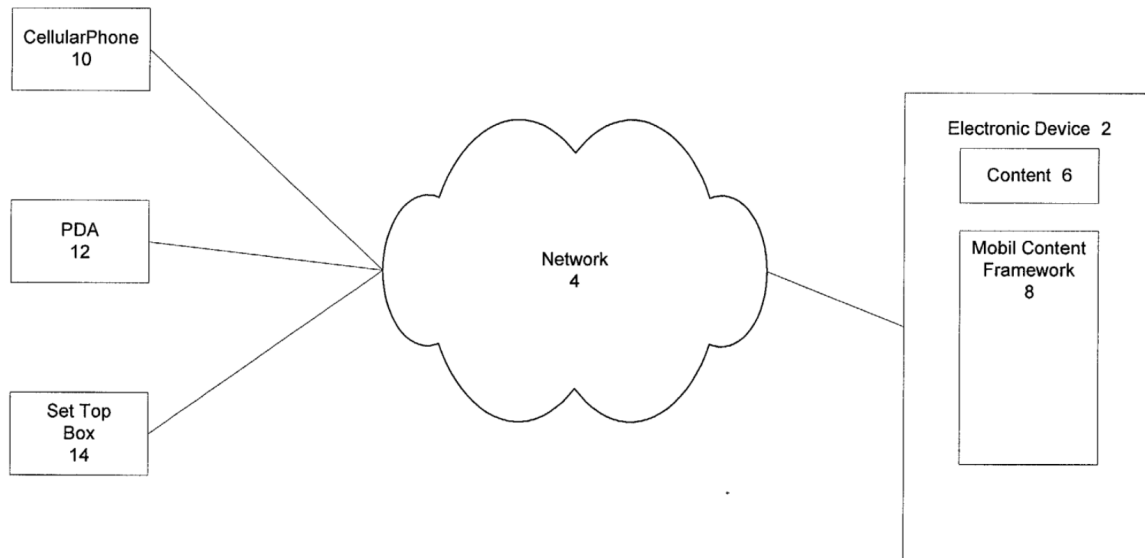


Figure 1 illustrates electronic device 2, e.g., a web server, with “content 6 and the MCF 8” connected through network 4 to “a plurality of mobile devices,” e.g., “a cellular phone 10, a PDA 12 and set-top box 14,” that may request content 6 from electronic device 2. Ex. 1007 ¶ 15, Fig. 1; *see id.* ¶¶ 23–24. Content 6 “may be content in written in WAX, a non-WAX wireless language format, or a non-wireless language format.” *Id.* ¶ 15; *see id.* ¶ 25. For content written in a non-WAX format, the MCF 8 translates the content into WAX. *Id.* ¶ 15.

When delivering content to a requesting device, the MCF 8 translates the content from WAX into “a device-specific language,” such as HTML, “using XML-based technologies.” Ex. 1007 ¶¶ 18–19; *see id.* ¶¶ 8–9, 14, 16, 23–24, 27, code (57). “WAX is designed to overcome the challenges of graphics and user-input on small devices.” *Id.* ¶ 16; *see id.* ¶ 17.

Harris's Figure 2 (reproduced below) depicts a block diagram of components in the MCF 8:

Figure 2

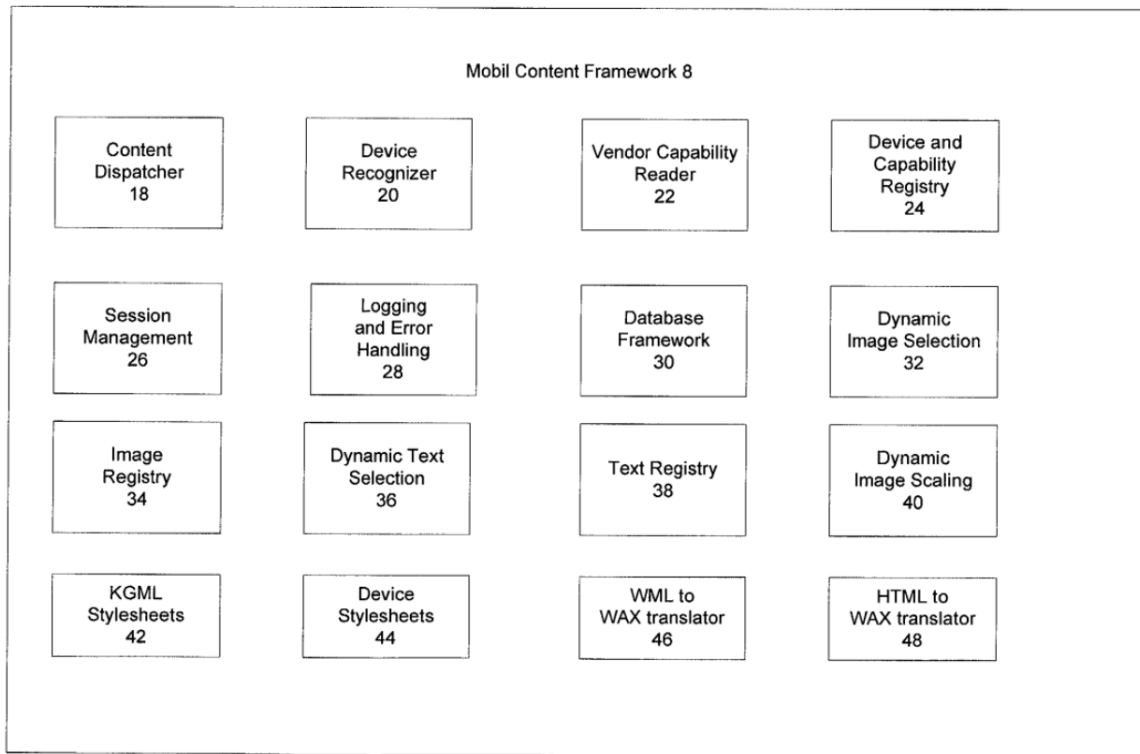


Figure 2 illustrates the MCF 8 including the following components: content dispatcher 18, device recognizer 20, vendor-capability reader 22, device-and-capability registry 24, session-management component 26, logging-and-error-handling component 28, database-framework component 30, dynamic image-selection component 32, image registry 34, dynamic text-selection component 36, text registry 38, dynamic image-scaling component 40, WAX-stylesheets component 42,⁷ device-stylesheets component 44, WML-

⁷ Although Figure 2 includes the identifier “KGML” for WAX-stylesheets component 42, Harris explains that “WAX is referred to as KGML” in a related provisional application. Ex. 1007 ¶ 7.

to-WAX translator 46,⁸ and HTML-to-WAX translator 48. Ex. 1007 ¶¶ 20–22, Fig. 2.

Device-and-capability registry 24 includes the following:

- (1) the specific features and capabilities of each mobile device, e.g., “screen size, browser version, etc.”;
- (2) “a set of rules used to determine which device is connecting to the MCF 8”; and
- (3) application-specific information.

Ex. 1007 ¶¶ 21, 24. “Changes can be made” to registry 24 on “an application-specific basis.” *Id.* ¶ 21. “Once the type of device is identified, attributes such as screen size, color depth, browser version and type, and translation rules become known.” *Id.*

To “determine the best content to deliver to a requesting device at any given time,” dynamic image-selection component 32 uses image registry 34, and dynamic text-selection component 36 uses text registry 38. Ex. 1007 ¶ 22; *see id.* ¶¶ 32–33. Dynamic image-scaling component 40 “scales and crops images to the right size and translates between image formats.” *Id.* ¶ 22.

WAX-stylesheets component 42 “dictates the presentation of the WAX content.” Ex. 1007 ¶ 22. Device-stylesheets component 44 “tailors the presentation of the content to the requesting device based on the attributes possessed by the requesting device.” *Id.* WML-to-WAX translator 46 and HTML-to-WAX translator 48 “translate content in WML or HTML respectively into the WAX format.” *Id.*

⁸ The acronym “WML” stands for “Wireless Markup Language.”

The MCF 8 “allows content to be authored in HTML, translated to WAX, and then transformed into content best suited for the requesting device,” such as HTML. Ex. 1007 ¶ 35; *see id.* ¶¶ 7, 18, 27. “Both translations occur without changing the originating HTML source.” *Id.* ¶ 35.

As an example of how the MCF 8 translates WAX elements differently for display based on “the attributes possessed by the requesting device,” Harris explains that “[t]he <wax:button> element is displayed as a ‘soft-key’ for WAP [Wireless Application Protocol] devices, but as a ‘link’ for devices which understand only HTML.” Ex. 1007 ¶¶ 29–30; *see id.* ¶ 22. As another example, Harris explains that the text “logo” in the <wax:img srcid=“logo”> element is “used to index into a set of rules to determine the best image to display for the specific device.” *Id.* ¶¶ 29–30.

3. INDEPENDENT CLAIM 1

(a) Preamble

Claim 1 recites “[a] method of generating content that is renderable by a wireless device.” Ex. 1001, 20:40–41.

Petitioner contends that Hariki teaches claim 1’s preamble because Hariki discloses that server 102:

- (1) “provides content data, application programs, diagnostic tools, program components, or any other content or executable objects to” mobile devices;
- (2) “can execute[] a web server process to serve web pages,” such as HTML files, over a network to mobile devices; and
- (3) “can generate a customized user interface for a plurality of different makes and types of mobile devices.”

Pet. 25 (alteration by Petitioner) (emphases omitted) (footnote omitted) (quoting Ex. 1006 ¶¶ 21, 24). According to Petitioner, Hariki’s customized

user interface or “UI skin” allows “a user to customize the ‘look and feel’ or application program environment of a device by altering display and/or sound output aspects of the device.” *Id.* at 25–26 (emphasis omitted) (quoting Ex. 1006 ¶ 24).

Regarding “[a] method of generating content” according to claim 1’s preamble, Petitioner asserts that Hariki discloses “a method of generating and downloading UI skins.” Pet. 28 (emphasis omitted) (quoting Ex. 1006 ¶ 36). Regarding “generating content that is renderable by a wireless device” according to claim 1’s preamble, Petitioner asserts that Hariki’s server 102 generates “executable content, such as a UI skin that alters the ‘look and feel’ of the display and/or sound of the mobile device and comprises audio content and display content.” *Id.* at 27 (citing Ex. 1002 ¶ 111).

Patent Owner makes no arguments specific to claim 1’s preamble. *See, e.g.*, Resp. 35–60; Sur-reply 11–22. Nonetheless, the burden remains on Petitioner to demonstrate unpatentability. *See Dynamic Drinkware*, 800 F.3d at 1378. As explained below, Petitioner shoulders this burden for claim 1. *See infra* §§ III.D.3(b)–(k).

Generally, a preamble does not limit a claim. *Allen Eng’g Corp. v. Bartell Indus., Inc.*, 299 F.3d 1336, 1346 (Fed. Cir. 2002). We need not decide whether claim 1’s preamble limits the claim because, for the reasons stated by Petitioner and supported by Dr. Bederson’s testimony, we agree with Petitioner that Hariki teaches claim 1’s preamble. *See* Pet. 25–29; Ex. 1002 ¶¶ 107–115.

(b) Limitation 1a

Claim 1 recites “transmitting, to said wireless device, an identification of a custom configuration of a plurality of rendering blocks of said wireless device.” Ex. 1001, 20:42–44 (limitation 1a).

Petitioner contends that Hariki teaches limitation 1a for several related reasons. *See* Pet. 30–35. Specifically, Petitioner asserts that Hariki discloses that server 102 “is operated by a content provider, and executes a user interface authoring tool 104 that generates a content package for each mobile device.” *Id.* at 30 (quoting Ex. 1006 ¶ 25). According to Petitioner, user interface authoring tool 104 “can represent a program or suite of programs, or even hardware circuits, or any combination thereof embodying instructions executed by one or more processing units in server 102.” *Id.* at 30–31 (emphases omitted) (quoting Ex. 1006 ¶ 27).

Petitioner next asserts that Hariki discloses that a UI skin permits configuration of, among other things, “backgrounds, title bars, buttons, [and] alert sounds” for display or sound output. Pet. 31 (emphasis omitted) (quoting Ex. 1006 ¶ 24) (citing Ex. 1006 ¶ 26). According to Petitioner, an ordinarily skilled artisan “would have understood that these backgrounds, title bars, buttons, and alert sounds comprise ‘rendering blocks’ within the context of the ’715 patent.” *Id.* (citing Ex. 1002 ¶ 119); *see id.* at 32 (citing Ex. 1002 ¶ 124). As support, Petitioner quotes the ’715 patent’s explanation that “rendering blocks” include, among other things, “static text for displaying text,” “an image,” a “check box/radio button,” “sound for controlling audio,” and “video to display a video.” *Id.* at 31–32 (emphases omitted) (quoting Ex. 1001, 8:25–41).

Petitioner next asserts that Hariki discloses a UI content package comprising “screen parameter definitions (e.g., size, aspect ratio, icon definitions, and so on), images, video clips, music or other sound clips, ringtones, games, small applications (applets), utilities, diagnostic tools, or any other similar data or applications” called “UI content objects.” Pet. 32 (emphases omitted) (quoting Ex. 1006 ¶ 27).

Petitioner next asserts that Hariki discloses user interface authoring tool 104 on server 102 that generates a UI content package from “common resource data” in common resource depot 202 in tool 104 using “resource profile information” in resource profiles 204 in tool 104. Pet. 33 (citing Ex. 1006 ¶ 29, Fig. 2). Petitioner also asserts that generating a UI content package includes the following:

- (1) “description editor component 210 produces description files 212 based on the selected resource profile 204 and resource file” from common resource depot 202;
- (2) “resource converter 206 converts each resource into a format corresponding to the resource profile” from resource profiles 204; and
- (3) “description file 212 and the converted resource output from resource converter 206 are processed by a package generator component 214.”

Id. at 33–34 (quoting Ex. 1006 ¶¶ 32–33). According to Petitioner, a UI content package comprises “the appropriate converted resources and the description file” that specifies the converted resources, the file path name, and the file type. *Id.* at 34 (citing Ex. 1002 ¶ 123; Ex. 1006 ¶¶ 33, 46).

Petitioner next asserts that Hariki discloses that “the converted resources in the UI content package are ‘files, links to files, and/or data or program objects associated with the configurable aspect of the user interface

for each mobile device.” Pet. 34 (emphasis omitted) (quoting Ex. 1006 ¶ 31).

Petitioner next asserts that an ordinarily skilled artisan would have understood that:

- (1) “the converted resources in the UI content package configure the configurable aspects of the UI, by for example, changing a display image or color”;
- (2) the converted resources in the UI content package correspond to the claimed “custom configuration”; and
- (3) the configurable aspects of the UI, such as configurable buttons and sounds, correspond to the claimed “plurality of rendering blocks.”

Pet. 34 (citing Ex. 1002 ¶ 124; Ex. 1006 ¶ 24); *see id.* at 35 (citing Ex. 1002 ¶ 126).

Petitioner next asserts that Hariki discloses that “the description file ‘may reference [converted] resources contained within the same UI content package, or it may reference [converted] resources in other content packages that are either [] pre-installed in the mobile handset or on an external server computer.’” Pet. 34–35 (alterations by Petitioner) (quoting Ex. 1006 ¶ 46).

Petitioner next asserts that an ordinarily skilled artisan would have understood that the description file in a UI content package identifies the converted resources in the UI content package and corresponds to the claimed “identification of a custom configuration.” Pet. 35 (citing Ex. 1002 ¶¶ 125–126).

Patent Owner makes no arguments specific to limitation 1a. *See, e.g.*, Resp. 35–60; Sur-reply 11–22.

For the reasons stated by Petitioner and supported by Dr. Bederson's testimony, we agree with Petitioner that Hariki teaches limitation 1a. *See* Pet. 30–35; Ex. 1002 ¶¶ 116–126.

(c) Limitation 1b

Claim 1 recites “wherein said custom configuration is associated with an application and configures said plurality of rendering blocks to render content in a manner customized to said application.” Ex. 1001, 20:44–47 (limitation 1b).

(i) Petitioner's Contentions

Petitioner advances two alternative theories why Hariki teaches limitation 1b. *See* Pet. 35–37, 36 n.10, 43; Reply 14–18, 15 nn.4–5. First, Petitioner identifies a web browser program on a mobile device as the claimed “application.” *See* Pet. 35–36, 36 n.10, 43; Reply 15 n.4. Second, Petitioner identifies a web server process on a server as the claimed “application.” *See* Pet. 36–37; Reply 14–18, 15 nn.4–5.

a. A Web Browser Program as the Claimed “Application”

For the first alternative, Petitioner asserts that Hariki teaches the claimed “application” on a mobile device “associated with” the claimed “custom configuration” because Hariki discloses that the converted resources (the claimed “custom configuration”) in a UI content package “alter the look and feel of aspects of the display and sound of the mobile device, such as backgrounds and sounds.” Pet. 35; *see id.* at 25–30. Therefore, according to Petitioner, the converted resources (the claimed “custom configuration”) “configure[] said plurality of rendering blocks” according to limitation 1b. *Id.* at 35.

Petitioner contends that the UI content package (1) allows “customization of the look and feel of the ‘application program environment of a device’” and (2) “is specific to the mobile device type and the application programs.” Pet. 35–37 (quoting Ex. 1006 ¶¶ 24, 27).

Regarding the claimed “application” on a mobile device “associated with” the claimed “custom configuration,” Petitioner asserts that Hariki discloses “a web browser program to access the web pages served by server computer 102 and any other available content provider or supplemental server.” Pet. 36 (quoting Ex. 1006 ¶ 21). Petitioner asserts that Hariki discloses that the converted resources (the claimed “custom configuration”) in a UI content package “must be referenced in some way by the application and then retrieved and converted to an appropriate format for use by the application.” *Id.* (emphasis omitted) (quoting Ex. 1006 ¶ 39). Therefore, according to Petitioner, an ordinarily skilled artisan would have understood that the converted resources (the claimed “custom configuration”) in a UI content package are “associated with” the web browser program (the claimed “application”) on the mobile device. *Id.* (citing Ex. 1002 ¶¶ 127, 129).

b. A Web Server Process as the Claimed “Application”

For the second alternative, Petitioner asserts that Hariki teaches the claimed “application” on a server “associated with” the claimed “custom configuration” because Hariki discloses that (1) user interface authoring tool 104 “represents a suite of programs on the server” and (2) “the server also provides content data such as HTML files through a web server process.” Pet. 36–37; *see* Reply 15–18. Petitioner asserts that an ordinarily skilled artisan would have recognized that the web server process and user

interface authoring tool 104 were “part of the same suite of programs” because (1) “they reside on the server together” and (2) “the authoring tool generated the custom UI for mobile devices accessing the web server process.” Pet. 37 (citing Ex. 1002 ¶ 128).

Further, Petitioner asserts that Hariki’s objective “is to display content-provider-supplied HTML content on a mobile device per the mobile device’s corresponding UI content package so that the content has a certain look.” Reply 15. Petitioner asserts that Hariki’s objective “requires an association between the HTML content and the UI content packages.” *Id.* (citing Ex. 1002 ¶¶ 127–130; Ex. 1006 ¶¶ 21, 24); *see id.* at 17 (citing Ex. 1002 ¶¶ 127–130; Ex. 2031, 63:12–16). Petitioner also asserts that “to achieve Hariki’s objective, it would have been a matter of common sense for the UI content package to be applicable to and customized for the web-server-generated content because only then can the content be displayed in a certain way on a mobile device.” *Id.* at 17 (emphasis omitted).

Additionally, Petitioner contends that a UI content package is “associated with” a web server process because “the UI skins would be used in combination with the server-produced HTML content to customize the HTML content for rendering on a client.” Reply 18 (citing Ex. 2031, 62:6–21).

(ii) Patent Owner’s Contentions

Patent Owner disputes that Hariki teaches limitation 1b. *See* Resp. 35–40; Sur-reply 11–15.

a. A Web Browser Program as the Claimed “Application”

Patent Owner contends that Hariki’s web browser program does not correspond to the claimed “application” because the web browser program

is not “remote” from the mobile device. *See* Resp. 35, 43–44, 48, 59 (citing Ex. 1002 ¶ 60; Ex. 2022 ¶ 152; Ex. 2031, 16:15–19, 18:1–4). Patent Owner also contends that Hariki contains “no disclosure” connecting “any HTML sent to a web browser to the UI skins” or that “the UI skins configure the devices to render content in a manner customized to HTML.” Sur-reply 13.

b. A Web Server Process as the Claimed “Application”

Patent Owner contends that Hariki’s web server process does not correspond to the claimed “application” because the converted resources (the claimed “custom configuration”) in a UI content package do not configure a “plurality of rendering blocks to render content in a manner customized to said application,” i.e., the web server process, as required by limitation 1b. *See* Resp. 35–37, 40, 48, 59; Sur-reply 11–15. According to Patent Owner, a UI content package and a UI skin are “written and created for applications running on mobile devices,” not a web server process. Resp. 36–37 (citing Ex. 1002 ¶ 135; Ex. 1006 ¶¶ 19, 25, Fig. 4). Patent Owner asserts that the web server process “sends the same HTML in response to the same request, regardless of whether the requestor is using a UI skin, and, if so, what UI skin is in use.” *Id.* at 37 (citing Ex. 2022 ¶ 146).

Regarding Petitioner’s assertions that (1) user interface authoring tool 104 “represents a suite of programs on the server” and (2) “the server also provides content data such as HTML files through a web server process,” Patent Owner contends that “not all programs residing on the same computer have to be part of a suite, i.e., ‘a set of computer programs designed to work together and usually sold as a single unit.’” Resp. 38 (quoting Ex. 2004 (Merriam-Webster.com), 1) (citing Ex. 2022 ¶ 144).

According to Patent Owner, Petitioner does not argue that the web server process and user interface authoring tool 104 “interact in any way.” *Id.*

Regarding Hariki’s disclosure that user interface authoring tool 104 “represents a suite of programs on the server,” Patent Owner asserts that this disclosure “simply means multiple programs or circuitry may perform the user interface authoring tool functionality,” not that tool 104 includes a web server process. Resp. 39 (citing Ex. 2022 ¶ 145).

Additionally, Patent Owner disputes that Hariki’s objective “is to display content-provider-supplied HTML content on a mobile device per the mobile device’s corresponding UI content package so that the content has a certain look.” Sur-reply 12–13 (quoting Reply 15); *see id.* at 14–15. Patent Owner contends that “Hariki only mentions ‘HTML’ once” in “the context that server 102, where the resource application program interface is coresident, can have a World-Wide Web server that transmits HTML files to any client computer on the Internet, and the phones have a browser that can access any web server on the Internet.” *Id.* at 12–13 (emphases omitted) (citing Ex. 1006 ¶ 21). According to Patent Owner, “[i]f Hariki has an objective, it is to provide a resource application program interface for creating and downloading a UI skin.” *Id.* at 12 (citing Ex. 1006 ¶¶ 3, 8, code (54)).

(iii) Analysis

For the reasons explained below, we agree with Petitioner that Hariki teaches limitation 1b because Hariki teaches the claimed “application” on a mobile device “associated with” the claimed “custom configuration.” *See* Pet. 35–36; Ex. 1002 ¶¶ 114, 116, 124, 127. But we disagree with Petitioner that Hariki teaches the claimed “application” on a server “associated with”

the claimed “custom configuration.” *See* Pet. 36–37; Reply 14–18; Ex. 1002 ¶¶ 128–129.

a. A Web Browser Program as the Claimed “Application”

With a web browser program as the claimed “application,” we agree with Petitioner that Hariki teaches limitation 1b. *See* Pet. 35–36; Ex. 1002 ¶ 127. As Petitioner asserts, Hariki discloses that the converted resources (the claimed “custom configuration”) in a UI content package may relate to an application program and “alter the look and feel of aspects of the display and sound of the mobile device, such as backgrounds and sounds.” *See* Ex. 1002 ¶¶ 114, 116, 124, 127; Ex. 1006 ¶¶ 19, 24, 28, 41, 44, 46–47, 50–51, code (57), Fig. 7; Pet. 35. According to Hariki, an application program, such as a web browser program, resides on a mobile device. Ex. 1006 ¶¶ 21, 42–43, Fig. 5. As Petitioner also asserts, the converted resources (the claimed “custom configuration”) in a UI content package are “referenced in some way by the application and then retrieved and converted to an appropriate format for use by the application.” *See* Ex. 1002 ¶ 127; Ex. 1006 ¶ 39; Pet. 36.

Specifically, Hariki explains that a user of mobile handset 502 may select a UI content package for downloading to mobile handset 502. Ex. 1006 ¶ 44. After a user selects a UI content package for downloading, setting application 504 sets or changes “the UI content package data for the application program,” i.e., “the UI package file path.” *Id.* ¶¶ 44, 50, Fig. 7 (step 701). By setting or changing “the UI content package data for the application program,” setting application 504 associates the UI content package with the application program on the mobile device.

Hariki also explains that application program 506 is “functionally coupled to resource API 508” including package selector 510 and description file parser 512. Ex. 1006 ¶ 43. Application program 506 “requests a resource by specifying the resource ID (e.g., ID_1)” rather than “by file name or directory (storage location) path.” *Id.* ¶¶ 41, 50, Fig. 7. Using the UI package file path from setting application 504 and the resource ID from application program 506, package selector 510 and description file parser 512 “locate the appropriate UI content package containing the referenced resource.” *Id.* ¶ 50; *see id.* ¶¶ 44, 46. Hence, resource API 508 determines where to obtain the converted resources in the UI content package associated with the application program on the mobile device.

To customize the user interface for application program 506, resource API 508 “reads the description file for the selected UI content package” and “retrieves each resource referenced by the description file selected for the UI content package” as located by package selector 510 and description file parser 512. Ex. 1006 ¶¶ 47, 50–51, Fig. 7; *see id.* ¶ 19, code (57). Hence, resource API 508 retrieves the converted resources (the claimed “custom configuration”) in the UI content package associated with the application program on the mobile device.

After resource API 508 “retrieves each resource referenced by the description file selected for the UI content package,” engine selector 520 in resource API 508 “selects the proper engine” for processing each resource. Ex. 1006 ¶¶ 47, 51; *see id.* ¶ 19, code (57). Then, a selected engine converts the “applicable resource” to “a format or embodiment that is compatible with” application program 506. *Id.* ¶¶ 43, 47. After appropriate formatting,

resource API 508 provides “all referenced resources to” application program 506 for display or sound output. *Id.* ¶ 51, Fig. 7; *see id.* ¶ 24. Hence, resource API 508 uses the converted resources (the claimed “custom configuration”) in a UI content package associated with an application program on a mobile device to customize the application program on the mobile device.

Hariki identifies a web browser program as an illustrative application program and explains that a mobile device may run “a web browser program to access the web pages served by” server 102, server 106, or “any other available content provider or supplemental server.” Ex. 1006 ¶ 21; *see* Ex. 1002 ¶ 127. For the reasons just discussed in this section, resource API 508 on a mobile device uses the converted resources (the claimed “custom configuration”) in a UI content package associated with an application program running on the mobile device to customize the application program on the mobile device, e.g., to customize the web browser program on the mobile device. Ex. 1006 ¶¶ 19, 41–42, 44, 46–47, 50–51, code (57), Fig. 7; *see* Ex. 1002 ¶¶ 127, 147, 151.

For instance, a Samsung mobile phone can have two web browsers, e.g., a Google browser and a Microsoft browser. If so, a first UI content package may customize the Google browser in certain ways, and a second UI content package may customize the Microsoft browser in different ways, e.g., because the different browsers have different features, backgrounds, and layouts. *See* Ex. 1002 ¶ 127. Moreover, even for a single browser on a mobile phone, a first UI content package may customize the browser in certain ways, e.g., to have dog-themed buttons, and a second UI content

package may customize the browser in different ways, e.g., to have cat-themed buttons. *See, e.g.*, Ex. 1006 ¶ 42.

As for Patent Owner’s contention that Hariki’s web browser program does not correspond to the claimed “application” because the web browser program is not “remote” from the mobile device, we disagree that limitation 1b requires the “application” to operate “remote” from the “wireless device” for the reasons discussed above in the section concerning claim construction. *See* Resp. 35, 43–44, 48, 59; *supra* § III.C.4(c).

As for Patent Owner’s contention that Hariki contains “no disclosure” connecting “any HTML sent to a web browser to the UI skins” or that “the UI skins configure the devices to render content in a manner customized to HTML,” Petitioner does not identify an HTML file as the claimed “application” on a mobile device “associated with” the claimed “custom configuration.” *See* Pet. 35–36, 38–43; Sur-reply 13.

b. A Web Server Process as the Claimed “Application”

With a web server process as the claimed “application,” we disagree with Petitioner that Hariki teaches limitation 1b. *See* Pet. 36–37; Reply 14–18; Ex. 1002 ¶¶ 128–129. Petitioner’s position that the claimed “application” reads on a web server process “associated with” the claimed “custom configuration” rests on Hariki’s disclosures that (1) user interface authoring tool 104 “represents a suite of programs on the server” and (2) “the server also provides content data such as HTML files through a web server process.” *See* Pet. 36–37; Reply 15–18; Ex. 1006 ¶¶ 21, 27. But Hariki does not disclose that a web server process interacts in any way with user interface authoring tool 104 such that a “custom configuration” is “associated with” a web server process even if the web server process and

user interface authoring tool 104 reside on the same server. *See* Ex. 1006 ¶¶ 21, 27; Ex. 2022 ¶ 144. Also, Hariki discloses that a web browser program may obtain content data (web pages) from a “supplemental server, such as computer 106,” that lacks user interface authoring tool 104. Ex. 1006 ¶ 21, Fig. 1.

Hariki explains that user interface authoring tool 104 “can represent a program or suite of programs, or even hardware circuits, or any combination thereof embodying instructions executed by one or more processing units in server 102.” Ex. 1006 ¶ 27; *see* Ex. 1002 ¶ 117; Ex. 2022 ¶ 145. Thus, one or more programs (or even hardware circuits) may perform the functions performed by the following components in user interface authoring tool 104: profile selector 205, resource converter 206, screen previewer 208, description editor 210, description file 212, and package generator 214. *See* Ex. 1006 ¶¶ 12, 27–34, Fig. 2; Ex. 2022 ¶ 145. The functions performed by those components in user interface authoring tool 104 differ markedly from the functions performed by a web server process, e.g., providing web pages in response to requests. *See* Ex. 1002 ¶ 59; Ex. 1006 ¶¶ 27–34; Ex. 2022 ¶¶ 144–145.

Moreover, as Patent Owner contends, “not all programs residing on the same computer have to be part of a suite, i.e., ‘a set of computer programs designed to work together and usually sold as a single unit.’” *See* Resp. 38; Ex. 2004 (Merriam-Webster.com), 1; Ex. 2022 ¶ 144.

Nor has Petitioner shown that the converted resources (the claimed “custom configuration”) in a UI content package configure a “plurality of rendering blocks to render content in a manner customized to said application,” i.e., customized to the web server process as required by

limitation 1b. *See* Pet. 36–37; Reply 14–18; Ex. 1002 ¶¶ 128–129. As discussed above, Hariki discloses that resource API 508 on a mobile device uses the converted resources (the claimed “custom configuration”) in a UI content package associated with an application program running on the mobile device to customize the application program on the mobile device. *See supra* § III.D.3(c)(iii).a.

As for Petitioner’s contention that a UI content package is “associated with” a web server process because “the UI skins would be used in combination with the server-produced HTML content to customize the HTML content for rendering on a client,” we disagree. *See* Reply 18. The web server process “sends the same HTML in response to the same request, regardless of whether the requestor is using a UI skin, and, if so, what UI skin is in use.” Ex. 2022 ¶ 146.

For example, a Samsung mobile phone implements a first UI content package applicable to a Google browser, and an Apple mobile phone implements a second, different UI content package applicable to a Microsoft browser. The Google browser implementing the first UI content package requests a particular web page by specifying a Uniform Resource Locator (URL) in a request to the server. *See* Ex. 1002 ¶¶ 59, 61, 64; Ex. 1018, 6–7; Tr. 6:24–7:15. The Microsoft browser implementing the second, different UI content package requests the same web page by specifying the same URL in another request to the server. When the server with the web server process receives each browser’s request, the server responds in the same way by transmitting the HTML file corresponding to the requested web page to the requesting browser for display. *See* Ex. 1006 ¶ 21; Ex. 2022 ¶ 146.

In this example, the “render[ed] content” (the displayed web page) on the “wireless device” is not “customized to” the web server process as the claimed “application.” *See* Ex. 1006 ¶ 21; Ex. 2022 ¶ 146. Instead, according to Hariki’s disclosures, customizing the “render[ed] content” (the displayed web page), e.g., by changing the displayed background color, occurs because an application program, e.g., a web browser program, on a mobile device implements a UI content package associated with the application program. *See* Ex. 1006 ¶¶ 19, 21, 24–28, 38, 41–51, code (57), Figs. 5–7; *supra* § III.D.3(c)(iii).a.

Hence, in this example, the “render[ed] content” (the displayed web page) on the Samsung mobile phone would be “customized to” the Google browser implementing the first UI content package, and the “render[ed] content” (the displayed web page) on the Apple mobile phone would be “customized to” the Microsoft browser implementing the second UI content package.

Also, Petitioner does not specify a purpose for customizing the “look and feel” of a web server process when that process operates behind the scenes to respond to a web browser’s request for a web page. *See, e.g.*, Pet. 35–37; Ex. 1002 ¶¶ 59–61, 64. In the Institution Decision, we noted the absence of an explanation for customizing the “look and feel” of a web server process. Inst. Dec. 66. In the Reply, Petitioner did not attempt to provide an explanation. *See* Reply 14–18, 15 nn.4–5.

Additionally, we disagree with Petitioner that Hariki’s objective “is to display content-provider-supplied HTML content on a mobile device per the mobile device’s corresponding UI content package so that the content has a certain look.” *See* Reply 15, 17. Instead of Petitioner’s alleged objective,

Hariki identifies a need for “a mobile device configuration system that allows modification of mobile device user interfaces or application programs without modification of the application programs themselves.” Ex. 1006 ¶ 9; *see* Ex. 1002 ¶ 66. Hariki addresses that need by disclosing (1) a user interface authoring tool executed by a content-providing server and (2) a resource application programming interface (API) on a mobile device. Ex. 1006 ¶¶ 18–19, 42, code (57).

Hariki identifies web pages (transmitted as HTML files) as just one example of content data that a server may provide. Ex. 1006 ¶ 21; *see* Ex. 1002 ¶¶ 67, 109. Hariki identifies “application programs, diagnostic tools, [and] program components” as other examples of content data that a server may provide. Ex. 1006 ¶ 21; *see* Ex. 1002 ¶¶ 67, 109. As Patent Owner contends, “Hariki only mentions ‘HTML’ once.” *See* Ex. 1006 ¶ 21; Sur-reply 12–13.

As for Petitioner’s assertion that “it would have been a matter of common sense for the UI content package to be applicable to and customized for the web-server-generated content because only then can the content be displayed in a certain way on a mobile device,” that assertion does not support Petitioner’s position. *See* Reply 17. Customizing the “web-server-generated content” at a mobile device does not mean that the “render[ed] content” (the displayed web page) on the “wireless device” is “customized to” the web server process as the claimed “application.” *See* Ex. 2022 ¶¶ 144–146. According to Hariki’s disclosures, customizing occurs because an application program, e.g., a web browser program, on a mobile device implements a UI content package associated with the

application program. *See* Ex. 1006 ¶¶ 19, 21, 24–28, 38, 41–51, code (57), Figs. 5–7; *supra* § III.D.3(c)(iii).a.

(d) Limitation 1c

Claim 1 recites “transmitting, to said wireless device, compiled content comprising (i) first compiled content specific to a first page of said application and (ii) second compiled content specific to a second page of said application.” Ex. 1001, 20:48–51 (limitation 1c).

(i) Petitioner’s Contentions

Petitioner contends that the combined disclosures in Hariki and Harris teach limitation 1c. *See* Pet. 37–43; Reply 18–20. Specifically, Petitioner asserts that Hariki discloses that server 102:

- (1) “provides content data, application programs, diagnostic tools, program components, or any other content or executable objects” to mobile devices; and
- (2) “can be a World-Wide Web (WWW) server that stores data in the form of web pages and transmits these pages as Hypertext Markup Language (HTML) files over the Internet 110” to mobile devices.

Pet. 38 (emphasis omitted) (quoting Ex. 1006 ¶ 21).

Further, Petitioner asserts that an ordinarily skilled artisan would have understood that an HTML file contains a “compilation of tags” aggregated into the HTML file including “low level commands to render content” on a device. Pet. 38 (citing Ex. 1002 ¶ 130). Petitioner also asserts that an ordinarily skilled artisan would have understood that a client accessing a server may receive “multiple” HTML pages (corresponding to “a first page” and “a second page”) from the server as well as embedded images referenced in the HTML pages. *Id.* at 39 (citing Ex. 1002 ¶ 131).

Therefore, according to Petitioner, an ordinarily skilled artisan would have understood Hariki to disclose that:

- (1) a “server transmits embedded images and multiple (corresponding to the claimed ‘first’ and ‘second’) HTML files (corresponding to the claimed ‘compiled content’);” and
- (2) the “HTML pages sent by a server” are “specific to the application (e.g., a web browser) executed on the mobile device because that browser application requested the content in the first place.”

Pet. 39 (emphasis omitted) (citing Ex. 1002 ¶ 131).

Also, “to the extent that [Patent Owner] contends” that Hariki does not disclose “compiled content” according to limitation 1c, Petitioner asserts that Harris discloses “a detailed process of sending HTML files to a client” where “the HTML files are tailored to the particular mobile device.” Pet. 40 (emphasis omitted) (citing Ex. 1002 ¶ 132).

In particular, Petitioner contends that Harris discloses:

- (1) “a wireless device template independent of mobile device type is generated in the WAX (XML) language and subsequently translated to a device specific language”;
- (2) the “elements (or tags) in the WAX file are translated” differently for display depending on the requesting device;
- (3) the “customized content is then returned to” the requesting device; and
- (4) the customized content is in “a language the requesting device can understand,” such as “WML, HDML, HTML, compact-HTML and Palm webClippings.”⁹

⁹ The acronym “WML” stands for “Wireless Markup Language,” and the acronym “HDML” stands for “Handheld Device Markup Language.”

Pet. 39–40, 42 (quoting Ex. 1007 ¶¶ 3, 24); *see id.* at 41–42. Regarding the “elements (or tags) in the WAX file” translated differently for display depending on the requesting device, Petitioner quotes Harris’s example that “[t]he <wax:button> element is displayed as a ‘soft-key’ for WAP [Wireless Application Protocol] devices, but as a ‘link’ for devices which understand only HTML.” *Id.* at 42 (first alteration by Petitioner) (quoting Ex. 1007 ¶ 30).

Petitioner also asserts that Harris discloses “serving multiple pages (e.g., HTML files)” to the mobile device because Harris explains that (1) “the mobile device will make ‘page requests’” and (2) “caching is done for multiple pages.” Pet. 42–43 (emphasis omitted) (quoting Ex. 1007 ¶ 27).

Further, Petitioner asserts that an ordinarily skilled artisan would have understood that Harris discloses “sending basic commands to render display items,” e.g., a button or link, that are “specific to the application being executed on the mobile device (corresponding to the claimed ‘compiled content’).” Pet. 42 (citing Ex. 1002 ¶¶ 136–137).

Regarding the “specific to” requirement in limitation 1c, Petitioner asserts that HTML files are “specific to” a web server process (the claimed “application”) because “that application is generating the HTML files in the first instance.” Pet. 42. Petitioner also asserts that an ordinarily skilled artisan would have understood that HTML files are “specific to” the web pages (1) served by a web server process (the claimed “application”) or (2) consumed by a web browser program (alternatively the claimed “application”). *Id.* at 43 (citing Ex. 1002 ¶ 137).

Additionally, Petitioner contends that the language “transmitting, to said wireless device, compiled content” in limitation 1c requires only that

“compiled content be transmitted to a mobile device from some source.”

Reply 19; *see id.* at 20. According to Petitioner, an “application that resides on a mobile device and receives compiled content transmitted by a server” meets limitation 1c. *Id.* at 19.

(ii) Patent Owner’s Contentions

Patent Owner disputes that the combined disclosures in Hariki and Harris teach limitation 1c. *See* Resp. 41–43; Sur-reply 16–17. Specifically, Patent Owner asserts that a web browser program (the claimed “application”) does not:

- (1) transmit HTML files (the claimed “compiled content”) from Hariki’s server; or
- (2) “produce or output any portion of the compiled content during its execution.”

Resp. 41, 43; Sur-reply 16.

Patent Owner asserts that “Hariki teaches it is the ‘server . . . [that] transmits these pages as Hypertext Markup Language (HTML) files over the Internet 110 to the mobile devices 108 and 109.’” Resp. 41 (alterations by Patent Owner) (emphases omitted) (quoting Ex. 1006 ¶ 21). Patent Owner further asserts that “Harris fails to disclose that which Hariki lacks” because Harris’s web browser program “still does not transmit the identified compiled content,” i.e., HTML files. *Id.* at 42 (citing Ex. 2031, 41:3–7, 43:1–5, 44:13–17); *see id.* at 42–43.

Additionally, Patent Owner contends that limitation 1c does not “require transmitting any ‘content,’ but specifically require[s] transmitting the compiled content ‘of said application,’ the same compiled content ‘generated in part from execution of said application’” according to limitation 1d. Sur-reply 16. Patent Owner also contends that “[b]ecause

there is no compiled content “generated in part from execution of” a web browser program according to limitation 1d, there is no compiled content to transmit “to said wireless device” according to limitation 1c. *Id.*

(iii) Analysis

We agree with Petitioner that the combined disclosures in Hariki and Harris teach limitation 1c. *See* Pet. 37–43; Reply 18–20; Ex. 1002

¶¶ 130–132, 135–137. Specifically, Hariki discloses that:

- (1) server 102 may execute “a web server process to serve web pages over network 110” by transmitting HTML files; and
- (2) mobile devices 108 and 109 may run “a web browser program to access the web pages served by” server 102.

Ex. 1006 ¶ 21; *see* Ex. 1002 ¶¶ 69, 130.

As Petitioner asserts, an ordinarily skilled artisan would have understood that an HTML file contains a “compilation of tags” aggregated into the HTML file including “low level commands to render content” on a device. Ex. 1002 ¶ 130; *see id.* ¶¶ 62, 92; Pet. 38. An HTML file corresponds to “compiled content” according to claim 1. Ex. 1002 ¶¶ 131, 140, 151.

Regarding “transmitting” according to limitation 1c, when a web browser program on a mobile device requests a first web page, Hariki’s server responds by transmitting a first HTML file corresponding to “first compiled content specific to a first page of said application.” *See* Ex. 1002 ¶ 131; Ex. 1006 ¶ 21; Ex. 1025, 51:7–52:6. And when the web browser program on the mobile device requests a second web page, Hariki’s server responds by transmitting a second HTML file corresponding to “second compiled content specific to a second page of said application.” *See*

Ex. 1002 ¶ 131; Ex. 1006 ¶ 21; Ex. 1025, 51:7–52:6. An HTML file transmitted by a server to a web browser program on a requesting device is “specific to” a “page” of the web browser program because the web browser program specified that particular content for display by the web browser program, e.g., by specifying a Uniform Resource Locator (URL) in a request to the server. *See* Ex. 1002 ¶¶ 61, 64, 131; Ex. 1018, 6–7.

Additionally, as Petitioner asserts, Harris discloses “a detailed process of sending HTML files to a client” where “the HTML files are tailored to the particular mobile device.” *See* Ex. 1002 ¶¶ 70–74, 132; Ex. 1007 ¶¶ 7, 14–16, 18–19, 21–22, 24, 35, code (57), Figs. 1–2; Pet. 40. Specifically, Harris discloses a Mobile Content Framework (MCF) on a server that “facilitates abstracting content and behavior from the rendering of content on a requesting device.” Ex. 1007 ¶ 7; *see id.* ¶ 14, code (57); Ex. 1002 ¶¶ 71–73.

With the MCF, content is (1) “generated specifically for each device, both from a display standpoint and a content navigation standpoint,” and (2) “tailored to take into account the limited resources of certain devices such as mobile devices.” Ex. 1007 ¶ 7; *see id.* ¶¶ 14–15, code (57); Ex. 1002 ¶¶ 71, 132. Content tailoring occurs based on:

- (1) “the attributes possessed by the requesting device,” including “browser version and type”; and
- (2) “user preferences,” including “interface choices, key mappings, key behavior, functionality, the amount of information to be rendered, language and location.”

Ex. 1007 ¶¶ 21–22, 24, claims 8–9, claims 17–18; *see id.* ¶¶ 7, 32–33; Ex. 1002 ¶ 163.

When delivering content to a requesting device, the MCF translates the content from WAX into “a device-specific language,” such as HTML. Ex. 1007 ¶¶ 18–19; *see id.* ¶¶ 8–9, 14, 16, 24, 27, code (57); Ex. 1002 ¶¶ 74, 132, 136. The MCF “allows content to be authored in HTML, translated to WAX, and then transformed into content best suited for the requesting device,” such as HTML. Ex. 1007 ¶ 35; *see id.* ¶¶ 7, 18, 27. As discussed above in this section, an HTML file corresponds to “compiled content” according to claim 1. Ex. 1002 ¶¶ 131, 140, 151.

Further, as Petitioner asserts, an ordinarily skilled artisan would have understood that Harris discloses “sending basic commands to render display items,” e.g., a button or link, that are “specific to the application being executed on the mobile device (corresponding to the claimed ‘compiled content’).” *See* Ex. 1002 ¶¶ 136–137; Ex. 1007 ¶¶ 21–22, 24; Pet. 42.

As for Patent Owner’s assertion that a web browser program (the claimed “application”) does not transmit HTML files (the claimed “compiled content”) from Hariki’s server, limitation 1c does not specify the entity that transmits the “compiled content” to the “wireless device.” *See* Ex. 1001, 20:48–51; Resp. 41, 43.

As for Patent Owner’s argument that a web browser program (the claimed “application”) does not “produce or output any portion of the compiled content during its execution” and, therefore, does not “generate[] in part” the “same compiled content” required by limitations 1c and 1d, we disagree with Patent Owner about what limitation 1d requires for the reasons discussed above in the section concerning claim construction. *See* Resp. 28–29, 45; Sur-reply 4, 16–17; *supra* § III.C.3(c).

(e) Limitation 1d

Claim 1 recites “wherein said compiled content is generated in part from execution of said application.” Ex. 1001, 20:52–53 (limitation 1d).

(i) Petitioner’s Contentions

Petitioner contends that the combined disclosures in Hariki and Harris teach limitation 1d. *See* Pet. 43–44; Reply 20–21. Specifically, Petitioner asserts that Hariki discloses that a mobile device “executes” a web browser program to request HTML files from a server and the server “executes” a web server process to provide the requested HTML files to the requesting mobile device. Pet. 43 (citing Ex. 1006 ¶¶ 21, 38). Petitioner also asserts that an ordinarily skilled artisan “would have readily understood that receiving the subsequent HTML files was due at least in part to executing the web server process and/or the web browser because execution of the applications is required to operate the server-browser system.” *Id.* (citing Ex. 1002 ¶ 138); *see id.* at 44 (citing Ex. 1002 ¶ 140).

Additionally, Petitioner asserts that Harris discloses that:

- (1) “the generation of the HTML page begins when the ‘web server accepts a connection and an HTTP request from a mobile device and the servlet engine directs the request to the appropriate page or servlet destined to generate WAX (step 60)’”; and
- (2) the Mobile Content Framework (MCF) on the server “translates the WAX into a device-specific markup language (WML, HTML, etc.).”

Pet. 43–44 (quoting Ex. 1007 ¶¶ 24, 27). Petitioner also asserts that an ordinarily skilled artisan “would have understood, that just as in Hariki, the web server and mobile device are each executing applications that cause the

generation of the HTML page (i.e., ‘compiled content’).” *Id.* at 44 (emphasis omitted) (citing Ex. 1002 ¶ 140).

Petitioner explains that execution of the web browser program on a mobile device in the Hariki-Harris system “triggers content generation at the server.” Reply 21 (citing Ex. 1006 ¶¶ 21, 38; Ex. 1007 ¶¶ 3, 7, 24).

Therefore, according to Petitioner, the web browser program “generates the HTML files, to some extent, when it identifies content for generation by the MCF.” *Id.*

(ii) Patent Owner’s Contentions

Patent Owner disputes that the combined disclosures in Hariki and Harris teach limitation 1d. *See* Resp. 44–48; Sur-reply 16–17. As discussed above, Patent Owner contends that limitation 1d requires “the identified application to ‘produce’ or ‘output’ the compiled content during its execution,” i.e., “said application produces/outputs some part of the compiled content during its execution.” Resp. 45; Sur-reply 4, 16; *see* Resp. 28–29, 33; *supra* § III.C.3(a).

Patent Owner asserts that a web browser program “does not—even in part—‘generate . . . from [its] execution’ the HTML files that Petitioner” identifies as the claimed “compiled content.” Resp. 45 (alterations by Patent Owner) (quoting Ex. 1001, 20:52–53 (limitation 1d)); *see id.* at 46–48; *see* Sur-reply 16–17. According to Patent Owner, a web browser program “is limited to requesting and displaying content.” Resp. 46 (emphases omitted) (citing Ex. 2022 ¶ 153).

Regarding Hariki, Patent Owner contends that “Petitioner concedes that ‘Hariki . . . does not expressly disclose how the HTML files are

generated.” Resp. 45 (alteration by Patent Owner) (emphasis omitted) (quoting Pet. 40).

Regarding Harris, Patent Owner contends that only Harris’s MCF generates (“produces” or “outputs”) HTML files from WAX in the Hariki-Harris system. Resp. 45–46 (citing Pet. 40; Ex. 2022 ¶¶ 153–154; Ex. 2031, 45:12–14, 58:7–9). According to Patent Owner, “the HTML files are completely produced and output by the MCF, and the MCF transmits the finished generated HTML to the wireless devices.” *Id.* at 46 (emphasis omitted). Further, Patent Owner asserts that a request from a web browser program in the Hariki-Harris system that prompts the MCF to produce and output an HTML file does not satisfy limitation 1d. *See id.* at 46–47; Sur-reply 16–17.

(iii) Analysis

We agree with Petitioner that the combined disclosures in Hariki and Harris teach limitation 1d. *See* Pet. 43–44; Reply 20–21; Ex. 1002 ¶¶ 138–140. As Petitioner asserts, Hariki discloses that a mobile device “executes” a web browser program (the “application” associated with the “custom configuration” according to limitation 1b) to request HTML files from a server and the server “executes” a web server process to provide the requested HTML files to the requesting mobile device. Ex. 1006 ¶¶ 21, 38; *see* Pet. 43. The web server process generates the requested HTML files “in part from execution of” the web browser program because execution of the web browser program causes or triggers the web server process to provide the requested HTML files to the requesting mobile device. *See* Ex. 1002 ¶ 138; *supra* § III.C.3(c).

Additionally, Harris discloses that when delivering content to a requesting device, the MCF translates the content from WAX into “a device-specific language,” such as HTML. Ex. 1007 ¶¶ 18–19; *see id.* ¶¶ 8–9, 14, 16, 24, 27, code (57); Ex. 1002 ¶¶ 74, 132, 136. The translated content “is generated in part from execution of” a web browser program on the requesting device because a request from the web browser program causes or triggers the MCF to generate the translation into the “device-specific language” for the requesting device. *See* Ex. 1002 ¶¶ 139–140; Ex. 1007 ¶ 24; *supra* § III.C.3(c). Hence, the content generation is not solely and independently accomplished by the MCF, but also requires execution of a web browser program to identify particular content for display on the requesting device.

Patent Owner’s arguments against the combined disclosures in Hariki and Harris teaching limitation 1d rest on its assertion that limitation 1d requires “the identified application to ‘produce’ or ‘output’ the compiled content during its execution,” i.e., “said application produces/outputs some part of the compiled content during its execution.” *See* Resp. 45–46; Sur-reply 4, 16–17. For the reasons discussed above in the section concerning claim construction, we disagree with Patent Owner. *See supra* § III.C.3(c).

(f) Limitation 1e

Claim 1 recites “wherein said compiled content comprises render commands expressed in a syntax that is generic to said wireless device.” Ex. 1001, 20:53–55 (limitation 1e).

Petitioner contends that the combined disclosures in Hariki and Harris teach limitation 1e. *See* Pet. 44–47. Specifically, Petitioner asserts that

“HTML is a standardized language that has the same syntax no matter what device” receives an HTML file, and thus is generic to a mobile device. *Id.* at 44 (citing Ex. 1002 ¶ 145). Petitioner also asserts that Harris discloses “render commands” in a “generic high-level syntax used to make the HTML pages,” i.e., Wireless Abstract XML (WAX). *Id.* at 46. As support, Petitioner provides Harris’s illustrative WAX document including Examples 1, 2, 3, and 4 as reproduced below (*id.*):

```
<?xml version=" 1. 0" encoding="utf-8"?>
<wax:wax xmlns:wax="http://www.kargo.com/wax" version="O.9">
  <wax:doc version="1.0">
    <wax:title>NY Nightlife</wax:title>
    <wax:block id="splash">
      <!--EXAMPLE 1 -->
      <wax : button href="index?a=rnain"
keytype="accept" type="go" labelid="enter" />
      <wax:p align="center">
        <!--EXAMPLE 2 -->
        <wax: img srcid="logo" alt="My Nightlife"
border="O" />
```

-continued

```
      <wax:br/>
      <!--EXAMPLE 3 -->
      <wax: text id="welcome" />
      <!--EXAMPLE 4 -->
      <% if ((String)session.getAttribute("lang") = =
null)
out .println ("<wax:a
href=\ "index?a=chlang\ ">Choose
Language</wax:a>");
%>
      <wax:br/>
      <wax:br/>
    </wax:p>
  </wax:block>
</wax:doc>
</wax:wax>
```

The above WAX document includes Examples 1, 2, 3, and 4 together with multiple tags, as exemplified by the following five lines that precede Examples 1, 2, 3, and 4 in the WAX document:

```
<?xml version=" 1.0" encoding="utf-8"?>
<wax:wax xmlns:wax="http://www.kargo.com/wax" version="O.9">
  <wax:doc version="1.0">
    <wax:title>NY Nightlife</wax:title>
    <wax:block id="splash">
```

Ex. 1007 ¶ 29; *see* Ex. 1002 ¶ 143. According to Petitioner, an ordinarily skilled artisan would have looked at the above WAX document and “understood that the WAX language used a syntax that was device generic.” Pet. 46 (citing Ex. 1002 ¶ 144).

Further, Petitioner asserts that “in the Hariki-Harris system, content data received by the mobile device for rendering is expressed in WAX or HTML, both using a syntax that is device independent (i.e., ‘expressed in a syntax that is generic to said wireless device’).” Pet. 47 (emphasis omitted) (citing Ex. 1002 ¶¶ 145–146).

Patent Owner makes no arguments specific to limitation 1e. *See, e.g.*, Resp. 35–60; Sur-reply 11–22.

For the reasons stated by Petitioner and supported by Dr. Bederson’s testimony, we agree with Petitioner that the combined disclosures in Hariki and Harris teach limitation 1e. *See* Pet. 44–47; Ex. 1002 ¶¶ 64, 141–146, 211.

(g) Limitation 1f

Claim 1 recites “wherein said custom configuration is applicable to said first and second compiled content.” Ex. 1001, 20:55–57 (limitation 1f).

(i) Petitioner’s Contentions

Petitioner contends that Hariki teaches limitation 1f. *See* Pet. 47–48; Reply 21–22. Specifically, Petitioner asserts that Hariki discloses that:

- (1) “[i]n general, UI skins allow a user to customize the ‘look and feel’ or application program environment of a

device by altering display and/or sound output aspects of the device, such as backgrounds, title bars, buttons, alert sounds, and so on”; and

- (2) “[t]hrough the resource API functionality, the mobile device is able to change the UI skin of the application 506 by UI content packages that are downloaded from a UI content server or are pre-installed in the mobile handset, without requiring modification of the application itself.”

Pet. 47 (alterations by Petitioner) (emphases omitted) (quoting Ex. 1006 ¶¶ 24, 42). According to Petitioner, Hariki’s mobile device “uses UI content packages to customize its web browser to look a certain way,” and this “customization requires that the UI content package be applicable to the HTML files that are received from the web server and displayed in the web browser.” Reply 22 (citing Ex. 1006 ¶¶ 19, 21, 24, 41–42).

Further, Petitioner asserts that an ordinarily skilled artisan would have understood that “customizing the UI skin” for “the application program environment or display and sound aspects of the device” using “the UI content package would mean that the converted resources (i.e., ‘custom configuration’) of the UI content package were applicable to all HTML files received from the web server and displayed in the application.” Pet. 47–48 (citing Ex. 1002 ¶ 148); *see* Reply 22 (citing Ex. 1002 ¶ 148).

(ii) Patent Owner’s Contentions

Patent Owner disputes that Hariki teaches limitation 1f. *See* Resp. 49–52; Sur-reply 17–20. Specifically, Patent Owner asserts that “the UI skin is not ‘applicable to’ the HTML files through the UI skin configured backgrounds, title bars, buttons, and alert sounds as required.” Resp. 49. Patent Owner also asserts that an HTML file determines “the look and feel”

of a web page and “how the page is displayed, not UI skin resources.” *Id.* at 51 (citing Ex. 2022 ¶ 156); *see* Sur-reply 19 (citing Ex. 2022 ¶ 156). According to Patent Owner, the standard governing HTML “has no provision for interfacing with” Hariki’s UI content package accessed through Hariki’s resource API. Resp. 50 (citing Ex. 2022 ¶¶ 156–157); *see* Sur-reply 19 (citing Ex. 2022 ¶¶ 156–157).

Additionally, Patent Owner asserts that the “suggestion that the HTML uses the UI skin is untenable” given Harris’s disclosure that “an automated testing environment will make sure content will display[] correctly before they are deployed to a device.” Resp. 50 (alteration by Patent Owner) (emphasis omitted) (quoting Ex. 1007 ¶ 35); *see id.* at 2; Sur-reply 19. Patent Owner explains that “[i]f the HTML content displays correctly in the testing environment on the MCF, where there are no UI skin resources—that are on remote devices—this means the Hariki-Harris HTML does not access, reference, or use any UI skin resources.” Resp. 50–51 (emphasis omitted).

Further, Patent Owner asserts that Petitioner “makes an inherency argument” because Petitioner contends that customizing a web browser program according to Hariki “requires that the UI content package be applicable to the HTML files that are received from the web server and displayed in the web browser.” Sur-reply 18 (emphasis omitted) (quoting Reply 22). Patent Owner also asserts that Petitioner fails to satisfy the “high standard” to show inherency. *Id.* (citing *PAR Pharm., Inc. v. TWI Pharms., Inc.*, 773 F.3d 1186, 1196 (Fed. Cir. 2014)).

(iii) Analysis

We agree with Petitioner that Hariki teaches limitation 1f. *See* Pet. 47–48; Ex. 1002 ¶¶ 127, 131, 147–148, 151. As discussed above for limitation 1b, Hariki identifies a web browser program as an illustrative application program and explains that a mobile device may run “a web browser program to access the web pages served by” server 102, server 106, or “any other available content provider or supplemental server.” Ex. 1006 ¶ 21; *see* Ex. 1002 ¶ 127; *supra* § III.D.3(c)(iii).a.

Hariki discloses that resource API 508 on a mobile device uses the converted resources (the claimed “custom configuration”) in a UI content package associated with an application program running on the mobile device to customize the application program, e.g., to customize a web browser program. Ex. 1006 ¶¶ 19, 24, 41–42, 44, 46–47, 50–51, code (57), Fig. 7; *see* Ex. 1002 ¶¶ 127, 147, 151; *supra* § III.D.3(c)(iii).a. Customizing a web browser program may include personalizing “backgrounds, title bars, buttons, [and] alert sounds.” Ex. 1006 ¶¶ 21, 24; *see* Ex. 1002 ¶¶ 69, 147.

Additionally, a web browser program “includes the content displayed in the browser,” e.g., content resulting from HTML files received from the web server. Ex. 2031, 68:15–18. Accordingly, an ordinarily skilled artisan “would have understood that customizing the application program environment or display and sound aspects of the device using the UI skin (e.g., UI package), would mean” that the converted resources (the claimed “custom configuration”) in a UI content package were applicable to all HTML files (the claimed “compiled content”) “received from the web server

and displayed” by the web browser program. Ex. 1002 ¶ 148; *see* Ex. 1006 ¶¶ 19, 24, 42.

Hence, a customized web browser program may have personalized forward and backward buttons as well as a personalized background color for the web pages transmitted as HTML files to a mobile device for display on the mobile device. *See* Ex. 1002 ¶¶ 69, 147–148; Ex. 1006 ¶¶ 19, 21, 24; Ex. 2031, 68:15–18. Due to the personalized background color for the web pages, the customized web browser program “is applicable to” (1) a first web page resulting from a first HTML file corresponding to “first compiled content” and (2) a second web page resulting from a second HTML file corresponding to “second compiled content.” *See* Ex. 1002 ¶¶ 131, 147–148; Ex. 1006 ¶¶ 21, 24, 42; Ex. 2031, 63:7–16, 68:15–18.

But even if the personalized background color related to the web browser program rather than the web pages as explained above, that customized web browser program would still meet limitation 1f. For example, a user with that customized web browser program on the user’s mobile device visits a website. Initially, the web browser program displays a first web page resulting from a first HTML file corresponding to “first compiled content.” Subsequently, the web browser program displays a second web page resulting from a second HTML file corresponding to “second compiled content.” The web browser program “includes the content displayed in the browser.” Ex. 2031, 68:15–18.

In this example, the personalized backward button “is applicable to” to the second web page (HTML file) to cause the web browser program to display the first web page (HTML file). *See* Ex. 1002 ¶ 148; Ex. 1006 ¶¶ 19, 24, 42. Then, the personalized forward button “is applicable to” to the first

web page (HTML file) to cause the web browser program to display the second web page (HTML file). *See* Ex. 1002 ¶ 148; Ex. 1006 ¶¶ 19, 24, 42.

Because a customized web browser program may have personalized forward and backward buttons and/or a personalized background color for the web pages transmitted as HTML files to a mobile device for display on the mobile device, we disagree with Patent Owner that “the UI skin is not ‘applicable to’ the HTML files through the UI skin configured backgrounds, title bars, buttons, and alert sounds as required.” *See* Ex. 1002 ¶¶ 69, 147–148; Ex. 1006 ¶¶ 21, 24; Ex. 2031, 63:7–16; Resp. 49.

As for Patent Owner’s assertion that the standard governing HTML “has no provision for interfacing with” Hariki’s UI content package accessed through Hariki’s resource API, the absence of Hariki-specific provisions in the HTML standard does not prevent an ordinarily skilled artisan from applying Hariki’s teachings to HTML files. *See* Resp. 50; Sur-reply 19. Patent Owner does not argue that the HTML standard precludes altering HTML files, e.g., by a web browser program. *See* Resp. 50; Sur-reply 19. That “it would take some creativity to carry out the combination does not defeat” an obviousness determination. *Facebook, Inc. v. Windy City Innovations, LLC*, 953 F.3d 1313, 1333 (Fed. Cir. 2020). Further, the “rationale of *KSR* does not support [the] theory that a person of ordinary skill can only perform combinations of a puzzle element A with a perfectly fitting puzzle element B.” *ClassCo, Inc. v. Apple, Inc.*, 838 F.3d 1214, 1219 (Fed. Cir. 2016).

Additionally, we disagree with Patent Owner that “[i]f the HTML content displays correctly in the testing environment on the MCF, where there are no UI skin resources—that are on remote devices—this means

the Hariki-Harris HTML does not access, reference, or use any UI skin resources.” *See* Resp. 50–51. Harris discloses optional automated testing for content “authored in HTML, translated to WAX, and then transformed into content” in another language, such as WML, HDML, or HTML. Ex. 1007 ¶ 35; *see id.* ¶ 7. Harris does not indicate that the optional automated testing applies to content tailored based on user preferences. *See id.* ¶¶ 24, 35.

As proposed by Petitioner, however, the Hariki-Harris system provides content tailored based on user preferences, e.g., “personalized to the taste of the individual.” *See* Pet. 40–41; Ex. 1002 ¶¶ 132–135. In particular, content customization occurs on a user’s mobile device, e.g., after “UI skins [are] downloaded by the user and installed on the mobile device to alter the default UI or permanently change the UI of the device.” *See* Pet. 41; Ex. 1002 ¶ 135; Ex. 1006 ¶ 24. Harris’s optional automated testing does not apply to the Hariki-Harris system as proposed by Petitioner. *See* Pet. 40–41, 47–48; Ex. 1002 ¶¶ 132–135, 147–148; Ex. 1007 ¶ 35.

We also disagree with Patent Owner that Petitioner “makes an inherency argument” for limitation 1f. *See* Sur-reply 18. Petitioner explains what an ordinarily skilled artisan would have understood based on Hariki’s disclosures and, therefore, why those disclosures teach limitation 1f. *See* Pet. 47–48; Reply 22; Ex. 1002 ¶¶ 147–148.

(h) Limitation 1g

Claim 1 recites “wherein said compiled content and said custom configuration are usable by a graphical user interface comprising said plurality of rendering blocks to generate renderable content based on said

compiled content and said custom configuration.” Ex. 1001, 20:58–62 (limitation 1g).

Petitioner contends that the combined disclosures in Hariki and Harris teach limitation 1g. *See* Pet. 48–51. Specifically, Petitioner asserts that Hariki discloses that a mobile device may include:

- (1) application 506 that “may be a software program or utility that alters the appearance or functionality of the mobile device, or it may be a program that, when executed, provides a service to the user,” such as a web browser program; and
- (2) resource API 508 that “process[es] the applicable resource using the appropriate playback format depending upon the type of data or program elements in the resource.”

Id. at 49–50 (quoting Ex. 1006 ¶¶ 41, 43) (citing Ex. 1002 ¶ 151).

Petitioner asserts that a web browser program on a mobile device “receives both HTML files (i.e., ‘compiled content’) and converted resources (i.e., ‘custom configuration’) in the UI content package” and “interacts with a ‘resource API 508, which contains a number of functional components such as package selector 510, description file parser 512, an engine selector 520, and one or more engines.’” Pet. 50 (quoting Ex. 1006 ¶ 43). Petitioner asserts that the one or more engines:

- (1) process “the applicable resource using the appropriate playback format,” such as a Flash engine for an applet or a JPEG engine for a photograph; and
- (2) convert “each resource file to a format or embodiment that is compatible with the application 506,” i.e., compatible “in terms of parameters such as image size, color, position, and so on.”

Id. (quoting Ex. 1006 ¶ 47).

Further, Petitioner asserts that an ordinarily skilled artisan would have understood that “Hariki’s resource API and engines [on the mobile device] use the converted resources in the UI content package and HTML file resources and format them into renderable content for the application for display.” Pet. 50 (emphasis omitted) (citing Ex. 1002 ¶ 153; Ex. 1006 ¶ 24).

Additionally, Petitioner contends that Harris discloses “displaying the content generated for the specific mobile devices,” including device-specific HTML files. Pet. 51 (citing Ex. 1002 ¶ 155; Ex. 1007, claim 1).

Patent Owner makes no arguments specific to limitation 1g. *See, e.g.*, Resp. 35–60; Sur-reply 11–22.

For the reasons stated by Petitioner and supported by Dr. Bederson’s testimony, we agree with Petitioner that the combined disclosures in Hariki and Harris teach limitation 1g. *See* Pet. 48–51; Ex. 1002 ¶¶ 149–155.

(i) Alleged Reasons to Combine the Teachings of the References

Petitioner identifies reasons that would have prompted an ordinarily skilled artisan to combine Harris’s teachings with Hariki’s teachings in the way Petitioner proposes, e.g., to provide “expanded functionality” to a mobile device. *See* Pet. 40–41, 51–52. Further, Petitioner asserts that an ordinarily skilled artisan “would have had a reasonable expectation of success” in combining the teachings of the references. *Id.* at 40–41, 52–53. Dr. Bederson’s testimony supports Petitioner’s positions. *See* Ex. 1002 ¶¶ 132–135, 154–159, 211.

For instance, Dr. Bederson testifies that:

- (1) Hariki discloses “sending HTML files to a mobile device” but “does not expressly disclose how the HTML files are generated”; and

- (2) Harris discloses “a detailed process of sending HTML files to a client” where “the HTML files are tailored to the particular mobile device” but does not explain how to customize a user interface to “the taste of the individual.”

Ex. 1002 ¶¶ 132–134 (quoting Ex. 1007 ¶ 7). Dr. Bederson then explains that an ordinarily skilled artisan would have been motivated to combine Harris’s teachings with Hariki’s teachings because “while each discloses sending content specific to a mobile device, each describes in detail different aspects of the customization.” *Id.* ¶ 135.

Further, Dr. Bederson testifies that Hariki discloses that the resource API uses “the Flash engine for an applet or JPEG engine for a photograph” and that “different or new versions of engines for different types of data objects or programs can be implemented in the resource API by adding or modifying the engine components.” Ex. 1002 ¶¶ 152, 154 (emphases omitted) (quoting Ex. 1006 ¶ 51) (citing Ex. 1006 ¶ 43); *see id.* ¶ 173. Also, Dr. Bederson testifies that Harris discloses “displaying the content generated for the specific mobile devices,” including device-specific HTML files. *Id.* ¶ 155. Dr. Bederson then explains that an ordinarily skilled artisan would have been motivated by Harris’s disclosure to modify Hariki’s “resource API to include additional engines to convert and render HTML files for display on the mobile device” and provide “expanded functionality” for the mobile device. *Id.* ¶¶ 156–157.

Patent Owner asserts that “Petitioner is mistaken regarding their motivation to modify Hariki” because “Hariki’s objective is not to display HTML web-server-generated content.” Sur-reply 14–15 (emphasis omitted) (citing Reply 15).

We agree with Petitioner that an ordinarily skilled artisan would have been motivated to combine Harris’s teachings with Hariki’s teachings in the way Petitioner proposes. *See* Pet. 40–41; Ex. 1002 ¶¶ 132–135. As Dr. Bederson explains, an ordinarily skilled artisan would have been motivated to combine Harris’s teachings with Hariki’s teachings because “while each discloses sending content specific to a mobile device, each describes in detail different aspects of the customization.” *See* Ex. 1002 ¶ 135.

Further, for the reasons stated by Petitioner and supported by Dr. Bederson’s testimony, we also agree that an ordinarily skilled artisan would have had a reasonable expectation of success in combining the teachings of the references. *See* Pet. 40–41; Ex. 1002 ¶¶ 133–134, 211.

As for Patent Owner’s assertion that “Petitioner is mistaken regarding their motivation to modify Hariki” because “Hariki’s objective is not to display HTML web-server-generated content,” Petitioner does not base the proposed combination on that purported objective. *See* Pet. 40–41; Sur-reply 14–15; Ex. 1002 ¶¶ 133, 135.

(j) Alleged Objective Indicia of Nonobviousness

(i) General Principles

Before reaching a conclusion about obviousness, we consider evidence concerning objective indicia of nonobviousness. *See Apple*, 839 F.3d at 1048. For such evidence to have substantial weight, the patentee “must establish a nexus between the evidence and the merits of the claimed invention.” *ClassCo*, 838 F.3d at 1220. “[T]here is no nexus unless the evidence presented is ‘reasonably commensurate with the scope of the claims.’” *Id.* (quoting *Rambus Inc. v. Rea*, 731 F.3d 1248, 1257 (Fed. Cir.

2013)). The patentee “bears the burden of showing that a nexus exists.” *WMS Gaming, Inc. v. Int’l Game Tech.*, 184 F.3d 1339, 1359 (Fed. Cir. 1999).

A rebuttable presumption of nexus arises “when the patentee shows that the asserted objective evidence is tied to a specific product and that product ‘embodies the claimed features, and is coextensive with them.’” *Fox Factory, Inc. v. SRAM, LLC*, 944 F.3d 1366, 1373 (Fed. Cir. 2019) (quoting *Polaris Indus., Inc. v. Arctic Cat, Inc.*, 882 F.3d 1056, 1072 (Fed. Cir. 2018)). Whether a rebuttable presumption of nexus arises “turns on the nature of the claims and the specific facts.” *Teva Pharms. Int’l GmbH v. Eli Lilly & Co.*, 8 F.4th 1349, 1362 (Fed. Cir. 2021). The presumption analysis should consider the unclaimed features in the product tied to the objective evidence to assess their significance and impact on the correspondence between the patented invention and the product. *Quanergy Sys., Inc. v. Velodyne Lidar USA, Inc.*, 24 F.4th 1406, 1418 (Fed. Cir. 2022). When, “for example, the patented invention is only a small component of the product tied to the objective evidence,” and thus the product is not coextensive with the patented invention, “there is no presumption of nexus.” *Henny Penny Corp. v. Frymaster LLC*, 938 F.3d 1324, 1333 (Fed. Cir. 2019).

Absent a presumption of nexus, the patentee may prove nexus by showing that the objective evidence resulted directly from “the unique characteristics of the claimed invention.” *Fox Factory*, 944 F.3d at 1373–74; *see In re Huang*, 100 F.3d 135, 140 (Fed. Cir. 1996). For example, “[a] prima facie case of nexus is generally made out when the patentee shows both that there is commercial success, and that the thing

(product or method) that is commercially successful is the invention disclosed and claimed in the patent.” *Demaco Corp. v. F. Von Langsdorff Licensing Ltd.*, 851 F.2d 1387, 1392 (Fed. Circ. 1988).

As the preceding discussion indicates, the Board initially considers whether the patentee has demonstrated that the “products are coextensive (or nearly coextensive) with the challenged claims,” resulting in a rebuttable presumption of nexus. *See Lectrosonics, Inc. v. Zaxcom, Inc.*, IPR2018-01129, Paper 33 at 32–33 (PTAB Jan. 24, 2020) (precedential). Absent a rebuttable presumption of nexus, the Board considers whether the patentee has demonstrated “a legally and factually sufficient connection” between the evidence and the claimed invention. *See Henny Penny*, 938 F.3d at 1332; *Lectrosonics*, IPR2018-01129, Paper 33 at 33.

(ii) Presumption of Nexus

a. Patent Owner’s Contentions

Patent Owner contends that the “Netflix system” practices the ’715 patent because a jury found that the “Netflix system” infringed dependent claim 4 and “by necessity” base claim 1. Resp. 57–58 (citing Ex. 3003 (Verdict Form)). Citing *Ecolochem, Inc. v. Southern California Edison Co.*, 227 F.3d 1361, 1378 (Fed. Cir. 2000), Patent Owner asserts that “when evidence shows a product practices the invention, there is a presumption that commercial success is due to the patent.” Sur-reply 21.

b. Petitioner’s Contentions

Petitioner contends that the jury’s infringement finding does not suffice to establish a nexus to objective indicia of nonobviousness. Reply 26. Petitioner also contends that there are a “plethora of reasons –

scale and quality of content, large user base, and being an early mover in the field – for Netflix’s success.” *Id.*

c. Analysis

Based on the evidence of record, we agree with Petitioner. In response to the question, “Did GoTV prove by a preponderance of the evidence that Netflix infringed [claim 4] of the ’715 Patent?,” the jury answered “Yes.” Ex. 3003, 3. The jury’s finding that “Netflix” infringed claim 4 does not demonstrate that the “Netflix system” is “coextensive (or nearly coextensive) with the challenged claims.” *See* Ex. 3003, 3; *Lectrosonics*, IPR2018-01129, Paper 33 at 33; *see also Fox Factory*, 944 F.3d at 1373. When, “for example, the patented invention is only a small component of the product tied to the objective evidence,” and thus the product is not coextensive with the patented invention, “there is no presumption of nexus.” *Henny Penny*, 938 F.3d at 1333.

Patent Owner fails to describe the “Netflix system,” any of its components, and any of its features. *See, e.g.*, Resp. 57–59; Sur-reply 21–22. Nor does Patent Owner map any ’715 patent claim to the “Netflix system,” e.g., with a claim chart. *See, e.g.*, Resp. 57–59; Sur-reply 21–22. Further, Patent Owner fails to (1) explain how any system components or features correspond to any claim limitations and (2) address the significance and impact of any unclaimed system components or features. *See, e.g.*, Resp. 57–59; Sur-reply 21–22; *Quanergy*, 24 F.4th at 1418.

Patent Owner “bears the burden of showing that a nexus exists.” *WMS Gaming*, 184 F.3d at 1359; *see Fox Factory*, 944 F.3d at 1373 (discussing a patentee’s burden for a rebuttable presumption of nexus). Based on the evidence of record, Patent Owner fails to shoulder its burden.

Additionally, *Ecolochem* does not help Patent Owner. The Federal Circuit has explained that “a presumption arises” when “a patentee can demonstrate,” among other things, “that the successful product is the invention disclosed and claimed in the patent,” i.e., “that [the successful] product ‘embodies the claimed features, and is coextensive with them.’” *Ecolochem*, 227 F.3d at 1377; *Fox Factory*, 944 F.3d at 1373 (quoting *Polaris*, 882 F.3d at 1072). As discussed above in this section, the jury’s finding that “Netflix” infringed claim 4 does not demonstrate that the “Netflix system” is “coextensive (or nearly coextensive) with the challenged claims.”

For these reasons, Patent Owner has not established a rebuttable presumption of nexus.

(iii) Proof of Nexus: Commercial Success

a. Patent Owner’s Contentions

Patent Owner contends that the “Netflix system” has been “very successful, with over 200 million subscribers paying an average of over \$11 per month, bringing in streaming revenues of over \$30 billion worldwide.” Resp. 58 (citing Ex. 2028, 3). Patent Owner also contends that the “commercial success of the Netflix system has a nexus to benefits conferred by the claimed features of” the ’715 patent. *Id.*

Specifically, Patent Owner asserts that the commercial success of the “Netflix system” is “derived from the Netflix application’s use of the patented invention to selectively, based on which type of device the user is using, ‘deliver only the data needed to render the view in as few requests as possible, which is essential for a quality mobile experience.’” Resp. 58–59 (quoting Ex. 2033, 3) (citing Ex. 2030, 3). Patent Owner also asserts that

since the '715 patent's "technology is 'essential' to Netflix's undisputed commercial success there is objective indicia, with a nexus to the claimed invention, that additionally supports" nonobviousness. *Id.* at 59.

b. Petitioner's Contentions

Petitioner disputes that Patent Owner has shown "a legally and factually sufficient connection" between the evidence of commercial success and the claimed invention. *See* Reply 25–26. According to Petitioner, "Netflix's success is from its award-winning content and diverse user base, and not as a direct result of the unique characteristics of the challenged claims." *Id.* at 26.

c. Analysis

Based on the evidence of record, we agree with Petitioner. Among other things, Patent Owner fails to explain how generating device-specific compiled content for rendering on a wireless device based on a custom configuration according to claims 1 and 4 relates to rendering "the view in as few requests as possible" needed for "a quality mobile experience." *See* Resp. 57–59; Sur-reply 21–22; Ex. 2030, 3; Ex. 2033, 3. Rendering "the view in as few requests as possible" could occur with or without generating content according to claims 1 and 4.

Hence, Patent Owner fails to show that any commercial success resulted directly from "the unique characteristics of the claimed invention" rather than other factors "unrelated to the quality of the patented subject matter." *See* Resp. 57–59; Sur-reply 21–22; *Huang*, 100 F.3d at 140. If "the commercial success is due to an unclaimed feature of the device, the commercial success is irrelevant." *Ormco Corp. v. Align Tech., Inc.*, 463 F.3d 1299, 1312 (Fed. Cir. 2006).

(iv) Summary for Objective Indicia of Nonobviousness

For the reasons discussed above, Patent Owner has not shown that:

- (1) the “Netflix system” is “coextensive (or nearly coextensive) with the challenged claims”; or
- (2) there is a nexus between the evidence concerning commercial success and the merits of the claimed invention.

See Resp. 57–59; Sur-reply 21–22; *Lectrosonics*, IPR2018-01129, Paper 33 at 33; *supra* §§ III.D.3(j)(ii).c, III.D.3(j)(iii).c.

Thus, we accord little weight to that evidence. But even if that evidence carried more weight, it would not outweigh the other evidence considered in the *Graham* analysis. *See Leapfrog Enters., Inc. v. Fisher-Price, Inc.*, 485 F.3d 1157, 1162 (Fed. Cir. 2007) (affirming an obviousness determination “given the strength of the prima facie obviousness showing” even though the patentee “provided substantial evidence of commercial success, praise, and long-felt need”).

(k) Conclusion About Obviousness/Nonobviousness

For the reasons discussed above, the combined disclosures in Hariki and Harris teach claim 1’s subject matter. *See supra* §§ III.D.3(a)–(h). An ordinarily skilled artisan would have been motivated to combine Harris’s teachings with Hariki’s teachings in the way Petitioner proposes and would have had a reasonable expectation of success. *See supra* § III.D.3(i). Also, we accord little weight to Patent Owner’s evidence concerning objective indicia of nonobviousness. *See supra* § III.D.3(j)(iv). Hence, Petitioner has shown by a preponderance of the evidence that claim 1 is unpatentable under § 103(a) as obvious over Hariki and Harris.

4. INDEPENDENT CLAIM 9

Claims 1 and 9 recite similar limitations, although their respective preambles differ. *Compare* Ex. 1001, 20:40–62, *with id.* at 21:19–43. Claim 1’s preamble recites “[a] method of generating content that is renderable by a wireless device.” *Id.* at 20:40–41. Claim 9’s preamble recites “[a] non-transitory computer readable medium comprising instructions therein that when executed by a processor implement a method of generating content that is renderable by a wireless device.” *Id.* at 21:19–22.

Petitioner contends that the combined disclosures in Hariki and Harris teach claim 9’s preamble because:

- (1) Hariki discloses “instructions embodied in various machine-readable or computer-readable media”; and
- (2) Harris discloses a “medium holding computer-executable steps for a method.”

Pet. 63 (emphasis omitted) (quoting Ex. 1006 ¶ 54; Ex. 1007, claim 21). Dr. Bederson’s testimony supports Petitioner’s contention. *See* Ex. 1002 ¶¶ 177–178.

Patent Owner makes no arguments specific to claim 9’s preamble. *See, e.g.,* Resp. 35–52; Sur-reply 11–20. Nonetheless, the burden remains on Petitioner to demonstrate unpatentability. *See Dynamic Drinkware*, 800 F.3d at 1378.

Generally, a preamble does not limit a claim. *Allen Eng’g*, 299 F.3d at 1346. We need not decide whether claim 9’s preamble limits the claim because, for the reasons stated by Petitioner and supported by Dr. Bederson’s testimony, we agree with Petitioner that the combined

disclosures in Hariki and Harris teach claim 9's preamble. *See* Pet. 63; Ex. 1002 ¶¶ 177–178.

Petitioner contends that the combined disclosures in Hariki and Harris teach claim 9's limitations for the reasons Petitioner contends that the combined disclosures teach claim 1's limitations. *See* Pet. 64.

Dr. Bederson's testimony supports Petitioner's contentions. *See* Ex. 1002 ¶¶ 179–184.

Patent Owner disputes that the combined disclosures in Hariki and Harris teach claim 9's limitations for the same reasons Patent Owner disputes that the combined disclosures teach claim 1's limitations. *See* Resp. 35–52; Sur-reply 11–20.

For the reasons discussed above, we consider Patent Owner's arguments for claim 1 unavailing. *See supra* §§ III.D.3(c)(iii).a, III.D.3(d)(iii), III.D.3(e)(iii), III.D.3(g)(iii), III.D.3(i), III.D.3(j)(iv). For (1) the reasons stated by Petitioner and supported by Dr. Bederson's testimony and (2) the reasons discussed above for claim 1, we agree with Petitioner that the combined disclosures in Hariki and Harris teach claim 9's subject matter. *See* Pet. 63–64; Ex. 1003 ¶¶ 177–184; *supra* §§ III.D.3(a)–(h). Moreover, an ordinarily skilled artisan would have been motivated to combine Harris's teachings with Hariki's teachings in the way Petitioner proposes and would have had a reasonable expectation of success. *See supra* § III.D.3(i). Also, we accord little weight to Patent Owner's evidence concerning objective indicia of nonobviousness. *See supra* § III.D.3(j)(iv). Hence, Petitioner has shown by a preponderance of the evidence that claim 9 is unpatentable under § 103(a) as obvious over Hariki and Harris.

5. DEPENDENT CLAIMS 2–8 AND 10–16

(a) Claims 2 and 10

Claim 2 depends directly from claim 1 and recites “wherein said renderable content comprises audio content and display content.” Ex. 1001, 20:63–64. Claim 10 depends directly from claim 9 and recites subject matter similar to claim 2. *Id.* at 21:44–46.

Petitioner contends that the combined disclosures in Hariki and Harris teach the limitations in claims 2 and 10 because Hariki discloses that:

- (1) a UI content package “allows a user to customize the ‘look and feel’ or application program environment of a device by altering display and/or sound output aspects of the device, such as backgrounds, title bars, buttons, alert sounds, and so on”; and
- (2) the converted resources (the claimed “custom configuration”) in a UI content package “can contain various types of data objects relating to the user interface elements of the mobile devices, such as image files, sound files, screen layouts, icons, movies, and so on.”

Pet. 53, 64 (emphases omitted) (quoting Ex. 1006 ¶¶ 24, 31); *see* Ex. 1002 ¶¶ 160, 185.

Patent Owner makes no arguments specific to claims 2 and 10. *See, e.g.,* Resp. 35–60; Sur-reply 11–22.

For the reasons stated by Petitioner and supported by Dr. Bederson’s testimony, we agree with Petitioner that the combined disclosures in Hariki and Harris teach the limitations in claims 2 and 10. *See* Pet. 53, 64; Ex. 1002 ¶¶ 160, 185.

(b) Claims 3 and 11

Claim 3 depends directly from claim 1 and recites “wherein said compiled content is partially resultant from said application operating on

a remote server.” Ex. 1001, 20:65–67. Claim 11 depends directly from claim 9 and recites subject matter similar to claim 3. *Id.* at 21:47–50.

(i) Petitioner’s Contentions

Petitioner contends that the combined disclosures in Hariki and Harris teach the limitations in claims 3 and 11. *See* Pet. 53–54, 65; Reply 25. Specifically, Petitioner references its assertions for limitations 1b and 1c. Pet. 53–54; *see id.* at 35–40; Reply 25. Petitioner contends that Hariki discloses a “remotely executed” web server process, e.g., on server 102, that sends HTML files when requested by a web browser program “executed on a mobile device,” e.g., on mobile device 108. Pet. 53 (citing Ex. 1002 ¶ 161); *see* Reply 25 (citing Ex. 1006 ¶¶ 20–21). Petitioner also contends that (1) Hariki’s UI content package is “associated” with the web server process and (2) the HTML files (the claimed “compiled content”) are “specific to” the web server process. Pet. 53–54.

Additionally, Petitioner asserts that an ordinarily skilled artisan “would have understood that the HTML files are generated as a result of both the web browser and web server” because “the web browser must request the HTML files (i.e., ‘compiled content’) from the web server.” Pet. 54; *see* Reply 25.

(ii) Patent Owner’s Contentions

Patent Owner disputes that the combined disclosures in Hariki and Harris teach the limitations in claims 3 and 11. *See* Resp. 48, 57; Sur-reply 11–15. Specifically, Patent Owner asserts that a web browser program “does not run remotely” as required by claims 3 and 11. Resp. 57; *see id.* at 48. Patent Owner asserts that a web server process does not correspond to the claimed “application” because the converted resources (the claimed

“custom configuration”) in a UI content package do not configure a “plurality of rendering blocks to render content in a manner customized to said application,” i.e., “customized to” the web server process, as required by limitations 1b and 9b. *See id.* at 48; Sur-reply 11–15.

(iii) Analysis

We disagree with Petitioner that the combined disclosures in Hariki and Harris teach the limitations in claims 3 and 11. *See* Pet. 53–54, 65; Reply 25; Ex. 1002 ¶¶ 161–162, 186. For the reasons discussed above for limitation 1b, we disagree with Petitioner that a web server process according to Hariki’s disclosures corresponds to the “application” required by claims 1 and 9. *See* Pet. 36–37; Reply 15–18; Ex. 1002 ¶¶ 128–129; *supra* § III.D.3(c)(iii).b. For the same reasons, we disagree with Petitioner that a web server process according to Hariki’s disclosures corresponds to the “application” required by claims 3 and 11.

Petitioner does not assert that a web browser program according to Hariki’s disclosures corresponds to the “application” required by claims 3 and 11. *See* Pet. 53–54, 65; Reply 25; Ex. 1002 ¶¶ 161–162, 186. Nor does Petitioner assert that Harris cures Hariki’s infirmities with respect to claims 3 and 11. *See* Pet. 53–54, 65; Reply 25; Ex. 1002 ¶¶ 161–162, 186.

For these reasons, Petitioner has not shown that the combined disclosures in Hariki and Harris teach the limitations in claims 3 and 11.

(c) Claims 4 and 12

Claim 4 depends directly from claim 1 and recites “wherein said compiled content is specific to the rendering capabilities of said wireless device.” Ex. 1001, 21:1–3. Claim 12 depends directly from claim 9 and recites subject matter similar to claim 4. *Id.* at 21:51–53.

Petitioner contends that the combined disclosures in Hariki and Harris teach the limitations in claims 4 and 12. *See* Pet. 54–56, 65. Specifically, Petitioner asserts that Harris explains that:

- (1) “a generic WAX template ‘is easily extended and can be translated into a variety of different mobile device markup languages’”; and
- (2) “WAX ‘is “device-smart” in that it detects the idiosyncrasies of each device,’ by ‘adjust[ing] to the limitations and features of each device.’”

Id. at 54–55 (alteration by Petitioner) (quoting Ex. 1007 ¶¶ 7, 17).

Petitioner also contends that Harris discloses that before “sending content to a mobile device, ‘[t]he WAX language may be dynamically translated to a requesting device’s native language,’” and thereby “tailor content to specific requesting devices.” Pet. 55 (alteration by Petitioner) (quoting Ex. 1007 ¶¶ 18–19). According to Petitioner, “a Mobile Content Framework (‘MCF’) ‘includes registries listing device capabilities which are utilized to provide appropriate amounts and types of content to the requesting device.’” *Id.* (quoting Ex. 1007 ¶ 19).

Patent Owner makes no arguments specific to claims 4 and 12. *See, e.g.,* Resp. 35–60; Sur-reply 11–22.

For the reasons stated by Petitioner and supported by Dr. Bederson’s testimony, we agree with Petitioner that the combined disclosures in Hariki and Harris teach the limitations in claims 4 and 12. *See* Pet. 54–56, 65; Ex. 1002 ¶¶ 163–164, 187.

(d) Claims 5 and 13

Claim 5 depends directly from claim 1 and recites “wherein each of said plurality of rendering blocks operates specific to a wireless device type

of said wireless device and each is instructed using a syntax that is generic to said wireless device type.” Ex. 1001, 21:4–7. Claim 13 depends directly from claim 9 and recites subject matter similar to claim 5. *Id.* at 22:1–5.

Petitioner contends that the combined disclosures in Hariki and Harris teach the limitations in claims 5 and 13. *See* Pet. 56–60, 65. Regarding the requirement for “rendering blocks operat[ing] specific to a wireless device type of said wireless device,” Petitioner asserts that Hariki discloses that “UI skin package data specific to each mobile device is generated from common resource data using resource profile information for each mobile device model.” *Id.* at 56 (emphases omitted) (quoting Ex. 1006 ¶ 29). Petitioner also asserts that Hariki’s user interface authoring tool 104 uses “the resource profiles to generate a UI content package with specific resources and a descriptor file that instructs the mobile device on how to render the converted resources of the UI content package for the backgrounds, title bars, buttons, and alert sounds (i.e., ‘rendering blocks’) of the mobile device.” *Id.* at 57 (citing Ex. 1002 ¶ 166; Ex. 1006 ¶¶ 32–33, 45–46).

Regarding the requirement that “each [rendering block] is instructed using a syntax that is generic to said wireless device type,” Petitioner asserts that a UI content package includes a “description file” that “contains a number of item entries 601.” Pet. 58 (quoting Ex. 1006 ¶ 48). Petitioner asserts that each item entry “consists of certain items of information, such as identifier (ID), path (location), and file type, among other parameters, relating to a particular resource.” *Id.* (quoting Ex. 1006 ¶ 48). Petitioner also asserts that an ordinarily skilled artisan would have understood that:

- (1) “the type of resource, e.g., Flash, PNG, JPEG, is not specific to any particular mobile device (e.g., device

independent), although inclusion of the resource itself is based on the type of mobile device”;

- (2) “a Flash, PNG, or JPEG file contained commands that could be rendered on many different device types”; and
- (3) the “format of commands in these files (i.e., ‘syntax’) was thus device independent.”

Id. at 58–59 (citing Ex. 1002 ¶ 168).

Additionally, Petitioner asserts that an ordinarily skilled artisan would have understood that the converted resources (the claimed “custom configuration”) in a UI content package “instruct the mobile device how to display the contents of the” converted resources because the converted resources “determine the configuration of the mobile device when used by the engines of the resource API.” Pet. 60 (citing Ex. 1002 ¶ 169).

Further, according to Petitioner, “the resource API engines that convert content use the device independent command structure of the converted resources (corresponding to the claimed ‘syntax that is generic to said wireless device type’) to display content on backgrounds, title bars, buttons, and alert sounds (i.e., ‘rendering blocks’) [on] the mobile device.” Pet. 60 (citing Ex. 1002 ¶ 170).

Patent Owner makes no arguments specific to claims 5 and 13. *See, e.g.*, Resp. 35–60; Sur-reply 11–22.

For the reasons stated by Petitioner and supported by Dr. Bederson’s testimony, we agree with Petitioner that the combined disclosures in Hariki and Harris teach the limitations in claims 5 and 13. *See* Pet. 56–60, 65; Ex. 1002 ¶¶ 165–170, 188.

(e) Claims 6 and 14

Claim 6 depends directly from claim 5 and recites “wherein said custom configuration comprises a syntax that is generic regarding said wireless device type.” Ex. 1001, 21:8–10. Claim 14 depends directly from claim 13 and recites subject matter similar to claim 6. *Id.* at 22:6–9.

Petitioner contends that the combined disclosures in Hariki and Harris teach the limitations in claims 6 and 14 because, as discussed above for claims 5 and 13, the converted resources (the claimed “custom configuration”) in a UI content package “use a device independent command structure” that “comprises a syntax that is generic regarding said wireless device type.” Pet. 60, 65 (citing Ex. 1002 ¶¶ 171, 189).

Patent Owner makes no arguments specific to claims 6 and 14. *See, e.g.*, Resp. 35–60; Sur-reply 11–22.

For the reasons stated by Petitioner and supported by Dr. Bederson’s testimony, we agree with Petitioner that the combined disclosures in Hariki and Harris teach the limitations in claims 6 and 14. *See* Pet. 60, 65; Ex. 1002 ¶¶ 171, 189.

(f) Claims 7 and 15

Claim 7 depends directly from claim 1 and recites “wherein said custom configuration comprises configuration information and content specific to said application.” Ex. 1001, 21:11–13. Claim 15 depends directly from claim 9 and recites subject matter similar to claim 7. *Id.* at 22:10–14.

Petitioner contends that the combined disclosures in Hariki and Harris teach the limitations in claims 7 and 15. *See* Pet. 60–61, 66. Regarding the

requirement that the “custom configuration comprises configuration information,” Petitioner asserts that Hariki discloses that:

- (1) a mobile device may include a “UI skin consisting of a particular screen configuration, size, color scheme, font, menu scheme, keypad button assignment, [and] ringtone selection”;
- (2) “[m]any different aspects of a mobile device may be customizable,” such as “the format and display of menus, commands, subwindows, and so on”; and
- (3) a server may provide a customized UI to a mobile device.

Id. at 60–61 (second alteration by Petitioner) (emphases omitted) (quoting Ex. 1006 ¶ 26).

Additionally, Petitioner contends that the converted resources (the claimed “custom configuration”) in a UI content package are processed by an appropriate engine into “a format or embodiment that is compatible with the application 506,” i.e., compatible “in terms of parameters such as image size, color, position, and so on.” Pet. 61 (emphasis omitted) (quoting Ex. 1006 ¶ 47).

Regarding the requirement that the “custom configuration comprises . . . content specific to said application,” Petitioner asserts that Hariki discloses that “the resources referenced by the descriptor file and utilized by the application must be referenced in some way by the application and then retrieved and converted to an appropriate format for use by the application.” Pet. 61 (emphases omitted) (quoting Ex. 1006 ¶ 39).

Patent Owner makes no arguments specific to claims 7 and 15. *See, e.g.*, Resp. 35–60; Sur-reply 11–22.

For the reasons stated by Petitioner and supported by Dr. Bederson’s testimony, we agree with Petitioner that the combined disclosures in Hariki

and Harris teach the limitations in claims 7 and 15. *See* Pet. 60–61, 66; Ex. 1002 ¶¶ 172–174, 190.

(g) Claims 8 and 16

Claim 8 depends directly from claim 1 and recites “wherein said custom configuration is one of a plurality of memory-stored custom configurations stored by said wireless device, and wherein said method further comprises transmitting an identifier that identifies said custom configuration.” Ex. 1001, 21:14–18. Claim 16 depends directly from claim 9 and recites “wherein said method further comprises transmitting an identifier that identifies said custom configuration.” *Id.* at 22:15–18.

Petitioner contends that the combined disclosures in Hariki and Harris teach the limitations in claims 8 and 16. *See* Pet. 62, 66. Specifically, Petitioner asserts that Hariki discloses that:

- (1) a mobile device includes data storage component 522;
- (2) “[o]ne or more user interface content packages 524 and [532] can be stored in” data storage component 522; and
- (3) “package selector 510 and description file parser 512 use the package file path and resource ID number to locate the appropriate UI content package containing the referenced resource.”

Id. at 62 (alterations by Petitioner) (emphasis omitted) (quoting Ex. 1006 ¶¶ 45, 50).

Petitioner also asserts that an ordinarily skilled artisan “would have understood that the ID in the description file acts as an identifier of the converted resource (i.e., ‘custom configuration’) in the UI content package, and the ID is sent (corresponding to the claimed ‘transmitting’) to the wireless device in the UI content package.” Pet. 62 (citing Ex. 1002 ¶ 176).

Patent Owner makes no arguments specific to claims 8 and 16. *See, e.g.,* Resp. 35–60; Sur-reply 11–22.

For the reasons stated by Petitioner and supported by Dr. Bederson’s testimony, we agree with Petitioner that the combined disclosures in Hariki and Harris teach the limitations in claims 8 and 16. *See* Pet. 62, 66; Ex. 1002 ¶¶ 175–176, 191.

(h) Summary for Dependent Claims 2–8 and 10–16

For the reasons discussed above, the combined disclosures in Hariki and Harris teach the limitations in claims 2, 4–8, 10, and 12–16. *See supra* §§ III.D.5(a), III.D.5(c)–(g). Moreover, an ordinarily skilled artisan would have been motivated to combine Harris’s teachings with Hariki’s teachings in the way Petitioner proposes and would have had a reasonable expectation of success. *See supra* § III.D.3(i). Also, we accord little weight to Patent Owner’s evidence concerning objective indicia of nonobviousness. *See supra* § III.D.3(j)(iv). Hence, Petitioner has shown by a preponderance of the evidence that claims 2, 4–8, 10, and 12–16 are unpatentable under § 103(a) as obvious over Hariki and Harris.

For the reasons discussed above, Petitioner has not shown that the combined disclosures in Hariki and Harris teach the limitations in claims 3 and 11. *See supra* § III.D.5(b)(iii). Hence, Petitioner has not shown by a preponderance of the evidence that claims 3 and 11 are unpatentable under § 103(a) as obvious over Hariki and Harris.

6. INDEPENDENT CLAIM 17

Claim 17 recites a “server” comprising “a library of applications” (limitation 17a) and “a library of custom configuration data comprising a custom configuration that configures a plurality of rendering blocks of said

wireless device to render content in a manner customized to an application from said library of applications requested by said wireless device” (limitation 17b). Ex. 1001, 22:19–26.

(a) Petitioner’s Contentions

Petitioner contends that Hariki teaches limitation 17a because:

- (1) Hariki discloses that user interface authoring tool 104 “can represent a program or suite of programs, or even hardware circuits, or any combination thereof embodying instructions executed by one or more processing units in server 102”; and
- (2) a web server process resides with user interface authoring tool 104 on server 102 and the web server process works with user interface authoring tool 104 to “render provider-supplied content in a specified manner on mobile devices.”

Pet. 67 (emphasis omitted) (quoting Ex. 1006 ¶ 27); Reply 23; *see* Pet. 37 (citing Ex. 1002 ¶ 128); Reply 15 (citing Ex. 1002 ¶¶ 127–130; Ex. 1006 ¶¶ 21, 24). According to Petitioner, an ordinarily skilled artisan “would have understood that a suite of programs was synonymous with a ‘library of applications.’” Pet. 67 (citing Ex. 1002 ¶ 194).

Petitioner contends that Hariki teaches limitation 17b for two related reasons. *See* Pet. 30–37, 67–69; Reply 23. First, Petitioner asserts that limitation 17b is “substantively similar” to limitations 1a and 1b and that Hariki teaches limitations 1a and 1b for the reasons discussed above. *See* Pet. 30–37, 67–68; *supra* §§ III.D.3(b), III.D.3(c)(i).

Second, Petitioner asserts that Hariki teaches “a library of custom configuration data comprising a custom configuration” on a server because Hariki discloses user interface authoring tool 104 on server 102 “generating multiple UI content packages for download to different mobile devices [and]

for different programs” where each UI content package includes converted resources corresponding to the claimed “custom configuration.” Pet. 68–69 (citing Ex. 1002 ¶¶ 197–198; Ex. 1006 ¶¶ 24–25, 30–32); *see id.* at 30, 34–37, 48, 50. According to Petitioner, “the UI content package resource files configure blocks such as title bars, buttons, and sounds that render the content on a mobile device that is customized to” the web server process, and “the entire mobile device display is impacted by the UI skin.” Reply 23 (citing Ex. 1002 ¶ 119; Ex. 2031, 68:17–69:2).

(b) Patent Owner’s Contentions

Patent Owner disputes that Hariki teaches limitation 17b. *See* Resp. 52–54; Sur-reply 20–21. Specifically, Patent Owner asserts that a web server process “is not an application in a ‘library’ or ‘suite’ of programs” just because the web server process and user interface authoring tool 104 reside on the same computer. Resp. 53, 59; *see* Sur-reply 20–21. Patent Owner also asserts that a web server process does not correspond to the “application” required by claim 17 because the converted resources (the claimed “custom configuration”) in a UI content package do not configure a plurality of rendering blocks to “render content in a manner customized to” the web server process as the claimed “application.” *See* Resp. 53; Sur-reply 11–15.

(c) Analysis

For the reasons discussed above for limitation 1b, we agree with Patent Owner that a web server process does not correspond to the “application” required by claim 17. *See* Resp. 53, 59; Sur-reply 11–15; *supra* § III.D.3(c)(iii).b. In particular, the converted resources (the claimed “custom configuration”) in a UI content package do not configure a plurality

of rendering blocks to “render content in a manner customized to” the web server process as the claimed “application.” *See supra* § III.D.3(c)(iii).b.

Hence, Petitioner fails to show by a preponderance of the evidence that Hariki teaches limitation 17b. Petitioner does not rely on Harris for teaching limitation 17b. *See* Pet. 67–69; Reply 23.

Because (1) Petitioner fails to show by a preponderance of the evidence that Hariki teaches limitation 17b and (2) Petitioner does not rely on Harris for teaching limitation 17b, Petitioner fails to show by a preponderance of the evidence that claim 17 is unpatentable under § 103(a) as obvious over Hariki and Harris.

7. DEPENDENT CLAIMS 18–20

Claims 18–20 depend directly from claim 17. Ex. 1001, 22:44–52. Hence, claims 18–20 incorporate all the limitations in claim 17. 35 U.S.C. § 112 ¶ 4 (2006).

For the reasons discussed for claim 17, Petitioner fails to show by a preponderance of the evidence that claims 18–20 are unpatentable under § 103(a) as obvious over Hariki and Harris. *See In re Fine*, 837 F.2d 1071, 1076 (Fed. Cir. 1988); *supra* § III.D.6(c).

IV. PETITIONER’S MOTION TO EXCLUDE EVIDENCE

Petitioner moves to exclude Exhibits 2023 to 2027 containing dictionary definitions for “application-specific,” “customize,” “from,” “generate,” and “output.” Paper 31; *see* Exs. 2023–2027. Petitioner contends that these dictionary definitions “are not relevant” because they do not reflect an ordinarily skilled artisan’s understanding at the time the invention was made. *See* Paper 31, 1–3; 35 U.S.C. § 103(a). According to Petitioner, these dictionary definitions evidence meanings “no earlier than

2023,” not meanings “as of nearly a decade prior, when the ’715 patent was filed and issued.” Paper 31, 3.

Patent Owner contends that these dictionary definitions “are still relevant” to what an ordinarily skilled artisan would have understood as of the ’715 patent’s effective priority date. Paper 32, 2. According to Patent Owner, no evidence indicates that any meaning has changed since the ’715 patent’s effective priority date. *See id.* at 2–4.

In our analyses above, we do not rely on any of Exhibits 2023 to 2027. *See, e.g., supra* §§ III.C.2–III.C.4. Hence, we dismiss Petitioner’s motion to exclude evidence as moot. *See, e.g., Volkswagen Grp. of Am., Inc. v. Spero*, IPR2023-00335, Paper 40 at 24 (PTAB July 15, 2024) (dismissing motion to exclude evidence as moot).

V. CONCLUSION

Based on the evidence presented with the Petition, the evidence introduced during the trial, and the parties’ respective arguments, Petitioner has shown by a preponderance of the evidence that claims 1, 2, 4–10, and 12–16 are unpatentable under § 103(a) as obvious over Hariki and Harris.¹⁰ Petitioner has not shown by a preponderance of the evidence that claims 3,

¹⁰ Should Patent Owner wish to pursue amendment of the challenged claims in a reissue or reexamination proceeding after the issuance of this Final Written Decision, we draw Patent Owner’s attention to the April 2019 Notice Regarding Options for Amendments by Patent Owner Through Reissue or Reexamination During a Pending AIA Trial Proceeding. *See* 84 Fed. Reg. 16,654 (Apr. 22, 2019). If Patent Owner chooses to file a reissue application or a request for reexamination of the challenged patent, we remind Patent Owner of its continuing obligation to notify the Board of any such related matters in updated mandatory notices. *See* 37 C.F.R. §§ 42.8(a)(3), (b)(2).

11, and 17–20 are unpatentable under § 103(a) as obvious over Hariki and Harris.

In summary:

Claims	35 U.S.C. §	Reference(s)/ Basis	Claims Shown Unpatentable	Claims Not Shown Unpatentable
1–20	103(a)	Hariki, Harris	1, 2, 4–10, 12–16	3, 11, 17–20
Overall Outcome			1, 2, 4–10, 12–16	3, 11, 17–20

VI. ORDER

Accordingly, it is

ORDERED that claims 1, 2, 4–10, and 12–16 in the ’715 patent are determined to be unpatentable;

FURTHER ORDERED that claims 3, 11, and 17–20 in the ’715 patent are not determined to be unpatentable;

FURTHER ORDERED that Petitioner’s motion to exclude evidence (Paper 31) is dismissed as moot; and

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

IPR2023-00757
Patent 8,989,715 B2

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APPENDIX B—DIRECTOR REVIEW DECISION

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE OFFICE OF THE UNDER SECRETARY OF COMMERCE
FOR INTELLECTUAL PROPERTY AND DIRECTOR OF THE
UNITED STATES PATENT AND TRADEMARK OFFICE

NETFLIX, INC.,
Petitioner,

v.

GOTV STREAMING, LLC,
Patent Owner.

IPR2023-00757 (Patent 8,989,715 B2)
IPR2023-00758 (Patent 8,478,245 B2)¹

Before DERRICK BRENT, *Acting Under Secretary of Commerce for
Intellectual Property and Acting Director of the United States Patent and
Trademark Office.*

ORDER

¹ This order applies to each of the above-listed proceedings.

IPR2023-00757 (Patent 8,989,715 B2)

IPR2023-00758 (Patent 8,478,245 B2)

The Office received requests for Director Review of the Final Written Decisions in the above-captioned cases. *See* Paper 41.² The requests were referred to me.

Upon consideration of the requests, it is:

ORDERED that the requests for Director Review are denied.

² All citations are to the record in IPR2023-00757. Similar papers were filed in IPR2023-00758.

IPR2023-00757 (Patent 8,989,715 B2)

IPR2023-00758 (Patent 8,478,245 B2)

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CERTIFICATE OF NOTICE/FILING

The undersigned certifies that on the twenty-first day of March, 2025, a complete and entire copy of the foregoing “PATENT OWNER’S NOTICE OF APPEAL OF FINAL WRITTEN DECISION,” including any exhibits, if any, is concurrently being/was filed with Director of the United States Patent and Trademark Office in accordance with the Electronic Submission of Notices of Appeal Final Rule, 89 Fed. Reg. 22083, 22084 (Mar. 29, 2024) via email to the address indicated on the USPTO’s web page for the Office of the General Counsel, <https://www.uspto.gov/about-us/organizational-offices/office-general-counsel>:

Director of the United States Patent and Trademark Office
c/o Office of the General Counsel
efileSO@uspto.gov

The subject line of the Director notice included/will include the type of document filed.

The undersigned also certifies that on the same day, a true and correct copy of the same document(s) were/are concurrently being filed via the electronic filing system, CM/ECF, with the Clerk’s Office of the U.S. Court of Appeals for the Federal Circuit.

CERTIFICATE OF SERVICE

The undersigned certifies that on the twenty-first day of March, 2025, a true and correct copy of the same document(s) listed in the Certificate of Notice/Filing were/are concurrently being served to the following counsel of record via email per Petitioner's consent to electronic service. *See Paper 2 at 79.*

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Dated: March 21, 2025

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