

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

AMAZON.COM, INC.,
Petitioner,

v.

LEXOS MEDIA IP, LLC,
Patent Owner.

IPR2023-01001
Patent 6,118,449

Before PHILLIP J. KAUFFMAN, JEFFREY S. SMITH, and
SHARON FENICK, *Administrative Patent Judges*.

FENICK, *Administrative Patent Judge*.

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

I. INTRODUCTION

A. *Background and Summary*

Amazon.com, Inc. (“Petitioner”) filed a Petition (Paper 2, “Pet.”), requesting an *inter partes* review of claims 1, 27, 38, and 53 of U.S. Patent No. 6,118,449 (Ex. 1002, “the ’449 patent”). Lexos Media IP, LLC (“Patent Owner”) filed a preliminary response. Paper 8 (“Prelim. Resp.”).

The Board has authority to determine whether to institute an *inter partes* review. See 35 U.S.C. § 314(b); 37 C.F.R. § 42.4(a). Under 35 U.S.C. § 314(a), we may not authorize an *inter partes* review unless the information in the Petition “shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” For the reasons that follow, we institute an *inter partes* review as to claims 1, 38, and 53 of the ’449 patent on all grounds of unpatentability presented.

B. *Real Parties in Interest*

Petitioner identifies Amazon.com, Inc.; Amazon.com Services LLC; and Amazon.com Sales, Inc. as the real parties in interest. Pet. 1.

Patent Owner identifies only itself as the real party in interest. Paper 6 (Patent Owner’s Mandatory Notices), 1.

C. *Related Matters*

Petitioner identifies the following proceeding as a related matter: *Lexos Media IP, LLC v. Amazon.com, Inc.*, No. 2:22-cv-00169-JRG (E.D. Tex.) (“the related district court litigation”). Pet. 1–2. Petitioner additionally lists as related 12 pending and 30 terminated cases involving the ’449 patent and/or U.S. Patent No. 5,995,102 (Ex. 1001, “the ’102 patent”). *Id.* at 2–4. Petitioner notes that the ’449 patent was the subject of *inter*

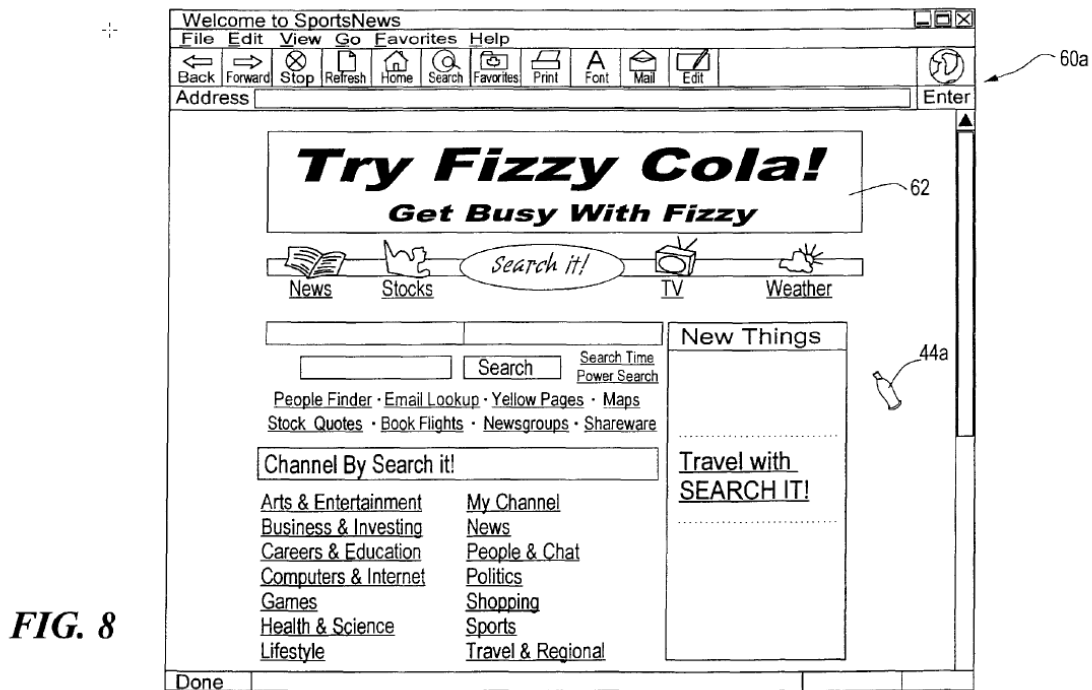
partes review proceeding IPR2018-01755 (“the 1755 IPR”), and that the Federal Circuit affirmed the Board decision in that proceeding. *Id.* at 5.

Patent Owner lists twelve pending cases as related, including the related district court litigation. Paper 6, 1.

D. The ’449 Patent

The ’449 patent is directed to “[a] system for modifying a cursor image, as displayed on a video monitor of a remote terminal, to a specific image having a desired shape and appearance.” Ex. 1001,¹ code (57). The context of the invention relates to a graphical user interface in which a pointing device (*e.g.*, a mouse) is used by the user to navigate a video display, and in which movement of the pointing device is indicated by a corresponding movement of a cursor on the video display. *Id.* at 3:22–26, 8:24–37. A generic cursor may be an arrow, pointing hand, hourglass, etc. *Id.* at 3:57–61. The ’449 patent relates to changing that generic cursor by sending data and control signals from a remote computer to replace such a cursor with a cursor having an appearance that is associated with other content being displayed to the user, *e.g.*, a logo, mascot, or an image of a product or service, related to the other content being displayed to the user. *Id.* at 3:4–9, 17:5–18:3. Figure 8 of the ’449 patent, reproduced below, shows a web page according to the invention.

¹ The parties reference the specification of the ’102 patent, parent to the ’449 patent, rather than the ’449 patent itself. Pet. 2 n.2; Prelim. Resp. 30 n.7 (describing the patents as having a “common specification”). We follow this practice for this Decision.



In Figure 8, shown above, web page 60a is displayed to a user, including banner ad 62 for cola. *Id.* at 5:30–32, 13:31–41. The cursor to be used with this web page changes from a standard cursor (e.g., an arrow) to cola-bottle-shaped cursor 44a in association with the banner ad 62. *Id.*

The '449 patent describes interactions between a server system and a user's terminal to effect the cursor change. *Id.* at 4:4–9, 5:37–65, 7:16–40. The user terminal is controlled by an operating system (“OS”), and application programs such as a browser running on the user terminal use an application programming interface (“API”) to interface with the OS. *Id.* at 7:29–40, Fig. 2.

The server system transmits specified content information to the user terminal, including information to be displayed on the user's computer (such as a hypertext markup language (“HTML”) web page), cursor display instruction, and cursor display code. *Id.* at 8:4–23. The cursor display instruction indicates where the cursor image data corresponding to the new

appearance of the cursor resides. *Id.* at 8:49–64. The cursor display code causes the user’s terminal to display that cursor image data in place of the original cursor, using the API of the operating system to effect these changes. *Id.* at 8:34–37, 8:52–57, 13:19–30.

E. Challenged Claims

Claims 1 and 53 are independent. Claim 38 depends from claim 27. As discussed below, in Section II.A, claim 27, while listed as being challenged, has been cancelled.

Claim 1 is reproduced below with identifiers in brackets, corresponding to the identifiers set forth by Petitioner (Pet. 71–72) and with additional identifiers added by the Board.

1. A server system for modifying a cursor image to a specific image having a desired shape and appearance displayed on a display of a remote user’s terminal, said system comprising:

[a] cursor image data corresponding to said specific image

[b] cursor display code, said cursor display code operable to modify said cursor image; and

[c.i] a first server computer for transmitting specified content information to said remote user terminal [c.ii] said specified content information including at least one cursor display instruction indicating a location of said cursor image data, [c.ii] said cursor display instruction and said cursor display code operable to cause said user terminal to display a modified cursor image on said user’s display in the shape and appearance of said specific image, [c.iii.1] wherein said specified content information is transmitted to said remote user terminal by said first server computer responsive to a request from said user terminal for said specified content information, [c.iii.2] and wherein said specified content information further comprises information to be displayed on said display of said user’s

terminal, [c.iv] said specific image including content corresponding to at least a portion of said information to be displayed on said display of said user's terminal, and wherein said cursor display code is operable to process said cursor display instruction to modify said cursor image to said cursor image in the shape and appearance of said specific image in response to movement of said cursor image over a display of said at least a portion of said information to be displayed on said display of said user's terminal, and wherein said specific image relates to at least a portion of said information to be displayed on said display of said remote user's terminal.

Ex. 1002, 18:39–19:6.

Cancelled claim 27 is identical to claim 1, with the exception of claim 1's recitation (in element [c.iv]) that “said cursor display code is operable to process said cursor display instruction to modify said cursor image to said cursor image in the shape and appearance of said specific image in response to movement of said cursor image *over a display of said at least a portion of said information to be displayed* on said display of said user's terminal” (*id.* at 18:64–19:3 (emphasis added)), which is replaced in cancelled claim 27 with the following recitation:

said cursor display code is operable to process said cursor display instruction to modify said cursor image to said cursor image in the shape and appearance of said specific image in response to movement of said cursor image *over a specified location* on said display of said user's terminal

Id. at 20:35–67 (emphasis added).

Claim 38 depends from cancelled claim 27:

38. The server system in accordance with claim 27, wherein said specified content information is transmitted in the form of HTML files that define a web page.

Id. at 21:39–41.

Claim 53 is reproduced with identifiers in brackets, corresponding to the identifiers set forth by Petitioner (Pet. 74–75):

53. A method for modifying an initial cursor image displayed on a display of a user terminal connected to at least one server, comprising:

- [a] receiving a request at said at least one server to provide specified content information to said user terminal;
- [b] providing said specified content information to said user terminal in response to said request, said specified content information including at least one cursor display instruction and at least one indication of cursor image data corresponding to a specific image; and
- [c.i] transforming said initial cursor image displayed on said display of said user terminal into the shape and appearance of said specific image in response to said cursor display instruction, wherein said specified content information includes information that is to be displayed on said display of said user's terminal, wherein said specific image includes content corresponding to at least a portion of said information that is to be displayed on said display of said user's terminal, and [c.ii] wherein said cursor display instruction indicates a cursor display code operable to process said cursor display instruction to modify said cursor image to said cursor image in the shape and appearance of said specific image in response to movement of said cursor image over a display of said at least a portion of said information to be displayed on said display of said user's terminal, and [c.iii] wherein said specific image has a shape and appearance relating to said information to be displayed.

Id. at 22:30–58.

F. Evidence

Petitioner relies on the following patent evidence.

Name	Patent Document	Exhibit
Nakagawa et al.	U.S. Patent No. 5,835,911	Ex. 1005

(“Nakagawa”)		
Nielsen	U.S. Patent No. 5,937,417	Ex. 1006
Malamud et. al. (“Malamud”)	U.S. Patent No. 6,437,800 B1	Ex. 1004

Pet. 6. Petitioner also relies on a declaration from Dr. Craig Rosenberg (Ex. 1003). Patent Owner relies on a declaration from Dr. Michael Shamos (Ex. 2001).

G. Asserted Grounds

Petitioner asserts that claims 1, 27,² 38, and 53 would have been unpatentable on the following grounds:

Claim(s) Challenged	35 U.S.C. §³	Reference(s)/Basis
1, 27, 53	103	Malamud
1, 27, 53	103	Malamud, Nakagawa
1, 27, 38, 53	103	Nielsen, Malamud

II. ANALYSIS

A. Statutory Authority with Respect to Claim 27

Petitioner presents arguments with respect to the unpatentability of claim 27. However, as Petitioner acknowledges, claim 27 was found unpatentable in the 1755 IPR, and this decision was affirmed by the Federal Circuit. *See* 1755 IPR, Paper 22 (Final Written Decision), 1, 27–28, 44–46; *Ralph Lauren Corp. v. Hirshfeld*, 852 F. App’x 540 (Fed. Cir. 2021). An *inter partes* review certificate was issued confirming this determination. Ex. 3001.

² As discussed in Section II.A, claim 27 has been cancelled.

³ The Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112-29, 125 Stat. 284, 287–88 (2011), amended 35 U.S.C. § 103. Because the claims were issued before the effective date of the AIA’s amendments to 35 U.S.C. § 103, we apply the pre-AIA version of § 103 in this Decision. *See* Ex. 1002, code (45).

We lack statutory authority to entertain Petitioner’s request to cancel claim 27 for the simple reason that it is no longer a valid claim that may be canceled. The plain language of the statute makes that point clear. In particular, § 311(b) provides that a petitioner in an *inter partes* review “may request to *cancel* as unpatentable 1 or more *claims of a patent*.” 35 U.S.C. § 311(b) (emphases added). Our reviewing court has explained that “[s]ection 311 is confined to the review of *existing* patent claims.” *Uniloc 2017 LLC v. Hulu, LLC*, 966 F.3d 1295, 1304 (Fed. Cir. 2020) (emphasis added). That is because “[t]o ‘cancel’ carries the ordinary meaning to ‘annul or destroy[,]’ ” which, in the context of § 311(b), presupposes that the claim being canceled “is already in effect.” *Id.* (citing *Mac’s Shell Serv., Inc. v. Shell Oil Prods. Co.*, 559 U.S. 175, 183 (2010); Webster’s Third New International Dictionary (1961) (defining “cancel” as the “destr[uction] [of] the force, effectiveness, or validity”) (alterations in original)). Thus “[w]hen given its ordinary meaning, § 311(b) provides that only claims that are in effect may be annulled.”⁴ *Id.* at 1304–05.

Per the reasoning in *Uniloc*, institution of an IPR is predicated on the challenged claims having some “force, effectiveness, or validity” that can be canceled. *Id.* at 1305. So, claims of a patent that have been finally adjudicated to be invalid in a prior *inter partes* review cannot subsequently be “cancel[ed] as unpatentable” under § 311(b), as they no longer exist in the patent for which the later *inter partes* review is being sought. Claim 27 of the ’449 patent no longer exists as a claim that can be canceled under § 311(b).

⁴ Although the issue in *Uniloc* was whether the Board has authority to consider patent eligibility when analyzing proposed substitute claims in a motion to amend, *Uniloc* nonetheless interprets § 311(b).

In sum, the plain language of § 311(b) limits the scope of the Board’s authority to institute an *inter partes* review to only those patent claims that have not been cancelled at the time of institution.⁵ And because that is not the case with claim 27 of the ’449 patent, we lack statutory authority to institute an IPR on that claim.

B. Discretionary Denial

Institution of *inter partes* review is discretionary. *See Harmonic Inc. v. Avid Tech, Inc.*, 815 F.3d 1356, 1367 (Fed. Cir. 2016) (“[T]he PTO is permitted, but never compelled, to institute an IPR proceeding.”).

Patent Owner argues that we should exercise discretion to deny institution under 35 U.S.C. § 314(a) because the factors identified in *Apple, Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 (PTAB Mar. 20, 2020) (precedential) (“*Fintiv*”), weigh in favor of denying institution. Prelim. Resp. 3–23. Petitioner argues we should not discretionarily deny institution under 35 U.S.C. § 314(a). Pet. 62–65.

Patent Owner additionally argues that we should exercise discretion to deny institution under 35 U.S.C. § 325(d) based on the 1755 IPR. Prelim. Resp. 23–27. Petitioner argues we should not discretionarily deny institution under 35 U.S.C. § 325(d). Pet. 65–69.

For the reasons discussed below, we do not exercise our discretion to deny under either §§ 314(a) or 325(d).

⁵ In contrast, the Director has authority to review claims of an expired patent because an expired patent still carries certain rights, including the right to recover damages for past infringement under 35 U.S.C. § 286. *See, e.g., Sony Corp. v. Iancu*, 924 F.3d 1235, 1238 n.1 (Fed. Cir. 2019).

1. *Discretion - 35 U.S.C. § 314(a)*

The precedential decision in *Fintiv* identifies a non-exclusive list of factors parties may consider addressing where there is a related, parallel district court action to determine whether such action provides any basis for discretionary denial. *Fintiv*, 5–16. The Director has issued additional guidance on the application of *Fintiv*. See Katherine K. Vidal, Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation (June 21, 2022)⁶ (“*Fintiv* Memorandum”).

The *Fintiv* Memorandum states that “the PTAB will not discretionarily deny institution in view of parallel district court litigation where a petitioner presents a stipulation not to pursue in a parallel proceeding the same grounds or any grounds that could have reasonably been raised before the PTAB.” *Fintiv* Memorandum, 3 (citing *Sotera Wireless, Inc. v. Masimo Corp.*, IPR2020-01019, Paper 12 (PTAB Dec. 1, 2020) (precedential as to § II.A) (“*Sotera*”)); see *id.* at 7–9. The *Fintiv* Memorandum explains that such a stipulation “mitigates concerns of potentially conflicting decisions and duplicative efforts between the district court and the PTAB.” *Id.* at 7.

Here, Petitioner provides a *Sotera* stipulation. Pet. 63. Specifically, Petitioner stipulates that if we institute review, “Petitioner will not pursue the grounds raised, or that reasonably could have been raised, in this IPR.” *Id.* (referencing *Sotera*).

Patent Owner asserts we should deny the Petition despite Petitioner’s *Sotera* stipulation because “the same issues can be tried by the consolidated

⁶ Available at https://www.uspto.gov/sites/default/files/documents/interim_proc_discretionary_denials_aia_parallel_district_court_litigation_memo_20220621_.pdf.

defendants, who have not offered the same stipulation.” Prelim. Resp. 20–21. Patent Owner argues that “[a] *Sotera* stipulation is not a magic bullet under the circumstances here.” *Id.* at 21. But Patent Owner’s only citation is to a non-precedential decision issued before the *Fintiv* Memorandum was issued. *Id.* (citing *Cisco Sys., Inc. v. Estech Sys., Inc.*, IPR2021-00329, Paper 13 (PTAB June 6, 2021)).

While other parties may be able to raise duplicative issues in the consolidated proceeding, Petitioner here has stipulated it will not, following the *Sotera* formulation. By offering this stipulation, Petitioner has done what it can to ensure “that there is minimal potential overlap of the two proceedings” between these two parties. *Sotera*, 20.

Because Petitioner provides a *Sotera* stipulation, we decline to exercise the discretion under § 314(a) to deny institution in view of the related district court litigation. *See Fintiv* Memorandum, 3, 7, 9.

2. *Discretion - 35 U.S.C. § 325(d)*

The Director may deny institution of *inter partes* review when “the same or substantially the same prior art or arguments previously were presented to the Office.” 35 U.S.C. § 325(d). We apply a two-part test when evaluating whether to exercise discretion under § 325(d). *See Advanced Bionics, LLC v. MED-EL Elektromedizinische Geräte GmbH*, IPR2019-01469, Paper 6 at 8 (Feb. 13, 2020) (precedential) (“*Advanced Bionics*”). Specifically, we consider:

- (1) whether the same or substantially the same art previously was presented to the Office or whether the same or substantially the same arguments previously were presented to the Office; and (2) if either condition of first part of the framework is satisfied, whether the petitioner has demonstrated that the Office erred in a manner material to the patentability of challenged claims.

Id. In doing so, we broadly consider the factors discussed in *Becton, Dickinson & Co. v. B. Braun Melsungen AG*, IPR2017-01586, Paper 8 (Dec. 15, 2017) (precedential as to § III.C.5, first para.; informative) (“*Becton, Dickinson*”). *Id.* at 9–11.

In particular, we consider *Becton, Dickinson* factors (a), (b), and (d) to determine whether the same or substantially the same prior art or arguments previously were presented to the Office. *Id.* at 10. These factors relate to:

(a) the similarities and material differences between the asserted art and the prior art involved during examination; (b) the cumulative nature of the asserted art and the prior art evaluated during examination; . . . [and] (d) the extent of the overlap between the arguments made during examination and the manner in which Petitioner relies on the prior art or Patent Owner distinguishes the prior art.

Becton, Dickinson, 17–18. While these factors mention examination, we are instructed that

The factors set forth in *Becton, Dickinson* should be read broadly . . . to apply to any situation in which a petition relies on the same or substantially the same art or arguments previously presented to the Office during a proceeding pertaining to the challenged patent. For example, although *Becton, Dickinson* factors (a) and (b) pertain to art evaluated “during examination,” these factors more broadly provide guidance as to whether the art presented in the petition is the “same or substantially the same” as the prior art previously presented to the Office during *any* proceeding, including prior AIA proceedings. Similarly, although *Becton, Dickinson* factor (d) pertains to arguments made “during examination,” this factor more broadly provides guidance as to whether the arguments presented in the petition are “the same or substantially the same” as the arguments previously presented to the Office during *any* proceeding.

Advanced Bionics, 10; *see id.* at 8. Our consideration “[a]t bottom . . . reflects a commitment to defer to previous Office evaluations of the evidence of record unless material error is shown.” *Id.* at 9.

Patent Owner argues that the same art was presented in the 1755 IPR. Prelim. Resp. 26–27. Patent Owner describes that Malamud was considered in the 1755 IPR and describes Nakagawa and Nielsen as cumulative over art considered in the 1755 IPR. *Id.* (citing Ex. 2018 (1755 IPR, Paper 2 (1755 IPR petition)), 30, 34–35). We agree that Malamud was presented and considered in the 1755 IPR. Patent Owner additionally argues that the presentation of Malamud in the 1755 IPR parallels the arguments that are before us now. *Id.* at 26.

However, as Petitioner correctly asserts, the arguments made in the 1755 IPR were markedly different from the arguments presented in this proceeding with respect to whether and how Malamud teaches “specified content information.” Pet. 67–69. The 1755 IPR petitioner relied on information in Malamud’s transmitted message that “tells the operating system what type of cursor to display and sets forth the contents and type of information to be displayed in the cursor” (Ex. 1004, 5:49–52) for teaching the “specified content information” (first recited in limitation c.i) in claim 1 that comprises “information to be displayed on [the] display of [the] user’s terminal” (recited in limitation c.iii.2). 1755 IPR, Paper 221755 IPR final written decision, 18–19, 21–24. This led to a deficiency in the petition’s showing for the recitation (in limitation c.iv of claim 1) that the cursor image is modified “responsive to movement of said cursor image over a display of said at least a portion of said information to be displayed on said display of said user’s terminal.” *Id.* at 24–26. It was this argument in the 1755 IPR that was found to be fatal to arguments of unpatentability regarding claim 1

of the '449 patent. *Id.* at 26 (“Petitioner has not adequately demonstrated how Malamud . . . teaches or suggests this limitation because it has failed to explain how Malamud’s cursor image could exhibit movement over itself.”). The similar recitations of claim 53 were argued on the same basis, and were also not found to have been shown to be unpatentable for the same reason. *Id.* at 26–27.

Here, however, Petitioner does not rely on Malamud’s transmitted message as including the “specified content information” of limitation c.i of claim 1 as the petition in the 1755 IPR did; rather, Petitioner here relies on the application program in Malamud as including this information. Pet. 29–31, 48–49; *see infra* at § II.F.2. With respect to claim 53, Petitioner here substantially repeats its claim 1 arguments, therefore making different argument with respect to “specified content information” than was made in the 1755 IPR. Pet., 35. We consider, therefore, with respect to *Becton, Dickinson* factor (d), this is a significant area in which there is no overlap between the arguments previously made, which were dispositive in the 1755 IPR, and the manner in which Petitioner in this proceeding relies on Malamud. Even though Malamud was before the Board in the 1755 IPR, the arguments presented in the Petition here were not previously considered by the Office.

We note that in *Advanced Bionics*, factor (d) was not considered because a determination had been made with respect to factors (a) and (b) that the art had been previously presented to the Office in the context of examination. *Advanced Bionics*, 20. In deciding not to analyze this factor, the Board in *Advanced Bionics* noted that it had determined that the same art had been presented to the Office, so “the first condition of the first part of

the framework [was] satisfied” and no further analysis was necessary for that first prong of the *Advanced Bionics* test.

However *Advanced Bionics* involved a determination regarding the prosecution of the challenged patent in that proceeding, and in such cases, it may be the case that “the record of the Office’s previous consideration of the art is . . . silent.” *Id.* at 10. In such situations, *Advanced Bionics* instructs, proceeding to the second prong after determining that the same art was previously before the Office, without considering whether the same arguments appear in the record, may be merited.

But where, as here, the prior presentation was in a prior *inter partes* review, even if factors (a) and (b) might lead us to conclude that the same art was before the Office, it is necessary for us to evaluate factor (d). The consideration of the art by the Office in *inter partes* review proceedings is limited to the arguments made by the petitioner. *See Sirona Dental Sys. GmbH v. Institut Straumann AG*, 892 F.3d 1349, 1356 (Fed. Cir. 2018) (the Board is not permitted “to deviate from the grounds in the petition and raise its own obviousness theory”); *Koninklijke Philips N.V. v. Google LLC*, 948 F.3d 1330, 1336 (Fed. Cir. 2020) (holding that the Board erred by raising its own obviousness theory based on combination of references not provided in the petition).

Our evaluation of the first prong of *Advanced Bionics* makes clear that our “commitment to defer to previous Office evaluations of the evidence of record” is not implicated, because there was no previous determination regarding the asserted art in the manner in which it is presented in this proceeding. We therefore do not move forward to the second portion of the *Advanced Bionics* framework, which would require us to determine if the Office erred in such a prior evaluation.

For these reasons, we decline to exercise the discretion to deny the Petition under 35 U.S.C. § 325(d).

C. Legal Standards

It is a petitioner’s burden to demonstrate unpatentability. *See Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015) (citing *Tech. Licensing Corp. v. Videotek, Inc.*, 545 F.3d 1316, 1326–27 (Fed. Cir. 2008)). Petitioner bears “the burden of proving . . . unpatentability by a preponderance of the evidence.” 35 U.S.C. § 316(e); *see* 37 C.F.R. § 42.1(d) (2018).

A patent claim is unpatentable under 35 U.S.C. § 103 if the differences between the claimed subject matter and the prior art are “such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved based on underlying factual determinations, including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of skill in the art; and (4) objective evidence of nonobviousness, i.e., secondary considerations.⁷ *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

Additionally, the obviousness inquiry typically requires an analysis of “whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.” *KSR*, 550 U.S. at 418 (citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006) (requiring “articulated

⁷ The present record contains no evidence or argument relating to secondary considerations.

reasoning with some rational underpinning to support the legal conclusion of obviousness”)); *see In re Warsaw Orthopedic, Inc.*, 832 F.3d 1327, 1333 (Fed. Cir. 2016) (citing *DyStar Textilfarben GmbH & Co. Deutschland KG v. C.H. Patrick Co.*, 464 F.3d 1356, 1360 (Fed. Cir. 2006)). “To satisfy its burden of proving obviousness, a petitioner cannot employ mere conclusory statements. The petitioner must instead articulate specific reasoning, based on evidence of record, to support the legal conclusion of obviousness.” *In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d 1364, 1380 (Fed. Cir. 2016).

We analyze the asserted grounds with the principles stated above in mind.

D. Level of Ordinary Skill in the Art

Petitioner contends that:

A person of ordinary skill in the art (“POSITA”) at the claimed priority date would have had experience in the fields of human factors engineering or human computer interaction. The POSITA would have at least a bachelor’s degree in computer science, computer engineering, human factors engineering, or a related field and would have had at least two years of relevant work experience in the fields of UI design, or equivalent experience.

Pet. 7 (citing Ex. 1003 ¶¶ 31–35). At this time, Patent Owner does not contest Petitioner’s proposed definition for one of ordinary skill in the art. Prelim. Resp. 28; *see* Ex. 2001 ¶ 29.

For the purposes of this Decision, we adopt Petitioner’s formulation for the level of skill of one of ordinary skill in the art, which appears to be consistent with the level of skill in the art reflected in the prior art of record and the disclosure of the ’449 patent. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001) (“the prior art itself [may] reflect[] an appropriate level” as evidence of the ordinary level of skill in the art)

(quoting *Litton Indus. Prods., Inc. v. Solid State Sys. Corp.*, 755 F.2d 158, 163 (Fed. Cir. 1985)).

E. Claim Construction

Petitioner argues that no claim terms need to be construed, with the exception of a term construed in *Lexos Media IP, LLC v. APMEX, Inc.*, 2:16-cv-00747-JRG-RSP (E.D. Tex.) (“APMEX litigation”). Pet. 12–14. Patent Owner also argues that we should apply the construction adopted in the APMEX litigation. Prelim. Resp. 29.

In that case, the district court construed “content corresponding to at least a portion of said information to be displayed on said display of said user’s terminal” to mean “an image representative of at least a portion of the subject or topic being displayed on the screen.” Ex. 1007, 9–13. The district court specifically considered whether any icon that changes based on being positioned over displayed content (including, e.g., a magnification icon that appears when a cursor is positioned over certain displayed content, such as a guitar image) is content corresponding to the displayed content, and determined that the term should be construed more narrowly. *Id.* at 11–12 (“If a user were to see the magnification icon off by itself . . . the user would not think, ‘guitar!’”). Petitioner contends, however, that adopting or rejecting this claim construction “does not change the . . . analysis for any of the grounds presented here,” as the prior art relied on for this recitation in the challenged claims meets the narrower construction adopted by the district court in the APMEX litigation, and by implication, would meet the broader construction considered by that court. Pet. 14.

Patent Owner additionally contends that we should apply the district court’s constructions in the APMEX litigation for the claim terms “cursor display code,” “cursor display instruction,” and “cursor image.” Prelim.

Resp. 29–30 (citing Ex. 2008). These claim constructions were set forth in the Claim Construction Memorandum Opinion and Order, which was filed on September 5, 2023, after the filing of the Petition in this proceeding.

Ex. 2008 (“Order”).

In its Order, the district court made the following constructions relevant to claims 1, 38, and 53 of the ’449 patent:

Term	Construction
“cursor display code”	“computer code for modifying the display of the cursor image”
“cursor display instruction”	“an instruction operable to modify the display of a cursor image”
“cursor image,” “initial cursor image,” “modified cursor image”	“a movable image on a display screen whose position can be controlled through a user interface”
“modifying an initial cursor image”/ “modify said cursor image”	Plain and ordinary meaning
“specific image”	Plain and ordinary meaning

Ex. 2008, 7–18, 22.

Petitioner makes specific reference to the “cursor display code” construction adopted by the district court in its Order, and appears to make arguments consistent with these constructions. Pet. 29, 39–40. We do not understand Patent Owner to be making any arguments regarding the grounds in the Petition that specifically rely on, require, or differ from the constructions in the district court’s Order.

“The Board is required to construe ‘only those terms . . . that are in controversy, and only to the extent necessary to resolve the controversy.’” *Realtime Data, LLC v. Iancu*, 912 F.3d 1368, 1375 (Fed. Cir. 2019) (alteration in original) (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999)). Thus, at this time, we note these constructions, but do not construe any terms.

F. Obviousness over Malamud

Petitioner argues that claims 1 and 53 would have been obvious over Malamud. Pet. 21–23, 26–43. Patent Owner presents arguments disputing certain aspects of Petitioner’s showing. Prelim. Resp. 38–41, 45–51.

For the reasons discussed below, we determine that Petitioner has established a reasonable likelihood that it would prevail in showing that claims 1 and 53 are unpatentable over Malamud.

1. Malamud (Ex. 1004)

Malamud relates to information cursors for use in an operating system or application programs. Ex. 1004, code (57). “[An] information cursor includes a pointing portion to point to objects displayed on a video display and an information portion to display information about an object to which the pointing portion points.” *Id.* One such information cursor is a “combined name and preview cursor,” which is shown in Malamud’s Figure 4, reproduced below:

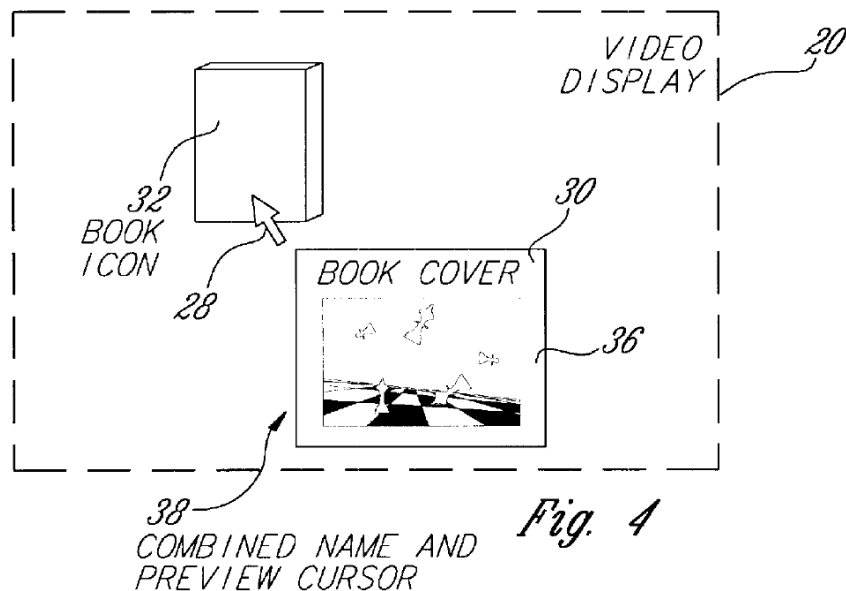


Figure 4 illustrates combined name and preview cursor 38 pointing to book icon 32. *Id.* at 2:47–49, 4:4–18. Combined name and preview cursor 38

includes pointing portion 28 in the shape of an arrow pointing to book icon 32. *Id.* at 3:65–68, 4:4–6, 4:8–9. Combined name and preview cursor 38 also includes name box 30, which displays the name of the object the cursor is pointing to. *Id.* at 3:39–43, 4:8–13. Lastly, combined name and preview cursor 38 includes preview portion 36, which holds a preview of the contents of the object the cursor is pointing to. *Id.* at 4:14–18. Other cursors include only some of this information; a name cursor may include only the pointing portion and the name, and a preview cursor only the pointing portion and preview portion. *Id.* at 3:30–43, 3:59–4:3.

To implement the display of cursors, the OS of the terminal maintains a message queue for each program that generates windows, and when a mouse event occurs, such as positioning or a mouse click, a message from the OS is placed into the queue for the program. *Id.* at 4:56–5:9. The application program can respond by passing, to the OS, information for the cursor, e.g., a text string for a name box and a pointer to graphical information for a preview portion. *Id.* at 5:47–65.

2. *Analysis of Claim 1*

a) *Preamble*

Petitioner does not assert that the preamble of the claim is limiting, but argues that Malamud teaches a “server system for modifying a cursor image to a specific image having a desired shape and appearance displayed on a display of a remote user’s terminal” as recited in the preamble of claim 1. Pet. 26–27. Petitioner cites Malamud’s “conventional cursor” displayed when the cursor is positioned at a location where no “named entity” is present and Malamud’s teaching that when the cursor is moved over a named entity the cursor image is modified to an information cursor including text or a graphical image related to the object on the display screen to which

the cursor is pointing. *Id.* (citing Ex. 1004, 2:66–3:1, 3:59–4:3, 5:32–44). Petitioner acknowledges that Malamud does not address the user terminal being connected to a server, but argues that connecting a user computer to a server was “desirable, beneficial, well known to [persons of ordinary skill in the art], and commonplace.” *Id.* at 27–28 (citing Ex. 1003 ¶¶ 88–94).

Patent Owner does not present any arguments relating to this showing.

Without determining whether or not the preamble is limiting, on this record, we determine that Petitioner has established sufficiently, for purposes of institution, Malamud teaches or suggests the recitations in the preamble of claim 1.

b) Limitation a

Petitioner cites Malamud’s disclosure of a preview cursor that displays data, including a bitmap of graphical information, which corresponds to a specific image, such as a book icon displayed on a video display, and argues that this teaches limitation a of claim 1. Pet. 28 (citing Ex. 1004, 3:59–4:18, 5:58–62, Fig. 3).

Patent Owner does not present any arguments relating to this showing.

On this record, we determine that Petitioner has established sufficiently, for purposes of institution, Malamud teaches or suggests the recitations in limitation a of claim 1.

c) Limitation b

For limitation b’s recitation of “cursor display code operable to modify said cursor image,” Petitioner cites Malamud’s message, passed by a window procedure to the operating system to indicate the type of cursor to display and the contents of that cursor. Pet. 28–29 (citing Ex. 1004, 5:47–53). Petitioner argues that “[t]he code that interprets the instructions in the application program, causes the message to be constructed and transmitted

. . . , and causes the cursor image to change from the original cursor to the shape of the information cursor is ‘cursor display code’ as it is ‘operable to modify said cursor image.’” *Id.* at 29 (citing Ex. 1003 ¶¶ 107, 169).

Petitioner appears to cite both code in the application program and code in the operating system as teaching or suggesting the cursor display code of limitation 1b. Petitioner cites testimony that indicates that, in *Malamud*, code in the application program in addition to code in the operating system and/or drivers would teach or suggest the cursor display code of this limitation. Ex. 1003 ¶ 107 (citing Ex. 1004, Fig. 6, elements 54, 56, and 57, and Fig. 7, element 58 (“which would be implemented in code in the application program,”), and citing Fig. 7 elements 60, 62, and 64 (“which would be implemented in the OS and/or drivers”)); *compare* Ex 1003 ¶ 169 (“The code that interprets those instructions and causes the cursor image to change from the original cursor shape to the shape of the information cursor is ‘cursor display code’”) *with* Pet. 29 (“The code that interprets the instructions *in the application program*, causes the message to be constructed and transmitted with the appropriate content and form, and causes the cursor image to change from the original cursor shape to the shape of the information cursor is ‘cursor display code’” (emphasis added)).

Patent Owner does not present any arguments relating to this showing.

On the present record and for the purposes of institution, Petitioner sufficiently shows that code in the operating system and code in the application program may each be computer code for modifying the display of the cursor image, and operable to modify the cursor image. Ex. 1004, 5:46–53, Fig. 7. On this record, we determine that Petitioner has established sufficiently, for purposes of institution, *Malamud* teaches or suggests the recitations in limitation b of claim 1.

d) Limitation c.i and c.iii.2

For the “specified content information” of limitation c.1, Petitioner cites Malamud’s application program, which, Petitioner argues, includes information for display on the user’s computer because it generates the content displayed in the application window. Pet. 30 (citing Ex. 1004, 3:36–39, 3:59–4:18, Fig. 4; Ex. 1003 ¶ 72). Petitioner argues that the first server computer transmitting the application program to the user terminal is taught or suggested by the knowledge of one of ordinary skill regarding the transmission of application programs by a server, as discussed with reference to the preamble. *Id.* at 29 (citing Ex. 1003 ¶¶ 88–94). Relatedly, for the limitation that “said specified content information further comprises information to be displayed on the display of said user’s terminal” (limitation c.iii.2), Petitioner argues that Malamud’s application program includes specified content information that includes information to be displayed on the user’s computer, such as the image of the book icon in Malamud’s Figure 4. Pet. 31.

Patent Owner argues that Petitioner’s assertion that Malamud’s application program includes information for display on a user’s terminal is a misreading of Malamud. Prelim. Resp. 45–51. Patent Owner contends that Malamud describes an application that works with an operating system that supports the use of information cursors. *Id.* at 46. Patent Owner asserts that “[a] user installs and configures Malamud’s application to, at a minimum, add the content to be displayed in the box(es) of an information cursor (*i.e.* a specific image) and to specify which information cursor type is to be displayed when a cursor is positioned over the Windows icon for a given named object/entity (cursor display instructions).” *Id.* (citing Ex. 2001 ¶ 71). But, Patent Owner argues, the related content to be displayed (*e.g.*,

the book icon in Figure 4) and the information to use in a combined name and preview cursor (*e.g.*, the information in the combined name and preview cursor in Figure 4) could not be pre-loaded in the Malamud application, because Malamud's application would not have knowledge, prior to installation, of what files are on a user's computer and the content of those files. *Id.* at 46–47 (citing Ex. 2001 ¶¶ 73, 75–76). Because of this lack of foreknowledge by the application, though Patent Owner concedes that Malamud describes messages being passed to the operating system including the content to be displayed in the boxes of the information cursor, Patent Owner contends that this information is specified by a user at some point, “most likely through a direct user input into the Malamud application.” *Id.* at 38–41 (citing Ex. 1004, 4:45–65; Ex. 2001 ¶¶ 40–43). Thus, Patent Owner argues, the Malamud application, even if served from a server, would still not meet the claim limitation, because it would not provide the specified content information, *i.e.* the content displayed on the screen and the content of the information cursor. *Id.* at 47–48.

We determine that, on this record, Petitioner establishes sufficiently for the purposes of institution that Malamud teaches or suggests limitation c.i and limitation c.iii.2 of claim 1. Petitioner's contention that an application program both provides a display of underlying information (content displayed on the screen) and an indication of the content of the information cursor appears to be supported by Malamud's description of programs that generate windows, with the operating system providing mouse positioning or mouse click messages to the procedure for the window associated with the mouse location. Ex. 1004, 4:53–5:10. Malamud describes that the window procedure determines what is displayed at the cursor position within the window and can tell the operating system what

kind of cursor to display and the contents and type of information to be displayed in the cursor. *Id.* at 5:22–62. Patent Owner’s arguments appear to be based on the use of information cursors only by the operating system – Patent Owner argues that “Malamud’s application is not described as having . . . knowledge prior to installation of what files are on a user’s computer and their content.” Prelim. Resp. 47.

But, as Petitioner argues, Malamud describes information cursors for use in an operating system *or in application programs*. Pet. 14, 30 (citing Ex. 1004, code (57), 3:36–39, 3:59–4:18, Fig. 4; Ex. 1003 ¶ 172). Patent Owner focuses on its understanding of Malamud as disclosing an application program that supports information cursors in a Windows operating system that has been enhanced to support information cursors. *See, e.g.*, Prelim. Resp. 39, 45–46. Patent Owner’s argument assumes *ab initio* that the objects being pointed to by the cursor are “files . . . on a user’s computer” and then argues that the application program providing the information cursor could not be pre-loaded, when installed, with information regarding those files on the user’s computer, since it would not know what those files would be. *Id.* at 47. Patent Owner argues that Petitioner errs in saying that the book icon of Figure 4 may be “generated by the application program” and contends instead that “Malamud explicitly describes that the only information transmitted from the Malamud application to the operating system is the identification of which type of information cursor the operating system should display, whether the boxes of the information cursor should show prior to the cursor being positioned over the icon, and what content should be displayed within its box(es).” *Id.* at 49 (citing Ex. 2001 ¶ 80).

On the present record and for the purposes of institution, however, Petitioner sufficiently shows that Malamud’s application program may be

providing the information displayed on the terminal. Petitioner supports its contentions with Malamud's discussion of messaging by the operating system to a window procedure associated with a window. Ex. 1004, 4:56–5:9, 5:28–30, 5:36–45, 5:47–6:16 (cited at Pet. 16–17); *see id.* at 4:53–65 (describing window procedures associated with windows and the operating system maintaining a message queue for each program that generates windows). “Information cursors are made available by an operating system to applications that are run on the operating system.” *Id.* at 3:6–8. Petitioner has sufficiently shown that information cursors in Malamud are for use in an operating system *or in application programs*, and that such application programs, rather than the operating system, may generate windows and make a determination (based on information regarding cursor location received from the operating system) that there is a named entity at the location pointed to by the cursor in an application window. While Patent Owner assumes that the book icon must be generated by the operating system, on the present record and for the purposes of institution, we accept Petitioner's argument that it may be generated by an application program.

Thus, we determine that Petitioner has established sufficiently, for purposes of institution, Malamud teaches or suggests the recitations in limitations c.i and c.iii.2 of claim 1.

e) Limitations c.ii, c.iii.1, and c.iv

For limitation c.ii, Petitioner argues Malamud teaches that the application program includes a cursor display instruction, including a location of cursor image data, and that the cursor display instruction and cursor display code are operable to cause the user terminal's display of the modified cursor image with the cursor image data. Pet. 30–31 (citing Ex. 1004, 3:50–4:8, 5:46–6:16).

For limitation c.iii.1, Petitioner reiterates its arguments regarding the transmission of the application program from a server responsive to a request from a user terminal, as discussed above with respect to the preamble and limitation c.i. Pet. 31.

For the recitations of limitation c.iv, Petitioner cites Malamud's preview cursor that includes content corresponding to the information displayed on the user's screen. Pet. 32 (citing Ex. 1004, code (57), 1:38–42, 2:10–12, 2:66–3:6, 3:50–4:18; Ex. 1003 ¶¶ 107, 178).

Patent Owner does not present any additional arguments relating to these limitations. We determine that Petitioner has established sufficiently, for purposes of institution, Malamud teaches or suggests the recitations in limitation c.ii, c.iii.1, and c.iv of claim 1.

f) Conclusion

For the reasons outlined above, on the present record, and for the purposes of institution, Petitioner shows that there is a reasonable likelihood that it would prevail in showing that claim 1 is unpatentable as obvious over Malamud.

3. Analysis of Claim 53

Claim 53 is a method claim that describes steps for modifying an initial cursor image displayed on a display of a user terminal to the shape and appearance of a specific image including content corresponding to a portion of information that is to be displayed on the display of the user's terminal in response to movement of the cursor image over a display of at least a portion of the information that is to be displayed. Ex. 1002, 22:30–58.

Petitioner's arguments with respect to the obviousness of claim 53 over Malamud are substantially similar to those with respect to claim 1. Pet.

34–42. Patent Owner presents substantially the same arguments with respect to Petitioner’s claim 53 contentions, referencing its arguments regarding claim 1. Prelim. Resp. 51–54.

For the same reasons discussed above, on the present record, and for the purposes of institution, Petitioner shows that there is a reasonable likelihood that it would prevail in showing that claim 53 is unpatentable as obvious over Malamud.

G. Obviousness over Malamud and Nakagawa

1. Nakagawa (Ex. 1005)

Nakagawa relates to the distribution of software over a network to a client computer in order to provide updated software to the client at predetermined times or in response to a user command. Ex. 1005, code (57), 1:13–16, 1:21–22. Nakagawa describes this is done to distribute software, correct bugs, add functions, and supply new versions for users. *Id.* at 1:34–39, 1:46–54, 1:66–2:6.

2. Analysis of Claim 1

Petitioner argues that one of ordinary skill in the art would have been motivated to distribute Malamud’s application programs over a network to lower costs and increase the speed at which users could obtain programs, and would have combined Nakagawa’s teachings of distribution over a network with Malamud’s teachings of an application program, resulting in the request for an application program from a server and the provision of the application program by the server. Pet. 21–24, 43–44 (citing Ex. 1005, 1:34–37, 1:46–49, 1:52–54, 3:1–5; Ex. 1003 ¶¶ 88–93, 205–208). Petitioner generally relies on or recapitulates the arguments addressed above with respect to obviousness over Malamud for the balance of the unpatentability argument. *Id.* at 42–45.

Patent Owner additionally refers to or recapitulates its arguments relating to Malamud, addressed above. Prelim. Resp. 54–57. Additionally, Patent Owner argues that Petitioner has not adequately presented a motivation to combine Malamud and Nakagawa because Nakagawa “has nothing to do with changing cursor images and does not relate to any server-browser interactions.” *Id.* at 57 (citing Ex. 2001 ¶ 82). The supporting testimony by Patent Owner’s declarant states exactly this – that Nakagawa “has nothing to do with changing cursor images and does not relate to any server-browser interactions.” Ex. 2001 ¶ 82. However, Patent Owner’s declarant follows this by testifying, regarding Petitioner’s declarant’s testimony:

83. I do not disagree with Dr. Rosenberg’s conclusion at ¶ 117 that a POSITA might be motivated to use Nakagawa’s system to at least distribute updates to Malamud’s application. Nor do I dispute that it would have been well within the technical skill of a POSITA to do so with a high likelihood of success.

84. However, downloading Malamud’s application from a server using Nakagawa’s system does not result in the system or methods of the Challenged Claims because of the shortcomings of Malamud discussed in connection with Ground 1.

Id. ¶¶ 83–84. Patent Owner’s declarant continues by testifying that the proposed combination would not teach or suggest the subject matter claimed because of the shortcomings of Malamud discussed with respect to the ground of obviousness over Malamud alone. *Id.* ¶¶ 84–87.

On the present record, Petitioner has presented a sufficient motivation to combine Malamud and Nakagawa and described how the combination would teach or suggest the claimed subject matter. *See* Pet. 21–24, 42–46; Ex. 1003 ¶¶ 88–93, 116 (describing the ease, benefits, and speed of distribution via network server), 117, 205–208; Ex. 2001 ¶ 83.

For the reasons outlined above, on the present record, and for the purposes of institution, Petitioner shows that there is a reasonable likelihood that it would prevail in showing that claim 1 is unpatentable as obvious over Malamud and Nakagawa.

3. *Analysis of Claim 53*

Petitioner's arguments with respect to the obviousness of claim 53 over Malamud and Nakagawa are substantially similar to those with respect to claim 1. Pet. 47–49. Patent Owner presents substantially the same arguments with respect to Petitioner's contentions, with reference to its arguments regarding claim 1. Prelim. Resp. 55–57.

For the same reasons discussed above, on the present record, and for the purposes of institution, Petitioner shows that there is a reasonable likelihood that it would prevail in showing that claim 53 is unpatentable as obvious over Malamud and Nakagawa.

H. *Obviousness over Nielsen and Malamud*

1. *Nielsen (Ex. 1006)*

Nielsen relates to text areas (“tooltips”) that display automatically when the user places the cursor over predetermined text on a display device, and to allowing a web page designer to specify tooltips for a page and browser software to display the specified tooltips. Ex. 1006, code (57), 1:13–16, 1:21–22. Nielsen explains that web page layouts are specified in hypertext markup language (HTML) and that web pages are retrieved via request to a network and viewed by user in a browser. *Id.* at 1:12–14, 1:19–22. Nielsen describes that “[w]eb pages in particular often include abbreviated forms of information because it is desirable to squeeze as much information as possible into a window without requiring the user to scroll the window” and thus a convenient way to add information to a web page to

explain abbreviated information to a user is necessary. *Id.* at 1:34–48.

Nielsen’s tooltips are proposed as a way to provide an additional display of information when the user places the cursor over text on the display device. *Id.* at 1:54–57, 3:35–41.

The web page designer specifies a tooltip for certain information using a tooltip tag in HTML. *Id.* at 1:66–2:19, 3:46–4:7. Nielsen provides examples of the display of a tooltip in a web page, for example in Figures 3 and 4, which each show examples of web pages, with Figure 4 showing the web page of Figure 3 with a tooltip displayed on it. *Id.* at 2:41–44, 4:44–55. Figure 3, a representation of a web page, is reproduced in part immediately below.

Flight Number	From City	To City
0931	LHR	SFO
0835	SFO	HKG
0073	EWR	SFO
0036	SFO	BOS
0806	HKG	SFO
0835	SFO	HKG
2936	LAS	SFO
2188	SFO	LAS
0931	LHR	SFO

This portion of Figure 3 shows a part of a web page displaying three columns of data, with flight numbers in the first column, “From Cit[ies]” in a second column, and “To Cit[ies]” in a third column. Fig. 3. Each city is listed as a three letter code, but Nielsen describes that it may not be clear what the three letter codes, such as “LHR” (the first “From City”) stand for.

Id. at 4:40–43. Figure 4, a second representation of the web page is reproduced in part immediately below.

Flight Number	From City	To City
--- London Heathrow ---		
0931	LHR	SFO
0835	SFO	HKG
0073	EWR	SFO
0036	SFO	BOS
0806	HKG	SFO
0835	SFO	HKG
2936	LAS	SFO
2188	SFO	LAS
0931	LHR	SFO

This portion of Figure 4 contains the same three columns, but “the user has placed the cursor over the text ‘LHR’” on the first line of the data in the second column “and has let the cursor remain stationary for a predetermined period of time,” after which “the tooltip text ‘London Heathrow’ is displayed, indicating that ‘LHR’ is an abbreviation for ‘London Heathrow.’” *Id.* at 2:42–43, 4:44–53, 7:8–14.

Nielsen discloses examples of tooltip tags that may have been used to display the tooltip in Figure 4. *Id.* at 5:1–3, Figs. 5(a)–5(c).

2. *Analysis of Claims 1 and 53*

a) *Combination of Nielsen and Malamud*

Petitioner contends that claims 1 and 53 are obvious in view of a combination of Nielsen and Malamud in which Malamud is used to modify the teachings of Nielsen such that the tooltip is not displayed above the object to which the cursor is pointing, but rather as part of a modified cursor image. Pet. 24–26, 49–55. Petitioner argues that one of ordinary skill in the

art would have been motivated to make this combination “because the user’s attention is often focused on the cursor when navigating a computer display through the use of a pointing device such as a mouse. *Id.* at 25 (citing Ex. 1003 ¶ 144). Petitioner argues that if Nielsen’s tooltip was displayed above a large object on the display screen, but the user’s cursor was hovering over the bottom portion of the object, the tooltip might be missed; Petitioner contends that the user would be less likely to miss the tooltip if the tooltip were part of a modified cursor image, as that is where the user’s attention would be focused. *Id.* (citing Ex. 1003 ¶ 145). Petitioner additionally argues that the change would be within the skill of one of ordinary skill in the art to accomplish and would have had a high chance of success. *Id.* at 25–26 (citing Ex. 1003 ¶ 145).

Patent Owner contends that the combination could not be accomplished. Prelim. Resp. 57–62. Patent Owner argues that “[t]he tool tip [of Nielsen] does not move, nor would it make any sense in Nielsen for it to move because the point of Nielsen is to show the tool tip near the associated webpage text.” *Id.* at 59 (citing Ex. 2001 ¶ 92). Patent Owner additionally argues that “the disparate and limited respective environments of Nielsen and Malamud reinforce that a POSITA would not have been motivated to combine them to arrive at [the challenged claims].” *Id.* at 56 (citing Ex. 2001 ¶¶ 92–106). Patent Owner additionally argues:

The HTML “tooltip” extension is specifically designed to only display the tooltip when the cursor is over the associated webpage text, so the user’s attention is already focused on the relevant webpage text for which it is desirable to show a tooltip. It would be contrary to the teachings of Nielsen to show the tooltip any other time because the cursor may be far away from the relevant text. Imagine, for example, the tooltip displaying “Heathrow” when the cursor is not positioned over the “LHR”

text but rather positioned over some other webpage text representing another airport or some other unrelated text. Now instead of a relevant tooltip, there would only be user confusion.

Id. at 59–60.

With reference to the Figure 3/Figure 4 example of Nielsen, Patent Owner argues that “Petitioner does not explain why anyone would want the tooltip ‘London Heathrow’ to be displayed as a modified cursor image when the cursor was moved over the letters ‘SFO’ or any text other than ‘LHR’ or anywhere else on the webpage far from the letters ‘LHR.’” *Id.* at 61–62. Patent Owner argues that the tooltip of Nielsen and the modified cursor image of Malamud each have a different “*raison d’être*” as the Nielsen tooltip is displayed when the cursor rests over text but the Malamud cursor is modified when the cursor is moved over content. *Id.* at 62, 65.

Patent Owner contends, “there is no support for the suggested combination and there is no reasonable expectation that a tooltip could even successfully fulfill its intended function if displayed in a modified cursor according to Malamud. *Id.* at 60 (citing Ex. 2001 ¶ 93). Patent Owner argues that the motivation to combine must be founded in the prior art, and Nielsen does not provide it. *Id.* (citing Ex. 2001 ¶¶ 99–106). Additionally, Patent Owner argues that Petitioner has provided no explanation as to how one of ordinary skill would accomplish the suggested modification. *Id.* at 62 (citing Ex. 2001 ¶¶ 96–101).

Because we have found that Petitioner has sufficiently shown, for the purposes of institution, a reasonable likelihood that it would prevail in showing that claims 1 and 53 are unpatentable as obvious over Malamud and over Malamud and Nakagawa, as discussed above (sections II.E.2 and II.F.2), we will institute, and our institution is necessarily on all claims and

all grounds. *See SAS Inst., Inc. v. Iancu*, 138 S. Ct. 1348, 1359–60 (2018); 37 C.F.R. § 42.108(a) (“When instituting . . . review, the Board will authorize the review to proceed on all of the challenged claims and on all grounds of unpatentability asserted for each claim.”). However, we provide these initial views, solely for the purposes of institution and on the current record.

Petitioner’s motivation to combine the references concerns replacing the cursor where the user’s attention is focused with Nielson’s tooltip in cases where “a large object that takes up a significant part of the display screen” triggers a tooltip, because the cursor may be too far from the top of the object, where Nielson teaches placing the tooltip; this does not appear to be describing the showing of a tooltip far away from relevant text, as Patent Owner argues. *See* Pet. 25; Prelim. Resp. 60–61. With respect to Patent Owner’s argument that the suggestion to combine the references and reasonable success must be founded in the prior art (Prelim. Resp. 60), it is well-established that “evidence of a motivation to combine need not be found in the prior art references themselves, but rather may be found in ‘the knowledge of one of ordinary skill in the art or, in some cases, from the nature of the problem to be solved.’” *DyStar Textilfarben GmbH Co.*, 464 F.3d at 1366 (emphasis omitted); *see also KSR*, 550 U.S. at 417 (“[T]he analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.”).

Additionally, while Patent Owner argues that the combination would find a cursor image displayed over unrelated content, it is not clear to us why the combination would cause that to happen. *See* Prelim. Resp. 60–61. Rather, as Petitioner argues, both Nielsen and Malamud describe providing

additional information for an object where a user's cursor is pointing. Pet. 24 (citing Ex. 1004, code (57), 1:35–42, 2:66–3:6, 3:59–4:18; Ex. 1006, code (57), 1:51–57, 3:35–41, 3:61–63, 3:65–4:4, 6:28–32, 7:8–14; Ex. 1003 ¶ 143). On the present record, the difference between the trigger for the tooltip of Nielsen (when a cursor is stationary over text for a minimum period of time) and the trigger for the information cursor of Malamud (when the cursor is moved over an object) is not so disparate as to require any combination to cause the tooltip to be displayed over unrelated text, as Patent Owner argues, and to the extent this argument requires the bodily incorporation of the trigger mechanism from Malamud into Nielsen, on the present record, we do not see that it is warranted by Petitioner's proposed combination. Prelim. Resp. 62; *see In re Keller*, 642 F.2d 413, 425 (CCPA 1981). We do not see why a person skilled in the art, considering both references, each of which includes additional display of information when a cursor is positioned over a specific area, would be unable to prevent the unwanted display of information when the cursor is not positioned over that area if using “the inferences and creative steps a person of ordinary skill in the art would employ.” *KSR*, 550 U.S. at 418.

With respect to the question of whether one of ordinary skill would have been able to modify Nielsen's HTML extension to perform the cursor modification, on the current record we note disagreement between the declarants. Petitioner's declarant argues that it would have been within the skill level of one of ordinary skill to “process[] Nielsen's tooltip instruction in a manner to display the tooltip information as part of a modified cursor as disclosed in Malamud,” and Patent Owner's contends that no adequate explanation has been provided. Pet. 25–26 (citing Ex. 1003 ¶¶ 144–145); Prelim. Resp. 62 (citing, *inter alia*, Ex. 2001 ¶¶ 96–100). As we institute,

the record may be developed to allow us to further explore these different positions.

3. *Analysis of Claim 38*

Claim 38 depends from claim 27. Ex. 1002, 21:39–41. Petitioner argues claim 38 is unpatentable for the same reasons provided regarding the unpatentability of claim 1 over the combination of Nielsen and Malamud, with the exception of (a) addressing the differences between claim 1 and claim 27 and (b) addressing the additional recitations of claim 38. Pet. 55–56.

At this time, Patent Owner provides no additional argument specifically addressing claim 38. Prelim. Resp. 64.

III. CONCLUSION

For the foregoing reasons, we have determined that there is a reasonable likelihood that Petitioner would prevail with respect to at least one claim on one of the grounds raised in the Petition. We therefore institute trial as to claims 1, 38, and 53 on all grounds stated in the Petition.

IV. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that *inter partes* review of claims 1, 38, and 53 of the '449 patent is instituted on all grounds in the Petition; and

FURTHER ORDERED that pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4, notice is hereby given of the institution of a trial; the trial will commence on the entry date of this decision.

IPR2023-01001

Patent 6,118,449

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