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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MICROSOFT CORP.,
Petitioner,

v.

SURFCAST, INC.,
Patent Owner.

IPR2022-00592
Patent 9,363,338 B2

Before SCOTT B. HOWARD, JASON W. MELVIN, and
MICHAEL T. CYGAN, *Administrative Patent Judges*.

MELVIN, *Administrative Patent Judge*.

JUDGMENT
Final Written Decision
Determining All Challenged Claims Unpatentable
35 U.S.C. § 318(a)

APPX00001

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I. INTRODUCTION

Microsoft Corporation (“Petitioner” or “Microsoft”) filed a Petition (Paper 1, “Pet.”) requesting institution of *inter partes* review of claims 1–13 (“the challenged claims”) of U.S. Patent No. 9,363,338 B2 (Ex. 1001, “the ’338 patent”). SurfCast, Inc. (“Patent Owner”) filed a Preliminary Response. Paper 6. We instituted review. Paper 9 (“Institution Decision” or “Inst.”).

Patent Owner filed a Response (Paper 13, “PO Resp.”), Petitioner filed a Reply (Paper 14, “Pet. Reply”), and Patent Owner filed a Sur-Reply (Paper 15, “PO Sur-Reply”). We held a hearing on July 12, 2023 (Paper 20, “Tr.”).

We have jurisdiction under 35 U.S.C. § 6. This Final Written Decision is issued pursuant to 35 U.S.C. § 318(a). For the reasons that follow, we determine that Petitioner has shown by a preponderance of the evidence that all of the challenged claims are unpatentable.

A. REAL PARTIES IN INTEREST

Petitioner identifies only itself as the real party in interest. Pet. 2. Patent Owner identifies only itself as the real party in interest. Paper 3, 2.

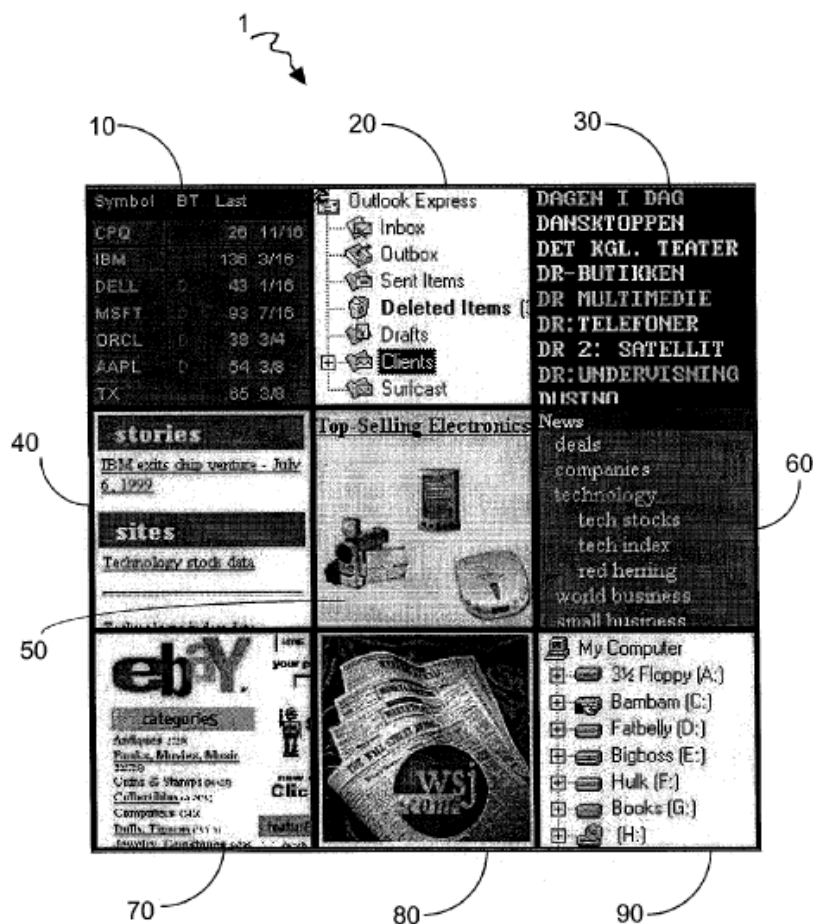
B. RELATED MATTERS

The parties both identify the following matter related to the ’338 patent: *SurfCast, Inc. v. Microsoft Corporation*, No. 6:21-cv-01018-ADA (W.D. Tex.). Pet. 3; Paper 3, 2. Petitioner additionally identifies *SurfCast, Inc. v. Microsoft Corporation*, No. 2:12-cv-00333-DBH (D. Me.), along with a number of IPR proceedings: IPR2013-00292, IPR2013-00293, IPR2013-00294, IPR2013-00295, IPR2014-00271, IPR2022-00423, IPR2022-00590, IPR2022-00591. Pet. 3–4.

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C. THE '338 PATENT

The '338 patent is entitled "System and Method for Simultaneous Display of Multiple Information Sources" and is directed to a graphical user interface that organizes content from a variety of information sources into a grid of tiles, each of which can refresh its content independently of the others. Ex. 1001, codes (54), (57). The '338 patent describes a graphical user interface "comprising a grid of tiles that resides on the user's computer desktop." *Id.* at 4:60–61. "The grid of tiles provides a uniform graphical environment in which a user can access, operate, and/or control multiple data sources on electronic devices." *Id.* at 4:61–64. Figure 1 is reproduced below.



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Ex. 1001, Fig. 1. Figure 1 illustrates “a user interface comprising a grid of tiles as might be depicted on a display screen.” *Id.* at 6:32–34; *see also id.* at 7:34–61 (describing the various tiles).

D. CHALLENGED CLAIMS

Claims 1 and 9 are independent. Claim 1 is reproduced below:

1. An electronic readable memory to direct an electronic device to function in a specified manner, the memory comprising:
 - a first set of instructions to partition at least a portion of a visual display of a client device into an array of tiles, a first tile in the array of tiles being associated with a first information source, the first information source being located on a first server device;
 - a second set of instructions for the client device to assign a first update rate to the first tile;
 - a third set of instructions to, at a first update time in accordance with the first update rate, send a conditional request from the client device to the first server device for an update of information in the first tile if the information from the first information source currently displayed in the first tile has not changed since a last update;
 - a fourth set of instructions for the client device to receive a response to the conditional request from the first server device; and
 - a fifth set of instructions for determining whether the client device updates the first tile in accordance with the response from the first server device.

Ex. 1001, 30:29–50. Claim 9 is reproduced below:

9. An electronic readable memory to direct an electronic device to function in a specified manner, the memory comprising:

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- a first set of instructions to partition by a first device at least a portion of a visual display into an array of tiles, a first information source being associated with a first tile in the array of tiles, the first information source being located on a second device, wherein the visual display is rendered according to instructions executed on the first device;
- a second set of instructions for the second device to assign first update rate for updating information from the first information source;
- a third set of instructions for the second device to, at a time for updating the information from the first information source in accordance with the first update rate, determine whether the information from the first information source has changed since the last update time and to send to the first device an update message including the updated information in accordance with the determination;
- a fourth set of instructions for the first device to receive an update message from the second device including updated information for updating the first tile; and
- a fifth set of instructions for the first device to update the tile in accordance with the updated information.

Id. at 31:23–32:12. The remaining claims depend directly from claim 1 or 9.

Id. at 30:51–32:31.

E. UNPATENTABILITY GROUNDS

Petitioner asserts the following unpatentability grounds:

Claims Challenged	35 U.S.C. §	Reference(s)/Basis
1–13	102	MSIE Kit ¹

¹ Microsoft Press. (1998). *Microsoft Internet Explorer Resource Kit*. (Ex. 1010). All citations are to the native pagination.

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Claims Challenged	35 U.S.C. §	Reference(s)/Basis
1–13	103	MSIE Kit
1–13	103	MSIE Kit, Jones ²
1–8	103	MSIE Kit, RFC2068 ³
1–8	103	MSIE Kit, RFC2068, Jones
1–13	103	Excel97 ⁴ , Igra ⁵
9–13	103	Excel97, Igra, Perez ⁶

Pet. 4. Petitioner relies also on the Declaration of Dr. Henry Houh. Ex. 1003.

F. LEGAL STANDARDS

A patent claim is unpatentable under 35 U.S.C. § 102 if “the four corners of a single, prior art document describe every element of the claimed invention, either expressly or inherently, such that a person of ordinary skill in the art could practice the invention without undue experimentation.”

Advanced Display Sys., Inc. v. Kent State Univ., 212 F.3d 1272, 1282 (Fed. Cir. 2000). “A single prior art reference may anticipate without disclosing a feature of the claimed invention if such feature is necessarily present, or inherent, in that reference.” *Allergan, Inc. v. Apotex Inc.*, 754 F.3d 952, 958 (Fed. Cir. 2014). Moreover, the reference must also “disclose[] within the four corners of the document not only all of the limitations claimed but also

² U.S. Patent No. 6,819,345 B1, filed Feb. 17, 1998 (Ex. 1011).

³ *Hypertext Transfer Protocol -- HTTP/1.1*, Network Working Group, Request for Comments 2068, R. Fielding, January 1997 (Ex. 1012).

⁴ Person, R. (1997). *Special Edition Using Microsoft Excel 97* (Ex. 1005). All citations are to the native pagination.

⁵ U.S. Patent No. 6,701,485 B1, filed June 15, 1999 (Ex. 1007).

⁶ U.S. Patent No. 5,319,777, issued June 7, 1994 (Ex. 1013).

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all of the limitations arranged or combined in the same way as recited in the claim.” *Net MoneyIN, Inc. v. Verisign, Inc.*, 545 F.3d 1359, 1371 (Fed. Cir. 2008). However, “the reference need not satisfy an *ipsissimis verbis* test.” *In re Gleave*, 560 F.3d 1331, 1334 (Fed. Cir. 2009).

A patent claim is unpatentable as obvious 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. 35 U.S.C. § 103. Obviousness is resolved on the basis of underlying factual determinations including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of ordinary skill in the art; and (4) objective evidence of non-obviousness.⁷ *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

“In an [*inter partes* review], the petitioner has the burden from the onset to show with particularity why the patent it challenges is unpatentable.” *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016) (citing 35 U.S.C. § 312(a)(3) (requiring *inter partes* review petitions to identify “with particularity . . . the evidence that supports the grounds for the challenge to each claim”)).

II. ANALYSIS

A. LEVEL OF ORDINARY SKILL IN THE ART

Petitioner contends that a person of ordinary skill in the art “would have had a Master’s degree in software engineering or computer science (or equivalent experience working in industry) and several years of experience

⁷ Patent Owner has not submitted such objective evidence here.

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designing, writing or implementing software products, either at the application or operating system level.” Pet. 11. Petitioner submits further that skilled artisans “would have been familiar with various technological concepts, including those relating to user interfaces, operating systems and software applications, basic computer functionality, networking and data processing.” *Id.* Patent Owner does not challenge or otherwise address Petitioner’s definition (*see generally* PO Resp.), and we adopt it here because it reflects the level of skill in the prior art.

B. CLAIM CONSTRUCTION

We construe claims according to the standard used in the federal courts in civil actions under 35 U.S.C. § 282(b), which is articulated in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc). *See* 37 C.F.R. § 42.100(b). Under *Phillips*, the “words of a claim ‘are generally given their ordinary and customary meaning,’” which is “the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application.” *Phillips*, 415 F.3d at 1312–13.

In IPR2013-00292, the Board construed a number of terms in the ’403 patent,⁸ which is the “ultimate parent” of the ’338 patent through a chain of continuations and continuations in part. IPR2013-00292, Paper 93 (Ex. 1017, the “403 FWD”).⁹ *See* Pet. 1. Because the ’403 patent is the

⁸ U.S. Patent No. 6,724,403 (Ex. 1019).

⁹ The Federal Circuit affirmed the 403 FWD’s unpatentability determinations. *SurfCast, Inc. v. Microsoft Corp.*, 639 F. App’x 651 (Fed. Cir. 2016).

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'338 patent's "ultimate parent," Petitioner submits that the 403 FWD constructions drive the proper constructions here. *Id.* at 12–19; Pet. Reply 1–13. Moreover, Petitioner argues, collateral estoppel bars Patent Owner from contesting constructions of the same terms in the '434 patent.¹⁰ Pet. Reply 1 (citing *XY, LLC v. Trans Ova Genetics*, 890 F.3d 1282, 1294–95 (Fed. Cir. 2018)). Patent Owner argues that because the 403 FWD applied the "broadest reasonable interpretations," it does not have preclusive effect here, where we construe claims using the *Phillips* standard. PO Sur-Reply 1 (citing *SkyHawke Techs., LLC v. Deca Int'l Corp.*, 828 F.3d 1373, 1376 (Fed. Cir. 2016)). We need not resolve that dispute, because we conclude that, to the extent the 403 FWD construed terms applicable in this proceeding, those constructions comport with the *Phillips* standard.

Petitioner also discusses constructions by the United States District Court for the District of Maine, which also construed terms of the '403 patent. *See* Pet. 13–19; Pet. Reply 7, 23; Ex. 1018.

Other than as discussed below, we conclude no additional claim term requires construction. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (noting that "we need only construe terms 'that are in controversy, and only to the extent necessary to resolve the controversy'" (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999))).

¹⁰ Patent Owner does not dispute that the '403 patent and '434 patent specifications substantively match.

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1. “tile”

Claim 1 recites “instructions to partition at least a portion of a visual display of a client device into an array of tiles, a first tile in the array of tiles being associated with a first information source.” Ex. 1001, 30:32–35.

Claim 9 recites a parallel limitation. *Id.* at 31:26–29.

Petitioner argues that a “tile” is “a graphical user interface element whose content may be refreshed and that, when selected, provides access to an information source.” Pet. 11–15; Pet. Reply 1–8. The 403 FWD construed “tile” the same as Petitioner’s proposed construction here. Ex. 1017, 7–10.

Patent Owner submits that a “tile” is “a graphical representation of an associated information source capable of displaying refreshed content, the graphical representation being persistent and selectable to provide access to underlying information of the associated information source, but providing a representation of the underlying information that is more limited than the representation provided by a window.” PO Resp. 11 (emphasis omitted); PO Sur-Reply 2–10.

We do not read the claim language as counseling in favor of one party’s proposed construction.

The specification discusses “Tile Objects” at some length. Ex. 1001, 10:34–14:12. It states that “[a] tile presents content from any information source.” *Id.* at 10:37–38. Further, “[t]iles are selectable and live” and the specification explains that “tiles are live in that each contains real-time or near real-time information” and, when selected, “the tile instantly provides the user with access to the underlying information.” *Id.* at 12:8–10.

The specification frames tiles as contrasting with two other graphical user interface elements—icons and windows. *Id.* at 10:38–11:14. It presents

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tiles as “a third graphical representation of programs and files” and explains that “each tile is a viewer of a single information source.” *Id.* at 11:1–4. To distinguish tiles, the specification states that, unlike icons, a tile “contains continually refreshed content” and compared to windows, “a tile will typically be smaller in size than a window, allowing the user to view multiple tiles simultaneously if desired.” *Id.* at 11:9–14. Significantly, that comparison to windows uses exemplary characteristics without defining aspects applicable to all tiles. The specification asserts that “many tiles may be displayed simultaneously without overlapping with one another in the way that windows must necessarily do.” *Id.* at 11:19–22. That said, the specification also gives an example of “expanding tile 406 to occupy the full area of the display” (*id.* at 11:54–56), demonstrating that size does not define a tile or distinguish a tile from a window.

According to Patent Owner, a tile is a “graphical representation of an associated information source,” not merely a graphical user interface element. PO Resp. 9–11. Patent Owner submits that “a graphical user interface element,” as Petitioner proposes, “does not require a tile to be graphically displayed and does not require it to be a representation of anything.” *Id.* at 10. In Patent Owner’s view, while such an element is used for user interaction, it “need not be a representation of an information source or its underlying information.” *Id.* at 10. As Petitioner points out, however, other claim language requires tiles be displayed. Pet. Reply 2. We therefore do not agree with Patent Owner that Petitioner’s construction is deficient.

Moreover, in light of Petitioner’s unpatentability contentions for MSIE Kit discussed below, the graphical-representation aspect of Patent Owner’s construction would not impact our conclusion. Patent Owner

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contends otherwise, in a general way, but does not explain that contention. *See* PO Resp. 11 (“These differences impact the prior art analysis.”), 35–43 (the cited discussion, which does not distinguish MSIE Kit’s asserted tiles based on whether they provide a representation of an information source or its underlying information).

Next, Patent Owner argues that a tile must provide “a representation of the underlying information that is more limited than the representation provided by a window.” PO Resp. 6–7, 11–16; *see also* Tr. 53:10–54:8. We do not agree.

While, as described above, the specification purports to distinguish tiles from windows, it does so with permissive terms rather than a restrictive definition. *See* Ex. 1001, 11:11–32. During the hearing, Patent Owner was unable to describe particular restrictions that would embody the limited representation. For example, Patent Owner asserted that degraded resolution would satisfy its proposed construction (Tr. 64:24–65:11) but that does not comport with a distinction from a window. A window may depict content at a variety of zooms, some of which would show an image with degraded resolution. *See* Tr. 68:6–15 (Patent owner discussing how pixels can be lost on a zoomed image). Patent Owner asserts that a window with zoom functionality lacks “a fundamentally or different in nature likeness or image.” Tr. 68:11–15. But that assertion is detached from Patent Owner’s proposed construction and unsupported by the specification. We conclude that the specification does not sufficiently distinguish a tile from a window to support Patent Owner’s proposed construction.

In fact, Patent Owner admits that the specification does not have a clear definition but insists that it nonetheless defines a tile “as something

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other than either an icon or a window.” Tr. 48:20–25. We do not agree. When identifying features that the specification describes to distinguish tiles from windows, Patent Owner points to other claim limitations, such as “[s]electability to provide access to the underlying information.” Tr. 49:7–10; *see also id.* at 50:3–8 (asserting a tile must be refreshable). Although such limitations may capture aspects that the specification uses to distinguish tiles from other graphical interface elements, they do not support further construing “tile” narrowly as Patent Owner asserts. Stated otherwise, the specification’s distinctions for tiles over icons or windows already appear as claim limitations and do not counsel in favor of further limiting “tile.”

Further, Patent Owner’s construction is unclear whether a tile must provide a graphical representation of its associated information source or of the information underlying that source. The proposed construction first requires a tile represent the source but then additionally requires it “provid[e] a representation of the underlying information,” seemingly allowing no room for a tile that represents only the information source. PO Resp. 6–7. Those competing requirements would not comport with the specification. The exemplary tiles do not necessarily represent a source’s underlying information, but instead may relate to the source itself. *See* Ex. 1001, Fig. 4 (tile 410, displaying the name of a broadcast signal; tile 408, displaying an icon indicating “New Mail!”), 11:56–65 (describing tile 408), 11:66–12:12 (describing tile 410). Patent Owner, at oral hearing, stated that tile 410 is an example of the claimed tile, thus confirming that the claimed “tile” encompasses at least one such exemplary tile. Tr. 50:5–22. Thus, Patent Owner’s proposed addition regarding the nature of a tile’s representation

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would create an internal inconsistency in the meaning of a tile. We do not adopt Patent Owner’s proposed restriction on the nature of a tile’s representation.

Next, Patent Owner attempts to distinguish a tile “whose content may be refreshed” from one “capable of displaying refreshed content.” PO Resp. 16–17. In this regard, Patent Owner distinguishes Petitioner’s construction, which Patent Owner asserts “does not require that [tile] element to be capable of displaying the refreshed content.” *Id.* We agree with Petitioner that the parties’ different language regarding refreshed content does not implicate any aspect of our unpatentability analysis. *See* Pet. Reply 4–5.

Finally, Patent Owner contends that a tile must be “selectable to provide access to underlying information of the associated information source,” not just an element that, “when selected, provides access to an information source.” PO Resp. 17–20. As Patent Owner explains, it seeks a distinction that “tiles themselves are selectable to provide access to underlying information of associated information sources, rather than access being provided by selecting the contents of a tile.” *Id.* at 18. Patent Owner argues that Petitioner’s construction, referring to an element “that, when selected, provides access to an information source,” does not require the tile itself be selectable. *Id.* at 19–20. Patent Owner relies primarily on the specification’s description that “[t]iles are selectable and live” and that, “[w]hen a tile is selected, whether by mouse click or otherwise, the tile instantly provides the user with access to the underlying information.” *Id.* at 17–18 (quoting Ex. 1001, 12:8–10). Petitioner relies on that same specification disclosure to argue that we should not restrict the manner of

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selecting a tile. Pet. Reply 6. The specification indicates that a tile may be selected “by mouse click or otherwise.” Ex. 1001, 12:8–9.

Petitioner points out that the 403 FWD concluded that when “a user selects a link *included* in an Active Desktop item, the user necessarily selects the Active Desktop item.” Ex. 1017, 36. That conclusion, which was part of a decision affirmed on appeal, *Surfcast, Inc. v. Microsoft Corp.*, 639 F. App’x 651 (Fed. Cir. May 9, 2016), indicates that Patent Owner’s proposed claim construction here would not preclude the claims from reading on MSIE Kit, because selecting a link within an item selects the item itself. Thus, Patent Owner’s construction would not affect the outcome here. Regardless, we agree with Petitioner that, when the specification discloses a tile may be selected “by mouse click or otherwise,” it indicates a broader range of selection mechanisms than proposed by Patent Owner. *See* Pet. Reply 7.

Although Patent Owner asserts that its proposed construction alone focuses on tiles themselves being selectable, we do not view the two constructions as supporting that distinction. As Petitioner points out, its proposed construction requires that a tile, “when selected, provides access to an information source” and therefore requires “that tiles can be selected.” *Id.* at 7. Although Patent Owner seeks a construction that would not permit selection through activation of a link within a tile, we do not read the specification as so restrictive.

Based on the foregoing, and consistent with the Board’s prior construction, we construe “tile” as “a graphical user interface element whose content may be refreshed and that, when selected, provides access to an information source.”

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2. “partition at least a portion of a visual display of a client device into an array of tiles”

Claim 1 recites “instructions to partition at least a portion of a visual display of a client device into an array of tiles.” Ex. 1001, 30:32–33. Claim 9 recites a parallel limitation. Ex. 1001, 31:26–27; *see* PO Resp. 20.

The Petition construes the partition limitation according to how the 403 FWD construed a similar phrase, “partitioning a visual display of the device into an array of tiles,” to mean “dividing a display or window into two or more tiles.” Pet. 18 (quoting Ex. 1017, 12–13). Petitioner notes that the Maine court construed that phrase to mean “dividing some or all of a display into an array of tiles,” where “array of tiles” meant “multiple tiles displayed in an orderly fashion.” *Id.*; Ex. 1018, 27–38.

Patent Owner submits that the partitioning limitation means “dividing some or all of a display into multiple tiles displayed in an orderly fashion.” PO Resp. 20. In Patent Owner’s view, because the claim already recites “tiles,” it is insufficient for “array” to require simply two or more tiles. *Id.* at 21. Rather, argues Patent Owner, “array” should require the tiles be displayed in an orderly fashion. *Id.*

We conclude, below, that our unpatentability analysis would not change by adopting one party’s construction for “array of tiles.” Accordingly, we decline to construe the phrase.

3. “assign a first update rate for updating information from the first information source”

Claim 1 recites a set of instruction for a “client device to assign a first update rate to the first tile.” Ex. 1001, 30:37–38. Independent claim 9 recites “the first information source being located on a second device” and a set of

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instructions “for the second device to assign a first update rate.” *Id.* at 31:29–30, 32:1–3. In other words, claim 1 requires the device displaying tiles assign an update rate, while claim 9 requires the device hosting the information source assign an update rate.

Patent Owner points to Petitioner’s contention that MSIE Kit satisfies claim 9’s update-rate assignment when a CDF file on the hosting computer is used to set the update rate for an Active Desktop item on a client computer. PO Resp. 23. In Patent Owner’s view, a “server cannot assign a schedule because the author of the CDF file has already assigned the schedule.” *Id.* Patent Owner therefore proposes we construe “assign” to mean “to deterministically impose a specific refresh rate on a tile based on whatever input factors and algorithms have been provide by the system designer and/or user.” *Id.* at 25.

Petitioner responds that Patent Owner’s proposed construction departs from the ordinary meaning of “assign” without adequate support. Pet. Reply 10. Petitioner additionally submits that, in the 403 FWD, the Board determined that downloading a CDF file satisfied claim language directed to “[automatically] assigning a first refresh rate to a first tile.” *Id.* at 11 (citing Ex. 1017, 31–38; Ex. 1019, 24:23–25, 24:61–62).

Patent Owner points to the specification’s description of Figure 24, in which “grid generator 2404 on the server creates a grid of tiles according to user-specified content.” PO Resp. 24 (quoting Ex. 1001, 27:57–59). The specification adds that, in an alternative embodiment, “the tile creator automatically assigns a priority to the tile based on the type of the information content.” Ex. 1001, 27:67–28:2. Petitioner submits that Patent Owner’s cited passages discuss “priority” rather than “update rate” and that

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Patent Owner fails to explain why the passages would support Patent Owner's proposed construction. Pet. Reply 10.

We agree with Petitioner that there is no need to construe "assign" here, beyond holding that Patent Owner's proposed construction is unwarranted. The specification uses "assign" in various ways, without indicating the special meaning Patent Owner seeks. For example, it states that the software "is able to recognize the type or format of the information source and assign properties to tiles according to the type." Ex. 1001, 7:54–56. It explains that, when assigning "a refresh rate to a tile according to an identifier presented with each source of information, the nature of the identifier may vary according to the type of data or the protocol that is employed for its transmission." *Id.* at 9:55–59; *accord id.* at 9:40–10:24 (explaining the ability to assign tile update rates depending on a variety of identifiers).

Moreover, the specification makes clear that "assign" is not used in a deterministic fashion. When discussing automatically assigning an update rate, it states that "in the absence of initial preferences specified by the user, the present technology is able to assign a rate at which the display of a tile is refreshed according to" a number of factors. Ex. 1001, 9:40–46. That assignment does not "deterministically impose a specific refresh rate" as Patent Owner would have us construe "assign," because it depends on multiple factors and may be overridden by a user's preferences.

We are also not persuaded that the specification's description of "grid generator 2404" supports Patent Owner's proposed construction. That portion of the specification describes a manner of creating a grid of tiles on a server and delivering that grid to a client. Ex. 1001, 27:51–28:67. In the

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described embodiment, although “tile creator 2408-1” can assign a priority to a tile and tile refresh rates are preferably “allocated according to the priorities associated with each tile,” a user may nonetheless manually update a tile ((*id.* at 27:64–28:2, 28:49–56), showing that even an assigned update rate is not “deterministic” as Patent Owner contends.

We conclude that the specification does not provide a sufficient basis on which to limit the “assign” claim language beyond its ordinary meaning.

4. “send a conditional request from the client device to the first server device for an update of information in the first tile if the information from the first information source currently displayed in the first tile has not changed since a last update”

Claim 1 recites instructions to “send a conditional request from the client device to the first server device for an update of information in the first tile if the information from the first information source currently displayed in the first tile has not changed since a last update.” Ex. 1001, 30:40–44.

Patent Owner contends that the conditional-request limitation “imposes a condition precedent that must be satisfied before sending the conditional request.” PO Resp. 25–29. Petitioner, on the other hand, reads the claim language to require that the server determine whether relevant information has changed and sending a response. Pet. Reply 11–13.

Based on the full record, and for the reasons given below, we do not agree with Patent Owner that the “if clause” imposes a condition precedent before the request is sent from the first client device to the server. Instead, we agree with Petitioner that the limitation simply requires sending a conditional request that asks if tile-displayed information that is stored at the server “has not changed since a last update.”

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Both parties direct us to the specification’s recitation of a conditional GET of HTTP1.1. *See* PO Resp. 27 (citing Ex. 1001, 25:32–33); Pet. Reply 12 (“Rather, as the petition pointed out, the only plausible support for this claim language comes from a passage in the specification that refers to the two ‘conditional gets’ of HTTP1.1, neither of which entail a client making a determination that information displayed at a client ‘has not changed’ before sending a conditional request.”). That section of the specification states that “a pre-fetch utility such as URL pre-fetch manager 2208 can be implemented.” Ex. 1001, 25:23–24. One strategy for performing the pre-fetch is the conditional GET:

Another function of a pre-fetch utility is to periodically check the validity of the items in the cache to make sure they are up to date. As would be familiar to one skilled in the art, some of the new HTTP1.1 methods would prove very useful for this, namely the conditional gets.

Ex. 1001, 25:29–33. According to the HTTP1.1 protocol (Ex. 1012), a GET request “retrieve[s] whatever information (in the form of an entity) is identified by the Request-URI.” Ex. 1012, 50. Such a GET is called a “‘conditional GET’ if the request message includes an If-Modified-Since, If-Unmodified-Since, If-Match, If-None-Match, or If-Range header field. A conditional GET method requests that the entity be transferred only under the circumstances described by the conditional header field(s).” Ex. 1012, 50.

That conditional GET, which both parties point to as support, is consistent with Petitioner’s construction, which we adopt. The conditional GET has the condition in the request, not as a condition precedent to sending the request. *See* Ex. 1012, 50; Ex. 1003 ¶¶ 180–181. The conditional GET in

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the HTTP1.1 protocol does not discuss a condition precedent to sending the request.

In its Sur-reply, Patent Owner also directs us to a different portion of the specification relating to conditional tile content. PO Sur-reply 12 (citing Ex. 1001, 13:26–28). We do not agree with Patent Owner’s argument based on that portion of the specification. That section of the specification involves tiles communicating with each other and having “conditional content.” *See* Ex. 1001, 13:26–28. Such conditional content refers to “the content of one tile depend[ing] upon the content of another.” Ex. 1001, 13:28. This has nothing to do with the conditional request claimed. *See* Ex. 1001, 13:26–28.

We have considered Patent Owner’s remaining arguments and, for the reasons given below, do not find they support imposing a condition precedent.

First, we do not agree that the conditional request construction “encompass a mere coincidence.” PO Resp. 26–27. In making that argument, Patent Owner does not accurately represent Petitioner’s arguments. Petitioner never argues that the claim was broad enough to cover a mere coincidence. *See* Pet. 29–30. Instead, as discussed above, Petitioner’s construction requires a specific type of request to be sent. *See id.*; Pet. Reply 13, 16–17.

Second, we do not agree with Patent Owner’s arguments relating to the difference between the words “while” and “if” or the definition of the word “if.” *See* PO Resp. 26–27; PO Sur-reply 13. As with the prior argument, Patent Owner is not accurately representing Petitioner’s claim construction, which focuses on the type of request that is sent as opposed to its timing. *See* Pet. 29–30; Pet. Reply 13.

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Third, we agree with Patent Owner that its condition precedent construction does not always result in the claim language being satisfied. *See* PO Sur-reply 14. But we find Patent Owner’s argument inapposite. For the reasons discussed above, we do not believe that the “if clause” imposes a condition precedent on when the conditional request is sent.

Accordingly, for the reasons set forth above, the “if clause” does not impose a condition precedent on when the conditional request is sent. Instead, the “if clause” describes the content of the conditional request.

C. OBVIOUSNESS OVER MSIE KIT AND RFC2068

Petitioner contends that MSIE Kit discloses each limitation of claims 1–13. Pet. 23–37. It additionally asserts obviousness over MSIE Kit and RFC2068 for claims 1–8, based on an alternative view of the conditional-request limitations (referred to as “elements [1.d] and [6.b]”). Pet. 42–46. For other limitations, Petitioner relies on MSIE Kit alone, as set forth in its anticipation ground. *See* Pet. 23 (“Additional grounds, building on and incorporating the basic analysis and addressing arguments Patent Owner may raise, are also included below.”).

Because Petitioner’s obviousness contentions are consistent with our construction for the conditional-request limitations, we address them first. Patent Owner disputes only certain aspects of Petitioner’s contentions, and we address those disputes below. We have reviewed the undisputed aspects of Petitioner’s contentions and conclude that Petitioner has shown that MSIE Kit discloses those limitations for the reasons given by Petitioner. Pet. 23–37, 42–46.

MSIE Kit describes features of Microsoft Windows Internet Explorer 4, including Microsoft Active Desktop functionality in conjunction

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with Windows 98 or Windows NT. Ex. 1010, 174, 180, 183, 211. MSIE Kit describes Active Desktop items presented on a user's desktop. *Id.* Each item is associated with an information source on the Web. *Id.* at 174, 176, 177, 180, 183. Each item is presented typically on the desktop in a borderless frame without a title bar or scrollbars. *Id.* at 176, 183. By default, the items are laid out in a 3x2 grid. *Id.* at 176–177, 180, 183. Each item displays information from a URL and is updated periodically. *Id.* at 176–177, 180, 188, 201. The user may choose how frequently to update, or a content provider may specify the frequency in a Channel Definition Format, or “CDF” file. *Id.* at 177, 183, 188, 212–15, 223.

RFC2068 is a specification describing the Hypertext Transfer Protocol, version 1.1. Ex. 1012. It describes conditional GET requests, and provides that such requests may use an “If-Unmodified-Since” statement, which cause the server to return the requested information only if it has not changed since a specified time. *Id.* at 124.

1. “partition at least a portion of a visual display of a client device into an array of tiles”

Claim 1 recites “instructions to partition at least a portion of a visual display of a client device into an array of tiles.” Ex. 1001, 30:32–33. Petitioner contends that MSIE Kit discloses partitioning a client display into an array of tiles by disclosing that, “[b]y default, Internet Explorer lays out new Active Desktop Items on a 3 by 2 grid.” Ex. 1010, 183. According to Petitioner, “[a] ‘grid’ is a form of an array because it is an ordered arrangement of items in a non-overlapping row/column format.” Pet. 24–25. Petitioner contends that Active Desktop items are tiles because they are “rectangular, borderless frames on the user's display that a user may interact

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with,” “provide access to an information source when selected,” and “can be refreshed at a specified rate assigned to that desktop item.” Pet. 26.

Patent Owner argues that Active Desktop items are not tiles and are not partitioned into an array. PO Resp. 35–43. Patent Owner argues that Active Desktop items are not tiles because they do not provide a representation of an associated information source more limited than the full information provided by a window. PO Resp. 36–38. Patent Owner’s argument is premised on its claim construction, which we do not adopt. *See supra* at 10–14 (§ II.B.1). Accordingly, the argument is not persuasive.

Next, Patent Owner argues that Active Desktop items are not selectable to provide access to underling information of the associated information source. PO Resp. 38–40. In particular, Patent Owner argues that clicking a hyperlink or host spot within an Active Desktop item cannot select the item because that action relates to the item’s content rather than the item itself. *Id.* at 38–39. We do not agree. As discussed above, we do not construe “tile” as limited to being selectable in a certain manner. *See supra* at 14–15 (§ II.B.1). Accordingly, Patent Owner’s argument is not persuasive.

Patent Owner argues that MSIE Kit does not disclosure partitioning at least a portion of a visual display into an array of tiles. PO Resp. 40–43. In Patent Owner’s view, because MSIE Kit discloses that Active Desktop items may be placed in arbitrary positions (Ex. 1010, 175), its tiles are not displayed in an orderly fashion. PO Resp. 41. We do not agree. When the grid of Active Desktop items is created, the location of the relative position of the Active Desktop items is not arbitrary; instead, by default the Active Desktop items are arranged in a 3 by 2 grid. *See* Ex. 1010, iii; Ex. 1065 ¶¶ 7, 10–11.

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Moreover, although we do not construe the claims to require enforced arrangement, MSIE Kit also discloses that the default grid arrangement can be enforced. As Petitioner’s expert testified, “MSIE Kit discloses that administrators can prevent users from rearranging or removing Desktop Items, including locking down the ‘default’ Active Desktop layout of a ‘3 by 2 grid’ of Desktop Items.” Ex. 1003 ¶ 150 (citing Ex. 1010, 235, 601); *see also* Ex. 1065 ¶ 7; Ex. 1010, 235 (“Once you’ve built your custom packages, you can use the IEAK Configuration Wizard to lock down channel options and restrict users from changing settings.”), 601 (“You can control, or *lock down*, features and functions in these areas. . . . More important, you can prevent users from adding or deleting channels that you have preset, or *from rearranging or adding Active Desktop items*.” (second emphasis added)). When the default grid is locked according to MSIE Kit’s teachings, it necessarily maintains the grid without any arbitrary movement or overlap. *See* Ex. 1003 ¶ 150; Ex. 1065 ¶ 7.

Based on the evidence, and under either party’s definition of “partition at least a portion of a visual display of a client device into an array,” we agree with Petitioner that MSIE Kit discloses partitioning at least a portion of a visual display of a client device into an array of tiles.

2. “send a conditional request from the client device to the first server device for an update of information in the first tile if the information from the first information source currently displayed in the first tile has not changed since a last update”

Claim 1 recites instructions to, “at a first update time in accordance with the first update rate, send a conditional request from the client device to the first server device for an update of information in the first tile if the

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information from the first information source currently displayed in the first tile has not changed since a last update.” Ex. 1001, 30:39–44.

Petitioner submits that MSIE Kit discloses “web crawling functionality” in which Internet Explorer periodically examines a linked web page. Pet. 29 (citing Ex. 1010, 191–92, 215–16, 176, 177, 180, 182; Ex. 1003 ¶¶ 161–162). Petitioner submits further that it would have been obvious to include RFC2068’s conditional GET functionality in MSIE Kit’s client device “to, for example, download the remainder of a web page (or other web document) when an earlier download was interrupted.” Pet. 43 (citing Ex. 1012, 123; Ex. 1024, 160, 79). Petitioner points out that MSIE Kit discusses RFC2068 and discloses the conditional HTTP GET method. *Id.* at 44 (citing Ex. 1010, 125, 129–30, 192, 787). Petitioner contends that the combination would have involved arranging old elements with each performing a known function and yielding expected results. *Id.* at 44.

Patent Owner argues first that “send a conditional request” requires conditionally sending a request, in that the request must be sent only when a condition is satisfied. PO Resp. 44. As discussed above, we do not agree with Patent Owner’s proposed construction for the conditional-request limitation. *See supra* at 19 (§ II.B.4). Accordingly, Patent Owner’s argument that the claim language “imposes a condition precedent that must be satisfied before sending the conditional request” is not persuasive. *See* PO Resp. 44.

Patent Owner does not otherwise challenge Petitioner’s contentions. We conclude that Petitioner has shown by a preponderance of the evidence that it would have been obvious to use MSIE Kit’s web-crawling

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functionality with RFC2068's conditional GET method to request an update if the server's information has not changed since a last update.

3. Conclusion

Patent Owner does not otherwise challenge Petitioner's showing as to obviousness of claims 1–8. Having reviewed the record, we conclude Petitioner has shown by a preponderance of the evidence that MSIE Kit and RFC2068 render those claims unpatentable as obvious.

D. ANTICIPATION BY MSIE KIT

Petitioner contends MSIE Kit discloses each limitation of claims 1–13. Pet. 23–37. Because our obviousness discussion already addresses Patent Owner's challenges to those contentions regarding claims 1–8, we need not repeat them. Additionally, having concluded that Petitioner has proven obviousness for claims 1–8, we do not address anticipation for those claims.

As discussed above, we conclude that MSIE Kit discloses claim 1's partition limitation. *See supra* at 23 (§ II.C.1). Claim 9 recites a parallel limitation. Ex. 1001, 31:26–27; PO Resp. 20. Accordingly, our conclusion regarding claim 1 applies also to claim 9.¹¹

For independent claim 9, and claims 10–13, which depend from claim 9, Patent Owner disputes only one additional aspect of Petitioner's contentions, which we address below. We have reviewed the undisputed aspects of Petitioner's contentions and conclude that Petitioner has shown that MSIE Kit discloses those limitations for the reasons given by Petitioner. Pet. 23–37.

¹¹ Claim 9 does not include the conditional-request limitation discussed above for claim 1. *See* Ex. 1001, 31:23–32:17.

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Claim 9 further recites instructions “for the second device to assign first update rate for updating information from the first information source.” Ex. 1001, 32:1–3. Petitioner contends that MSIE Kit discloses this limitation through a CDF file located on the server, which is downloaded to a client device and establishes an Active Desktop item with a particular update schedule. Pet. 34 (citing Ex. 1010, 186, 217; Ex. 1003 ¶ 237).

To the extent that Patent Owner relies on its proposed construction for the assigning limitation, we do not adopt that construction (*see supra* at 16 (§ II.B.3)) and therefore Patent Owner’s arguments are not persuasive.

Patent Owner argues that “a schedule set by a CDF file is not the same as the second device assigning the first update rate.” PO Resp. 45. According to Patent Owner, the update rate is assigned by an author when creating the CDF file and therefore cannot be assigned by the server. *Id.* Patent Owner, however, contends additionally that the client computer’s software (Internet Explorer 4) “interprets the CDF file to assign the schedule.” *Id.* at 46 (citing Ex. 1010, 186). Those two arguments suggest that assigning the update rate is not limited to a single event, but rather multiple assignments may occur for a particular tile—one when an author creates a file and another when the client computer interprets the file. In this regard, we agree with Petitioner that even if creating a CDF file “assigns” a tile’s update rate in some sense, transferring that file from the server to a client also assigns the tile’s update rate. Pet. Reply 17–18.

Patent Owner argues that “the ’338 Patent does not provide a single example of a user, a grid object, or a tile object assigning a priority based on ‘a file that defines the update rate for an item.’” PO Resp. 46 (quoting Inst. 21). The specification, however, discloses that a grid comprises a

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matrix or array of tiles and controls the layout and priorities of the tiles. Ex. 1001, 14:14–28. The grid may “manage the refresh rate of each tile in the grid.” *Id.* at 17:12–14. And “grids should also be sendable” or “transferred as a file,” for example using a markup language like HTML or XML. *Id.* at 18:4, 18:23–24, 18:42–44. Thus, it appears that the specification contemplates using a file to control the refresh rate of a tile. Patent Owner seems to recognize this, and argues that a grid object on a server is created by a “grid generator” whereas MSIE Kit’s CDF file is created by a user and uploaded to a server. PO Resp. 47. The problem with Patent Owner’s argument is that it attempts to limit the claims to one disclosed embodiment. *See* Ex. 1001, 27:42–28:67. Nothing about the description of grid objects elsewhere in the specification suggests that server-located grid objects must be created on a server by the server. *See* Ex. 1001, 18:4 (“grids should also be sendable”), 18:59–62 (“The application program may be downloaded from a predetermined web-site and preferably operates in a client-server mode. Users may download preconfigured grids from the predetermined server.”).

We conclude that a server transmitting a CDF file to a client assigns an update rate to the Active Desktop item created from the CDF file. *See* Ex. 1010, 186, 217; Ex. 1003 ¶ 237. Accordingly, Petitioner has shown that MSIE Kit discloses the assigning limitation.

Patent Owner does not otherwise challenge Petitioner’s showing as to anticipation of claims 9–13. Having reviewed the record, we conclude Petitioner has shown by a preponderance of the evidence that MSIE Kit renders those claims unpatentable as anticipated.

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III. CONCLUSION¹²

For the reasons discussed above, we conclude that Petitioner has shown by a preponderance of the evidence that the challenged claims are unpatentable.

¹² Should Patent Owner wish to pursue amendment of the challenged claims in a reissue or reexamination proceeding subsequent to the issuance of this 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).

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In summary:

Claims	35 U.S.C. §	Reference(s)/Basis	Claims Shown Unpatentable	Claims Not shown Unpatentable
1–13	102(a), (b)	MSIE Kit ¹³	9–13	
1–13	103(a)	MSIE Kit ¹⁴		
1–13	103(a)	MSIE Kit, Jones ¹⁵		
1–8	103(a)	MSIE Kit, RFC2068	1–8	
1–8	103(a)	MSIE Kit, RFC2068, Jones ¹⁶		
1–13	103(a)	Excel97 ¹⁷		
9–13	103(a)	Excel97, Igra, Perez ¹⁸		
Overall Outcome			1–13	

IV. ORDER

Accordingly, it is

ORDERED that Petitioner has shown by a preponderance of the evidence that claims 1–13 of the '338 patent are unpatentable; and

¹³ Because we determine that claims 1–8 are unpatentable as obvious over MSIE Kit and RFC2068, we decline to address those claims in this ground.

¹⁴ Because we determine that claims 1–13 are unpatentable in other grounds, we decline to address this ground.

¹⁵ Because we determine that claims 1–13 are unpatentable in other grounds, we decline to address this ground.

¹⁶ Because we determine that claims 1–13 are unpatentable in other grounds, we decline to address this ground.

¹⁷ Because we determine that claims 1–13 are unpatentable in other grounds, we decline to address this ground.

¹⁸ Because we determine that claims 1–13 are unpatentable in other grounds, we decline to address this ground.

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FURTHER ORDERED that because this is a Final Written Decision, parties to the proceeding seeking judicial review of the decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

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Paper No. 21
Entered: October 2, 2023

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MICROSOFT CORP.,
Petitioner,

v.

SURFCAST, INC.,
Patent Owner.

IPR2022-00591
Patent 9,946,434 B2

Before SCOTT B. HOWARD, JASON W. MELVIN, and
MICHAEL T. CYGAN, *Administrative Patent Judges*.

MELVIN, *Administrative Patent Judge*.

JUDGMENT
Final Written Decision
Determining All Challenged Claims Unpatentable
35 U.S.C. § 318(a)

APPX00034

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Patent 9,946,434 B2

I. INTRODUCTION

Microsoft Corporation (“Petitioner” or “Microsoft”) filed a Petition (Paper 1, “Pet.”) requesting institution of *inter partes* review of claims 1–24 (“the challenged claims”) of U.S. Patent No. 9,946,434 B2 (Ex. 1001, “the ’434 patent”). SurfCast, Inc. (“Patent Owner”) filed a Preliminary Response. Paper 6. We instituted review. Paper 9 (“Institution Decision” or “Inst.”).

Patent Owner filed a Response (Paper 13, “PO Resp.”), Petitioner filed a Reply (Paper 14, “Pet. Reply”), and Patent Owner filed a Sur-Reply (Paper 15, “PO Sur-Reply”). We held a hearing on July 12, 2023 (Paper 20, “Tr.”).

We have jurisdiction under 35 U.S.C. § 6. This Final Written Decision is issued pursuant to 35 U.S.C. § 318(a). For the reasons that follow, we determine that Petitioner has shown by a preponderance of the evidence that all of the challenged claims are unpatentable.

A. REAL PARTIES IN INTEREST

Petitioner identifies only itself as the real party in interest. Pet. 2. Patent Owner identifies only itself as the real party in interest. Paper 3, 2.

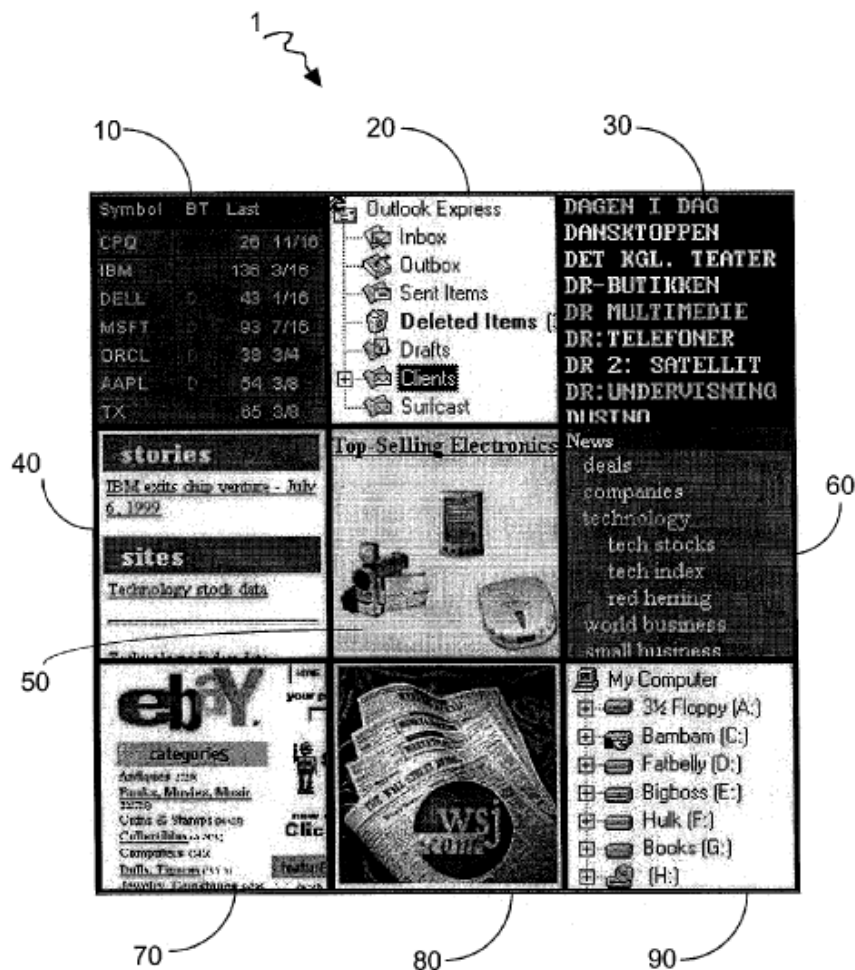
B. RELATED MATTERS

The parties both identify the following matter related to the ’434 patent: *SurfCast, Inc. v. Microsoft Corporation*, No. 6:21-cv-01018-ADA (W.D. Tex.). Pet. 3; Paper 3, 2. Petitioner additionally identifies *SurfCast, Inc. v. Microsoft Corporation*, No. 2:12-cv-00333-DBH (D. Me.), along with a number of IPR proceedings: IPR2013-00292, IPR2013-00293, IPR2013-00294, IPR2013-00295, IPR2014-00271, IPR2022-00423, IPR2022-00590, IPR2022-00592. Pet. 3–4.

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C. THE '434 PATENT

The '434 patent is entitled "System and Method for Simultaneous Display of Multiple Information Sources" and is directed to a graphical user interface that organizes content from a variety of information sources into a grid of tiles, each of which can refresh its content independently of the others. Ex. 1001, codes (54), (57). The '434 patent describes a graphical user interface comprising a grid of tiles that resides on the user's computer desktop. *Id.* at 4:66–5:3. The grid of tiles provides a uniform graphical environment in which a user can access, operate, and/or control multiple data sources on electronic devices. *Id.* at 5:4–6. Figure 1 is reproduced below.



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Ex. 1001, Fig. 1. Figure 1 illustrates “a user interface comprising a grid of tiles as might be depicted on a display screen.” *Id.* at 6:44–46; *see also id.* at 7:45–58 (describing the various tiles).

D. CHALLENGED CLAIMS

Claims 1, 9, and 17 are independent, with claim 1 reciting a system and claims 9 and 17 reciting methods. Claim 1 is reproduced below:

1. A system for simultaneous display of multiple application programs, the system comprising:
 - a computing device having a memory;
 - a display; and
 - a processor configured to execute instructions stored in the memory, to:
 - arrange a portion of a display into one or more grids of non-overlapping tiles, each grid of tiles being persistent;
 - associate a first application program of the plurality of application programs with a first tile of a first grid of the one or more grids of tiles and a second application program of the plurality of application programs with a second tile of the first grid of tiles;
 - assign a first refresh rate to the first tile and a second refresh rate to the second tile; and
 - simultaneously update content displayed in the first tile in accordance with the first refresh rate, and update content displayed in the second tile in accordance with the second refresh rate;
- wherein each tile has:
- a first selection operation that calls the application program associated with the tile, the associated application program being different from a program that arranges the display into the one or more grids of tiles, and

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a second selection operation that provides a menu of options for a user to ascertain or adjust properties of the tile; and

wherein the associated application program for the first tile and the associated application program for the second tile are different application programs selected from among the group consisting of a web browser, a word processing application, an electronic mail application, a chat application, a weather application, a news application, a spreadsheet application, a music application, and a streaming video player.

Ex. 1001, 31:10–47. The remaining claims depend directly from claim 1, 9, or 17. *Id.* at 31:48–34:22.

E. UNPATENTABILITY GROUNDS

This review considers the following unpatentability grounds:

Claims Challenged	35 U.S.C. §	Reference(s)/Basis
1, 2, 4–10, 12–18, 20–24	102	MSIE Kit ¹
1–24	103	MSIE Kit
1–24	103	MSIE Kit, Jones ²
1–24	103	Excel97 ³
1–24	103	Excel97, Bhansali ⁴

¹ Microsoft Press. (1998). *Microsoft Internet Explorer Resource Kit*. (Ex. 1010). All citations are to the native pagination.

² U.S. Patent No. 6,819,345 B1, filed Feb. 17, 1998 (Ex. 1011).

³ Person, R. (1997). *Special Edition Using Microsoft Excel 97* (Ex. 1005). All citations are to the native pagination.

⁴ U.S. Patent No. 6,006,239, filed Mar. 15, 1996 (Ex. 1006).

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Pet. 8. Petitioner relies also on two Declarations of Dr. Henry Houh.
Exs. 1003, 1065. Patent Owner relies on the Declaration of Glenn E.
Weadock. Ex. 2001.

F. LEGAL STANDARDS

A patent claim is unpatentable under 35 U.S.C. § 102 if “the four corners of a single, prior art document describe every element of the claimed invention, either expressly or inherently, such that a person of ordinary skill in the art could practice the invention without undue experimentation.” *Advanced Display Sys., Inc. v. Kent State Univ.*, 212 F.3d 1272, 1282 (Fed. Cir. 2000). “A single prior art reference may anticipate without disclosing a feature of the claimed invention if such feature is necessarily present, or inherent, in that reference.” *Allergan, Inc. v. Apotex Inc.*, 754 F.3d 952, 958 (Fed. Cir. 2014). Moreover, the reference must also “disclose[] within the four corners of the document not only all of the limitations claimed but also all of the limitations arranged or combined in the same way as recited in the claim.” *Net MoneyIN, Inc. v. Verisign, Inc.*, 545 F.3d 1359, 1371 (Fed. Cir. 2008). However, “the reference need not satisfy an *ipsissimis verbis* test.” *In re Gleave*, 560 F.3d 1331, 1334 (Fed. Cir. 2009).

A patent claim is unpatentable as obvious 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. 35 U.S.C. § 103. Obviousness is resolved on the basis of 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

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of ordinary skill in the art; and (4) objective evidence of non-obviousness.⁵
Graham v. John Deere Co., 383 U.S. 1, 17–18 (1966).

“In an [*inter partes* review], the petitioner has the burden from the onset to show with particularity why the patent it challenges is unpatentable.” *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016) (citing 35 U.S.C. § 312(a)(3) (requiring *inter partes* review petitions to identify “with particularity . . . the evidence that supports the grounds for the challenge to each claim”)). Petitioner cannot satisfy its burden of proving obviousness by employing “mere conclusory statements.” *In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d 1364, 1380 (Fed. Cir. 2016).

II. ANALYSIS

A. LEVEL OF ORDINARY SKILL IN THE ART

Petitioner contends that a person of ordinary skill in the art “would have had a Master’s degree in software engineering or computer science (or equivalent experience working in industry) and several years of experience designing, writing or implementing software products, either at the application or operating system level.” Pet. 11. Petitioner submits further that skilled artisans “would have been familiar with various technological concepts, including those relating to user interfaces, operating systems and software applications, basic computer functionality, networking and data processing.” *Id.* Patent Owner adopts Petitioner’s definition (PO Resp. 10), as do we, because it reflects the level of skill in the prior art.

⁵ Patent Owner has not submitted such objective evidence here.

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B. CLAIM CONSTRUCTION

We construe claims according to the standard used in the federal courts in civil actions under 35 U.S.C. § 282(b), which is articulated in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc). *See* 37 C.F.R. § 42.100(b). Under *Phillips*, the “words of a claim ‘are generally given their ordinary and customary meaning,’” which is “the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application.” *Phillips*, 415 F.3d at 1312–13.

In IPR2013-00292, the Board construed a number of terms in the ’403 patent,⁶ which is the “ultimate parent” of the ’434 patent through a chain of continuations and continuations in part. IPR2013-00292, Paper 93 (Ex. 1017, the “403 FWD”).⁷ *See* Pet. 1. Because the ’403 patent is the ’434 patent’s “ultimate parent,” Petitioner submits that the 403 FWD constructions drive the proper constructions here. *Id.* at 10–19; Pet. Reply 1–11. Moreover, Petitioner argues, collateral estoppel bars Patent Owner from contesting constructions of the same terms in the ’434 patent.⁸ Pet. Reply 1 (citing *XY, LLC v. Trans Ova Genetics*, 890 F.3d 1282, 1294–95 (Fed. Cir. 2018)). Patent Owner argues that because the 403 FWD applied the “broadest reasonable interpretations,” it does not have preclusive effect here, where we construe claims using the *Phillips* standard. PO Sur-Reply 1

⁶ U.S. Patent No. 6,724,403 (Ex. 1019).

⁷ The Federal Circuit affirmed the 403 FWD’s unpatentability determinations. *SurfCast, Inc. v. Microsoft Corp.*, 639 F. App’x 651 (Fed. Cir. 2016).

⁸ Patent Owner does not dispute that the ’403 patent and ’434 patent specifications substantively match.

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(citing *SkyHawke Techs., LLC v. Deca Int'l Corp.*, 828 F.3d 1373, 1376 (Fed. Cir. 2016)). We need not resolve that dispute, because we conclude that, to the extent the 403 FWD construed terms applicable in this proceeding, those constructions comport with the *Phillips* standard.

The parties also discuss constructions by the United States District Court for the District of Maine, which also construed terms of the '403 patent. *See* Pet. 12–18; PO Resp. 24–26; Ex. 1018.

Other than as discussed below, we conclude no additional claim term requires construction. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (noting that “we need only construe terms ‘that are in controversy, and only to the extent necessary to resolve the controversy’” (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999))).

I. “tile”

Petitioner argues that a “tile” is “a graphical user interface element whose content may be refreshed and that, when selected, provides access to an information source.” Pet. 11–15; Pet. Reply 1–8. The 403 FWD construed “tile” the same as Petitioner’s proposed construction here. Ex. 1017, 7–10.

Patent Owner submits that a “tile” is “a graphical representation of an associated information source capable of displaying refreshed content, the graphical representation being persistent and selectable to provide access to underlying information of the associated information source, but providing a representation of the underlying information that is more limited than the representation provided by a window.” PO Resp. 11 (emphasis omitted); PO Sur-Reply 2–10.

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The specification discusses “Tile Objects” at some length. Ex. 1001, 10:51–14:34. It states that “[a] tile presents content from any information source.” *Id.* at 10:54–55. Further, “[t]iles are selectable and live” and the specification explains that “tiles are live in that each contains real-time or near real-time information” and, when selected, “the tile instantly provides the user with access to the underlying information.” *Id.* at 12:29–37.

The specification frames tiles as contrasting with two other graphical user interface elements—icons and windows. *Id.* at 10:56–11:19. It presents tiles as “a third graphical representation of programs and files” and explains that “each tile is a viewer of a single information source.” *Id.* at 11:20–23. To distinguish tiles, the specification states that, unlike icons, a tile “contains continually refreshed content” and compared to windows, “a tile will typically be smaller in size than a window, allowing the user to view multiple tiles simultaneously if desired.” *Id.* at 11:29–34. Significantly, that comparison to windows uses exemplary characteristics without defining aspects applicable to all tiles. The specification asserts that “many tiles may be displayed simultaneously without overlapping with one another in the way that windows must necessarily do.” *Id.* at 11:39–42. That said, the specification also gives an example of “expanding tile 406 to occupy the full area of the display,” demonstrating that size does not define a tile or distinguish a tile from a window.

According to Patent Owner, a tile is a “graphical representation of an associated information source,” not merely a graphical user interface element. PO Resp. 12–14. Patent Owner submits that “a graphical user interface element,” as Petitioner proposes, “does not require a tile to be graphically displayed and does not require it to be a representation of

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anything.” *Id.* at 13. In Patent Owner’s view, while such an element is used for user interaction, it “need not be a representation of an information source or its underlying information.” *Id.* at 14. As Petitioner points out, however, other claim language requires tiles be displayed. Pet. Reply 2. We therefore do not agree with Patent Owner that Petitioner’s construction is deficient.

Moreover, in light of Petitioner’s unpatentability contentions for MSIE Kit discussed below, the graphical-representation aspect of Patent Owner’s construction would not impact our conclusion. Patent Owner contends otherwise, in a general way, but does not explain that contention. *See* PO Resp. 14 (“These differences impact the prior art analysis.”), 39–45 (the cited discussion, which does not distinguish MSIE Kit’s asserted tiles based on Patent Owner’s proposed construction for “tile”).

Next, Patent Owner argues that a tile must provide “a representation of the underlying information that is more limited than the representation provided by a window.” PO Resp. 11, 14–19; *see also* Tr. 53:10–54:8. We do not agree.

While, as described above, the specification purports to distinguish tiles from windows, it does so with permissive terms rather than a restrictive definition. *See* Ex. 1001, 11:29–34. During the hearing, Patent Owner was unable to describe particular restrictions that would embody the limited representation. For example, Patent Owner asserted that degraded resolution would satisfy its proposed construction (Tr. 64:24–65:11) but that does not comport with a distinction from a window. A window may depict content at a variety of zooms, some of which would show an image with degraded resolution. *See* Tr. 68:6–15 (Patent Owner discussing how pixels can be lost on a zoomed image). Patent Owner asserts that a window with zoom

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functionality lacks “a fundamentally or different in nature likeness or image.” Tr. 68:11–15. But that assertion is detached from Patent Owner’s proposed construction and unsupported by the specification. We conclude that the specification does not sufficiently distinguish a tile from a window to support Patent Owner’s proposed construction.

In fact, Patent Owner admits that the specification does not have a clear definition but insists that it nonetheless defines a tile “as something other than either an icon or a window.” Tr. 48:20–25. We do not agree. When identifying features that the specification describes to distinguish tiles from windows, Patent Owner points to other claim limitations, such as “[s]electability to provide access to the underlying information.” Tr. 49:7–10; *see also id.* at 50:3–8 (asserting a tile must be refreshable). Although such limitations may capture aspects that the specification uses to distinguish tiles from other graphical interface elements, they do not support further construing “tile” narrowly as Patent Owner asserts. Stated otherwise, the specification’s distinctions for tiles over icons or windows already appear as claim limitations and do not counsel in favor of further limiting “tile.”

Further, Patent Owner’s construction is unclear whether a tile must provide a graphical representation of its associated information source or of the information underlying that source. The proposed construction first requires a tile represent the source but then additionally requires it “provid[e] a representation of the underlying information,” seemingly allowing no room for a tile that represents only the information source. PO Resp. 11. Those competing requirements would not comport with the specification. The exemplary tiles do not necessarily represent a source’s underlying

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information, but instead may relate to the source itself. *See* Ex. 1001, Fig. 4 (tile 410, displaying the name of a broadcast signal; tile 408, displaying an icon indicating “New Mail!”), 12:9–14 (describing tile 408), 12:20–22 (describing tile 410). Patent Owner, at oral hearing, stated that tile 410 is an example of the claimed tile, thus confirming that the claimed “tile” encompasses at least one such exemplary tile. Tr. 50:5–22. Thus, Patent Owner’s proposed addition regarding the nature of a tile’s representation would create an internal inconsistency in the meaning of a tile. We do not adopt Patent Owner’s proposed restriction on the nature of a tile’s representation.

Next, Patent Owner attempts to distinguish a tile “whose content may be refreshed” from one “capable of displaying refreshed content.” PO Resp. 19–21. In this regard, Patent Owner distinguishes Petitioner’s construction, which Patent Owner asserts “does not require that [tile] element to be capable of displaying the refreshed content.” *Id.* at 20. We agree with Petitioner that the parties’ different language regarding refreshed content does not implicate any aspect of our unpatentability analysis. *See* Pet. Reply 5.

Finally, Patent Owner contends that a tile must be “selectable to provide access to underlying information of the associated information source,” not just an element that, “when selected, provides access to an information source.” PO Resp. 21–23. As Patent Owner explains, it seeks a distinction that “tiles themselves are selectable to provide access to underlying information of associated information sources, rather than access being provided by selecting the contents of a tile.” *Id.* at 21. Patent Owner argues that Petitioner’s construction, referring to an element “that, when

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selected, provides access to an information source,” does not require the tile itself be selectable. *Id.* at 23. Patent Owner relies primarily on the specification’s description that “[t]iles are selectable and live” and that, “[w]hen a tile is selected, whether by mouse click or otherwise, the tile instantly provides the user with access to the underlying information.” *Id.* at 21 (quoting Ex. 1001, 12:29–31). Petitioner relies on that same specification disclosure to argue that we should not restrict the manner of selecting a tile. Pet. Reply 6. The specification indicates that a tile may be selected “by mouse click or otherwise.” Ex. 1001, 12:30.

Petitioner points out that the 403 FWD concluded that when “a user selects a link *included* in an Active Desktop item, the user necessarily selects the Active Desktop item.” Ex. 1017, 36. That conclusion, which was part of a decision affirmed on appeal, *Surfcaster, Inc. v. Microsoft Corp.*, 639 F. App’x 651 (Fed. Cir. May 9, 2016), indicates that Patent Owner’s proposed claim construction here would not preclude the claims from reading on MSIE Kit, because selecting a link within an item selects the item itself. Thus, Patent Owner’s construction would not affect the outcome here. Regardless, we agree with Petitioner that, when the specification discloses a tile may be selected “by mouse click or otherwise,” it indicates a broader range of selection mechanisms than proposed by Patent Owner. *See* Pet. Reply 7.

Although Patent Owner asserts that its proposed construction alone focuses on tiles themselves being selectable, we do not view the two constructions as supporting that distinction. As Petitioner points out, its proposed construction requires that a tile, “when selected, provides access to an information source” and therefore requires “that tiles can be selected.”

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Pet. Reply 8. Although Patent Owner seeks a construction that would not permit selection through activation of a link within a tile, we do not read the specification as so restrictive.

Based on the foregoing, and consistent with the Board’s prior construction, we construe “tile” as “a graphical user interface element whose content may be refreshed and that, when selected, provides access to an information source.”

2. “grid”

The Petition construes “arrange a portion of a display into one or more grids of non-overlapping tiles” as “partitioning a visual display of the device into an array of non-overlapping tiles.” Pet. 16. Patent Owner focuses on “grid” alone, arguing it means “a regular arrangement of rows and columns, which may, but need not, allow a single tile to occupy more than one row and/or column.” PO Resp. 24–30; *accord* PO Sur-Reply 10–12. Patent Owner “elaborates that the word ‘regular’ in its construction means that the ‘arrangement’ enforces conformity to an established rule or standard continuously.” PO Resp. 24; *accord id.* at 25 (“Patent Owner makes this explicit and proposes further construing ‘grid’ to require ‘the regular arrangement enforcing conformity to the positions delimited by the rows and columns continuously.’”). Petitioner contends that no basis supports Patent Owner’s proposed construction, focusing on whether it requires enforced conformity. Pet. Reply 8–11.

We see no real dispute between the proposed constructions. Petitioner does not contest that a “grid” includes both rows and columns. *See* Pet. Reply 8–9. Additionally, both constructions would allow, but not require a single tile to occupy more than a single row or column. This is explicit in

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Patent Owner’s construction and implicit in Petitioner’s.⁹ Nor is there any real dispute that the grid must be regular. That is explicitly part of Patent Owner’s proposed construction. And Petitioner challenges only whether “regular” requires enforced conformity. *Id.* at 9.

Instead, the dispute between the parties is not about the construction of the term “grid,” but the meaning of the word “regular” as set forth by Patent Owner in that construction. Based on the full record and for the reasons given below, we do not agree with Patent Owner that “regular” requires a special construction limiting the claims to an arrangement that enforces conformity to an established rule or standard *continuously*.

The cited portions of the specification do not support Patent Owner’s construction. According to the specification, “[t]he grid controls the layout and priorities of the tiles.” Ex. 1001, 14:49–50. Similarly, the “Grid Object” section of the specification addresses “[t]he arrangement, layout, and independent functioning of the tiles on the display.” *Id.* at 14:36–38; *see also id.* at 14:44–46 (“Grid 700 comprises a matrix or array of tiles . . .”). Although the specification clearly links the grid to the arrangement or look of the tiles, nothing in those sections indicates that the arrangement must be maintained continuously. To the contrary, the specification is silent as to any temporal requirement.

⁹ We note that the district court in the Maine proceeding added the optional language to give guidance to the jury that spanning—a tile located in multiple rows and/or columns—is permissible. Ex. 1018, 74. Because there is no jury and spanning is not an issue, there is no need to include the optional language explicitly in the construction. Regardless, because it describes an optional feature, that construction has no bearing on the outcome of this proceeding.

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Moreover, the continuous requirement is inconsistent with other portions of the specification. Specifically, the specification describes how tiles can be moved and, while being moved, may overlap other tiles. *See id.* at 11:42–45 (“Tiles may overlap one another during configuration of a grid, or when moving tiles from one location to another, but typically, tiles are arranged adjacent to one another.”). Because the specification describes how the tiles can be moved out of their location in the grid and overlap tiles still on the grid, the grid cannot “enforce[] conformity to the positions . . . continuously” as Patent Owner argues.

We also do not agree with Patent Owner that even if the grid is alterable, it is still continuous. *See* PO Sur-reply 7–8. Continuous means “marked by uninterrupted extension in space, time, or sequence.” Ex. 3001.¹⁰ Uninterrupted extension is the antithesis of alterable. Thus, a grid cannot be both alterable and continuous.

Finally, Patent Owner’s argument is premised not on construing the term “grid,” but on reading its construction into the word “regular” in its proposed construction. But that is not consistent with the ordinary meaning of the word grid, which simply describes the arrangement of the elements without imposing a temporal requirement. *See* Ex. 1028, 208 (defining grid as “[t]wo sets of lines or linear elements at right angles to each other.”).

Nor is the construction consistent with the dictionary definitions Patent Owner has added to the record. We acknowledge that the seventh definition of the word “regular” in the Oxford Learners Dictionary refers to

¹⁰ Exhibit 3001 is the Merriam-Webster definition of “continuous.” *See* <https://www.merriam-webster.com/dictionary/continuous>, downloaded July 17, 2023.

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a temporal period. *See* Ex. 2019, 2. But, the first definition of regular is “following a pattern, especially with the same time and space between each thing and the next.” *Id.* at 1. That definition is most consistent with the other dictionary definition to which the Patent Owner cites and the specification in describing an orderly arrangement of the tiles. *See* Ex. 2020 (defining “regular” as “conforming in form, build, or arrangement to a rule, principle, type, standard, etc.; orderly; symmetrical regular features”) (Collins English Dictionary); Ex. 1001, 14:36–38 (“The arrangement, layout, and independent functioning of the tiles on the display . . .”), 14:49–50 (“The grid controls the layout and priorities of the tiles.”). In light of the specification’s silence regarding a temporal component and, instead, its focus on the arrangement of tiles, we see insufficient support for Patent Owner’s temporal component.

Accordingly, for the reasons given above, “grid” as used in the claims of the ’434 patent means “a regular arrangement of rows and columns.” However, we do not adopt Patent Owner’s understanding of the word “regular” and instead use the everyday meaning as reflected in the dictionary definitions cited approvingly above.

C. UNPATENTABILITY OVER MSIE KIT

MSIE Kit describes features of Microsoft Windows Internet Explorer 4, including Microsoft Active Desktop functionality in conjunction with Windows 98 or Windows NT. Ex. 1010, 174, 180, 183, 211. MSIE Kit describes Active Desktop items presented on a user’s desktop. *Id.* Each item is associated with an information source on the Web. *Id.* at 174, 176, 177, 180, 183. Each item is presented typically on the desktop in a borderless frame without a title bar or scrollbars. *Id.* at 176, 183. By default, the items

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are laid out in a 3x2 grid. *Id.* at 176–177, 180, 183. Each item displays information from a URL and is updated periodically. *Id.* at 176–177, 180, 188, 201. The user may choose how frequently to update, or a content provider may specify the frequency in a Channel Definition Format, or “CDF” file. *Id.* at 177, 183, 188, 212–15, 223.

1. Anticipation

Petitioner provides contentions showing how MSIE Kit discloses each limitation of claims 1–2, 4–10, 12–18, and 20–24. Pet. 23–42. Patent Owner disputes only certain aspects of Petitioner’s contentions, and we address those disputes below. We have reviewed the undisputed aspects of Petitioner’s contentions and conclude that Petitioner has shown that MSIE Kit discloses those limitations.

a. “one or more grids of non-overlapping tiles”

Petitioner contends that MSIE Kit discloses software instructions to “arrange a portion of a display into one or more grids of non-overlapping tiles, each grid of tiles being persistent” because it “lays out new Active Desktop Items on a 3 by 2 grid.” Pet. 25 (quoting Ex. 1010, 183). Because MSIE Kit discloses that “[a]s more items are added to the desktop they will start to overlap,” Petitioner contends that items added to the grid before that will not overlap. *Id.* at 25–26 (quoting Ex. 1010, 183).

Patent Owner argues that a “‘grid of non-overlapping tiles’ requires that tiles be placed in a regular arrangement of rows and columns such that any two adjacent tiles are positioned touching one another without overlap.” PO Resp. 39. According to Patent Owner, when MSIE Kit discloses that, “[b]y default, Internet Explorer lays out new Active Desktop items on a 3 by

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2 grid,” that does not satisfy the claim language because MSIE Kit further discloses that each Active Desktop item has “arbitrary x- and y-positions.” *Id.* at 40 (quoting Ex. 1010, 183, 175) (emphasis omitted). In Patent Owner’s view, MSIE Kit does not disclose an example of nonoverlapping items on a grid because it does not disclose that “exactly 6 and only 6 Active Desktop items are created and placed in a non-overlapping fashion on that default subdivision.” *Id.* at 42–43. We do not agree.

MSIE Kit discloses a grid of non-overlapping tiles with its default arrangement of a “3 by 2 grid.” Ex. 1010, 183. As Petitioner’s expert states, “the fact that Active Desktop items may be arbitrarily positioned by the user does not change the fact that MSIE Kit also discloses a default grid layout that discloses ‘dividing some or all of a display into multiple tiles displayed in an orderly fashion.’” Ex. 1065 ¶ 8.

Patent Owner argues also that MSIE Kit’s default layout does not satisfy the claim language because it explicitly includes gaps between items, whereas the claimed grid does not permit gaps. PO Resp. 43–44. We do not construe “grid” to exclude space between tiles (nor did Patent Owner argue for such a construction), and Patent Owner’s argument is therefore not persuasive.

Thus, MSIE Kit’s default configuration discloses a grid (a regular arrangement of rows and columns). And MSIE Kit discloses an exemplary configuration for a 640×480 pixel desktop using items with a “maximum size of no more than 200×200 pixels” so that the layout “allow[s] for reasonable spacing between items.” *Id.* Thus, MSIE Kit discloses a specific example of nonoverlapping items on a grid. Although Patent Owner points to an example in MSIE Kit where Active Desktop items are located in an

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assertedly non-grid arrangement (Ex. 1010, xxx), that does not undermine MSIE Kit's other disclosures.

b. Each tile's selection operation

Petitioner contends that active desktop items are “tiles” as claimed because they are graphical user interface elements that can be refreshed at a specified, assigned rate, and provide access to an information source when selected. Pet. 26, 30–35. Petitioner asserts that each Active Desktop item has a selection operation because the tile calls the application program associated with the tile (a browser, NetShow application, or email program) when the tile is selected (by clicking a hyperlink or hot spot, or using keyboard navigation, or by manually requesting an update). *Id.* at 32–34. To support that the web browser is different from the program that displays the grid, Petitioner relies on MSIE Kit's architecture description and Dr. Houh's testimony. *Id.* at 34 (citing Ex. 1003 ¶¶ 199–204;¹¹ Ex. 1010, 137, 145).

Patent Owner contends that because “not every Active Desktop item is required to include a hyperlink or hot spot,” MSIE Kit fails to disclose each tile has a selection operation that launches another application. PO Resp. 45–46. In Patent Owner's view, because an Active Desktop item requires “content including a hyperlink” to enable the selection functionality, but “allows for an item without a hyperlink,” it does not disclose the claimed “tile.” *Id.* at 46. Petitioner responds that selecting the tile (e.g., by clicking a hyperlink) is different from the selection operation, which is the manner in which Active Desktop items respond to the selection

¹¹ While the Petition cites pages in Dr. Houh's testimony (mistakenly including a paragraph symbol), here and elsewhere, we cite the relevant paragraph numbers.

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(by calling the associated application). Pet. Reply 15. Petitioner asserts that because each tile is programmed with functionality to respond to selection, Active Desktop items satisfy the claims. *Id.*

We agree with Petitioner. While Patent Owner argues that “the Petitioner relies on the presence of a hotspot or hyperlink as the ‘first selection operation’” (PO Sur-Reply 15), we do not agree. The Petition contends that clicking a hotspot or hyperlink (or clicking “Update Now” for an item associated with an email application) selects an item, but that the item responds to such a selection by calling its associated application (a browser, NetShow application, or email application). Pet. 32–34. Thus, Petitioner does not rely on an item’s hyperlink itself as the claimed selection operation, but instead relies on the item calling the associated application.

Patent Owner contends we should view a tile as an object separate from any content it may contain. PO Resp. 47–48 (“If a tile and an Active Desktop item are to be compared as two apparatuses, the only proper comparison is that of the structure and functionality of each apparatus, without regard for and independent of any content which may or may not be displayed by each apparatus.”). In that regard, Patent Owner points to “tile-specific attributes” such as a clickable map. *Id.* at 49 (citing Ex. 1001, 13:9–20); *see* Ex. 1001, 13:42–45. The specification describes a tile as “itself an image that at any given instant is resident on the file system” and “separate and distinct from the application program or file associated with the tile.” Ex. 1001, 12:65–13:1; *see also id.* at 13:36–39 (“In some embodiments . . . , the tile is itself a document created in a markup language such as HTML or XML”).

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MSIE Kit describes Active Desktop items in similar fashion. For example, items exist as distinct files, separate from the content they reference. Ex. 1010, 182 (“First, you design the desktop item (the page), and then you create its CDF file.”), 185 (“[Y]ou are required to create a separate CDF file for each Active Desktop item or Active Channel you author.”). Further, specific examples in both the ’434 patent and MSIE Kit indicate a similar approach. *Compare* Ex. 1001, 13:36–39 (“[T]he tile is itself a document created in a markup language such as HTML or XML as shown in FIG. 6 as is suitable for display in a web-browser.”), Fig. 6, *with* Ex. 1010, 186 (“CDF Example for an Active Desktop Item”).

The similar form of the claimed tiles and Active Desktop items supports Petitioner’s contentions. Because, as discussed above, we do not limit selecting a tile to a particular selection method (*see supra* at 13 (§ II.B.1)), Petitioner’s reliance on a user clicking a hyperlink is consistent with selecting a tile. *See* Pet. 32–33. And because we agree with Petitioner that it relies on the Active Desktop item’s *response* to selection as the claimed selection operation—calling the associated program (*see id.* at 32–34)—the selection operation is a characteristic of the tile itself. That conclusion is supported by Petitioner’s expert, who testifies that a selecting an item causes the item to launch a separate application. *See* Ex. 1003 ¶¶ 188–204. While the called program may change depending on the nature of the item’s content, that does not mean that the operation itself is part of the content. Rather, we agree with Petitioner that “the functionality is still programmed into the system and available for every Active Desktop item.” Pet. Reply 15.

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Although Patent Owner argues that MSIE Kit allows for additional configurations and therefore does not satisfy the claims (PO Resp. 47–50), we do not agree. As Petitioner points out, Active Desktop items respond to selection by calling an application, and Petitioner has identified a number of different configurations that satisfy the claim language. Pet. Reply 15–16; Pet. 32–34. We conclude that Petitioner has identified how MSIE Kit discloses the claimed tiles. *ParkerVision, Inc. v. Qualcomm Inc.*, 903 F.3d 1354, 1361 (Fed. Cir. 2018) (claim is satisfied “if the reference discloses an apparatus that is reasonably capable of operating so as to meet the claim limitations, even if it does not the meet the claim limitations in all modes of operation.”). And although Patent Owner purports to distinguish independent claims 9 and 17 as method claims (PO Resp. 47), we agree with Petitioner that even the method claims require only that each tile has the selection operation, not that each tile’s selection operation is carried out (Pet. Reply 15). Because the record shows that, when selected, Active Desktop items call the application corresponding to their content, Petitioner has shown MSIE Kit satisfies the claim language.

Patent Owner does not otherwise challenge Petitioner’s showing as to anticipation of claims 1, 2, 4–10, 12–18, and 20–24. Having reviewed the record, we conclude Petitioner has shown by a preponderance of the evidence that MSIE Kit discloses each limitation as claimed, and therefore anticipates those claims.

2. Obviousness

Petitioner asserts that all claims would have been obvious over MSIE Kit, thus encompassing a larger set of claims than with its anticipation challenge—by including claims 3, 11, and 19. Pet. 43–45.

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Claim 3, which is not addressed in the anticipation ground, depends from claim 1 and further recites that “each of two grids is associated with a separate theme.” Ex. 1001, 31:51–52.¹² Petitioner submits that MSIE Kit renders that limitation obvious by “disclos[ing] organizing favorite web links by content” and “grouping Active Channels by content.” Pet. 43 (citing Ex. 1010, 113–14, 212–13; Ex. 1003 ¶ 231). Petitioner reasons that adding additional grids of Active Desktop items would have been a predictable variation of the default 3x2 grid, and that it would have been obvious to use multiple grids to “organize Active Desktop Items in orderly, theme-based arrangements . . . by content” because doing so “would make it easier for a user to find an item she was looking for.” *Id.* at 43–44 (citing Ex. 1003 ¶¶ 230–231).

We noted during institution that Petitioner’s contentions may raise factual issues. Inst. 14. Patent Owner contends that “there is no reason to add additional grids” and that MSIE Kit contradicts doing so because it discloses that adding more items to the desktop than the number of default grid spaces will cause items to overlap. PO Resp. 52 (citing Ex. 1010, 183). Patent Owner, however, relies only on MSIE Kit’s disclosures and has not provided additional evidence undermining Petitioner’s showing, which we find persuasive.

The specification states that, “separate categories of information can be displayed on separate grids allowing each grid to be associated with a theme.” Ex. 1001, 15:3–5; *accord id.* at 16:1–3 (“If desired, a user can impose a ‘theme’ on a grid and thereby categorize, group, and/or otherwise

¹² Claims 11 and 19, which depend from claims 9 and 17, respectively, recite parallel limitations to those of claim 3. Ex. 1001, 32:40–41, 34:6–7.

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manage his/her data sources.”). In other words, the ’434 patent does not restrict how a grid is associated with a theme, other than suggesting that different grids be used for separate categories of information. Petitioner submits that a “theme” means a category of content in a tile (Pet. 20), and Patent Owner does not appear to dispute that construction.

We do not agree with Patent Owner that MSIE Kit’s disclosures show that claim 3’s limitation was not obvious. *See* PO Resp. 51. Petitioner relies on MSIE Kit’s disclosures that suggest organizing favorite web links by content (Ex. 1010, 113–14) and grouping Active Channels by content (*id.* at 212–13). Pet. 43. We agree that MSIE Kit suggested theme-based organization, as recited by claim 3. We further agree that using multiple grids to group items by theme “would make it easier for a user to find an item she was looking for.” Pet. 43–44 (citing Ex. 1003 ¶ 231).

Patent Owner takes issue with Petitioner’s contention that adding additional grids to MSIE Kit’s default would have been a predictable variation. PO Resp. 51 (citing Pet. 43). According to Patent Owner, that statement is conclusory. *Id.* We do not agree. Nothing about MSIE Kit’s disclosures suggest that using multiple grids would be anything other than predictable. The record contains no evidence that undermines Petitioner’s expert, who views multiple grids as a predictable variation of MSIE Kit’s default grid. Ex. 1003 ¶ 230. Although Patent Owner accurately points out that MSIE Kit discloses overloading a grid such that items overlap, that does not preclude using multiple grids, and we conclude that Petitioner’s stated reasons for doing so are logical.

Patent Owner’s position is that a display partitioned into multiple grids would have to impose the desired organization for tiles in the grid. *See*

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PO Resp. 52. We do not agree. As discussed above, a grid need only provide for an arrangement of tiles and need not continuously enforce a particular arrangement. *See supra* at 15 (§ II.B.2). Claim 3 requires only that each of two grids “is associated with a separate theme,” not that the grid imposes or controls the theme. Thus, we agree with Petitioner’s contentions that when a user arranges multiple grids to contain items with a common theme for each grid, that satisfies claim 3.

In light of MSIE Kit’s suggestion to organize links and Active Channels by content, and the predictable approach of using multiple grids, we agree with Petitioner that claims 3, 11, and 19 would have been obvious over MSIE Kit.

III. CONCLUSION¹³

For the reasons discussed above, we conclude that Petitioner has shown by a preponderance of the evidence that the challenged claims are unpatentable.

¹³ Should Patent Owner wish to pursue amendment of the challenged claims in a reissue or reexamination proceeding subsequent to the issuance of this 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).

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In summary:

Claims	35 U.S.C. §	Reference(s)/Basis	Claims Shown Unpatentable	Claims Not shown Unpatentable
1, 2, 4– 10, 12– 18, 20–24	102(a), (b)	MSIE Kit	1, 2, 4–10, 12–18, 20–24	
1–24	103(a)	MSIE Kit	3, 11, 19	
1–24	103(a)	MSIE Kit, Jones ¹⁴		
1–24	103(a)	Excel97 ¹⁵		
12–19	103(a)	Excel97, Bhansali ¹⁶		
Overall Outcome			1–24	

IV. ORDER

Accordingly, it is

ORDERED that Petitioner has shown by a preponderance of the evidence that claims 1–24 of the '434 patent are unpatentable; and

FURTHER ORDERED that because this is a Final Written Decision, parties to the proceeding seeking judicial review of the decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

¹⁴ Because we determine that claims 1–24 are unpatentable as anticipated by or obvious over MSIE Kit, we decline to address additional grounds.

¹⁵ Because we determine that claims 1–24 are unpatentable as anticipated by or obvious over MSIE Kit, we decline to address additional grounds.

¹⁶ Because we determine that claims 1–24 are unpatentable as anticipated by or obvious over MSIE Kit, we decline to address additional grounds.

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Paper 22
Date: October 2, 2023

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MICROSOFT CORP.,
Petitioner,

v.

SURFCAST, INC.,
Patent Owner.

IPR2022-00590
Patent 9,043,712 B2

Before SCOTT B. HOWARD, JASON W. MELVIN, and
MICHAEL T. CYGAN, *Administrative Patent Judges*.

HOWARD, *Administrative Patent Judge*.

JUDGMENT
Final Written Decision
Determining All Challenged Claims Unpatentable
35 U.S.C. § 318(a)

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Patent 9,043,712

I. INTRODUCTION

A. Background and Summary

Microsoft Corp. (“Petitioner”) filed a Petition (Paper 1, “Pet.”) requesting *inter partes* review of claims 1–4 of U.S. Patent No. 9,043,712 B2 (Ex. 1001, “the ’712 patent”). Surfcast, Inc. (“Patent Owner”) filed a Preliminary Response to the Petition. Paper 6. We instituted an *inter partes* review of claims 1–4 of the ’712 patent on all grounds of unpatentability alleged in the Petition. Paper 9 (“Institution Decision” or “Inst. Dec.”).

After institution of trial, Patent Owner filed a Response (Paper 14, “PO Resp.”), Petitioner filed a Reply (Paper 15, “Pet. Reply”), and Patent Owner filed a Sur-reply (Paper 16, “PO Sur-reply”).

An oral hearing¹ was held on July 12, 2023, and the record contains a transcript of this hearing. Paper 21 (“Tr.”).

We have jurisdiction under 35 U.S.C. § 6. This Final Written Decision is issued pursuant to 35 U.S.C. § 318(a). For the reasons that follow, we determine that Petitioner has shown by a preponderance of the evidence that all of the challenged claims are unpatentable.

B. Real Parties in Interest

Petitioner identifies itself as the real party in interest. Pet. 3.

Patent Owner identifies itself as the real party in interest. Paper 3, 2 (Patent Owner’s Mandatory Notices).

C. Related Matters

The parties identify the following district court proceeding: *SurfCast, Inc. v. Microsoft Corporation*, No. 6:21-cv-01018-ADA (W.D. Tex.).

¹ A single consolidated oral hearing was held for IPR2022-00423, IPR2022-00590, IPR2022-00591, and IPR2022-00592. Tr. 1, 3:2–5.

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Pet. 3; Paper 3, 2. Additionally, Petitioner identifies *SurfCast, Inc. v. Microsoft Corporation*, No. 2:12-cv-00333-DBH (D. Me.) (“Maine Proceeding”) and various *inter partes* review proceedings, including a series of *inter partes* review proceedings that determined that the claims of a related patent were unpatentable.² Pet. 3–4.

D. The ’712 Patent

The ’712 patent is entitled “System and Method for Simultaneous Display of Multiple Information Sources” and is directed to a graphical user interface that organizes content from a variety of information sources into a grid of tiles, each of which can refresh its content independently of the others. Ex. 1001, codes (54), (57). As described in the “Background,” at the time of the invention, display technologies lacked a user interface capable of presenting any type of information in a consistent manner and in such a way that all open channels could indicate their activity on a continual basis. Ex. 1001, 4:38–49. In response to this need, the ’712 patent describes a graphical user interface comprising a grid of tiles that resides on the user’s computer desktop. Ex. 1001, 4:53–54. “The grid of tiles provides a uniform[] graphical environment in which a user can access, operate, and/or control multiple data sources on electronic devices.” Ex. 1001, 4:54–57. Figure 1 is reproduced below.

² *Microsoft Corporation v. SurfCast, Inc.*, IPR2013-00292 is representative of those proceedings. A copy of the Final Written Decision (“the 403 FWD”) is Exhibit 1017.

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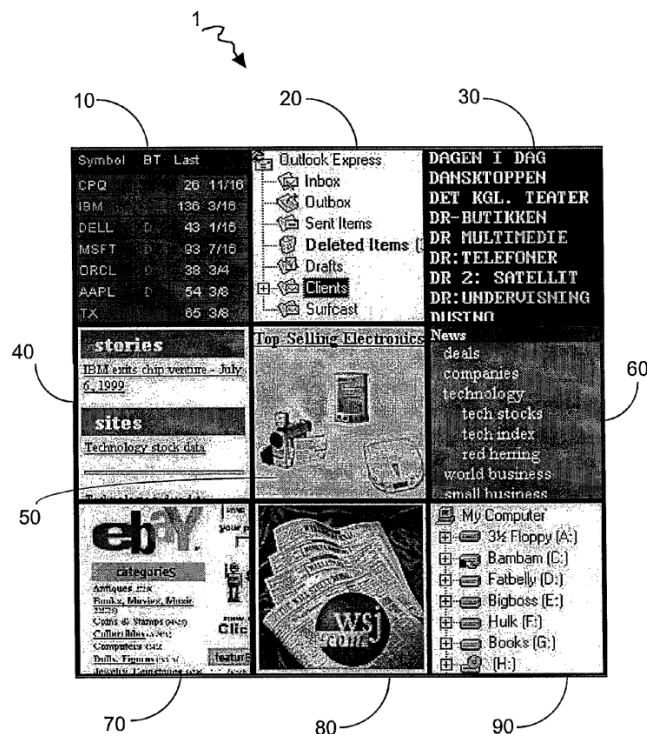


Figure 1 illustrates “a user interface comprising a grid of tiles as might be depicted on a display screen.” Ex. 1001, 6:25–27; *see also* Ex. 1001, 7:27–39 (describing the various tiles).

E. Illustrative Claim

Claims 1 and 3 are independent. Claim 1, reproduced below, is illustrative of the claimed invention.³

1. [1.a] A method executed by a device under the control of a program, the device including a memory for storing the program, the method comprising:

[1.b] partitioning a visual display rendered by the device into an array of tiles, [1.c] wherein each tile in the array of tiles is associated with an information source in a plurality of information sources, [1.d] wherein content of a second tile of the array of tiles depends upon content of a first tile of the array of tiles;

³ For ease of reference, we use Petitioner’s claim numbering scheme.

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[1.e] assigning a first update rate to the first tile;

[1.f] *updating information from a first information source in the plurality of information sources presented to the first tile in accordance with the first update rate; and*

[1.g] *updating content of the second tile based on the information updated to the first tile.*

Ex. 1001, 30:23–38 (emphases added).

F. Prior Art and Asserted Grounds

Petitioner asserts that claims 1–4 would have been unpatentable on the following grounds:

Claim(s) Challenged	35 U.S.C. §	Reference(s)/Basis
1–4	102(a), (b)	MSIE Kit ⁴
1–4	103(a)	MSIE Kit, Jones ⁵
1–4	103(a)	MSIE Kit, Miklos ⁶
1–4	103(a)	MSIE Kit, Miklos, Jones
1–4	102(a), (b)	Excel97 ⁷
1–4	103(a)	Excel97
1–4	103(a)	Excel97, Bhansali ⁸
1–4	103(a)	Excel97, Igra ⁹
1–4	103(a)	Excel97, Igra, Bhansali

⁴ Microsoft Press. (1998). *Microsoft Internet Explorer Resource Kit*. (Ex. 1010). All citations are to the native pagination.

⁵ U.S. Patent No. 6,819,345 B1, filed Feb. 17, 1998 (Ex. 1011)

⁶ U.S. Patent No. 5,226,117, issued July 6, 1993 (Ex. 1013).

⁷ Person, R. (1997). *Special Edition Using Microsoft Excel 97* (Ex. 1005). All citations are to the native pagination.

⁸ U.S. Patent No. 6,006,239, filed Mar. 15, 1996 (Ex. 1006).

⁹ U.S. Patent No. 6,701,485 B1, issued Mar. 2, 2004 (Ex. 1007).

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Petitioner relies on the testimony of Henry Houh, Ph.D.. Ex. 1003; Ex. 1065. Dr. Houh was cross-examined. Ex. 2003.¹⁰

Patent Owner relies on the testimony of Glenn E. Weadock. Ex. 2001. Mr. Weadock was not cross-examined in this proceeding.

II. ANALYSIS

A. *Legal Standard*

A patent claim is unpatentable under 35 U.S.C. § 102 if “the four corners of a single, prior art document describe every element of the claimed invention, either expressly or inherently, such that a person of ordinary skill in the art could practice the invention without undue experimentation.” *Advanced Display Sys., Inc. v. Kent State Univ.*, 212 F.3d 1272, 1282 (Fed. Cir. 2000). “A single prior art reference may anticipate without disclosing a feature of the claimed invention if such feature is necessarily present, or inherent, in that reference.” *Allergan, Inc. v. Apotex Inc.*, 754 F.3d 952, 958 (Fed. Cir. 2014). Moreover, the reference must also “disclose[] within the four corners of the document not only all of the limitations claimed but also all of the limitations arranged or combined in the same way as recited in the claim.” *Net MoneyIN, Inc. v. Verisign, Inc.*, 545 F.3d 1359, 1371 (Fed. Cir. 2008). However, “the reference need not satisfy an *ipsissimis verbis* test.” *In re Gleave*, 560 F.3d 1331, 1334 (Fed. Cir. 2009).

¹⁰ Contrary to our rules, Patent Owner only filed excerpts of the cross-examination testimony. *See* 37 C.F.R. § 42.53(f)(7) (2021) (“The testimony *must* be filed as an exhibit.”) (emphasis added). Accordingly, we only consider the pages cited and do not, because we cannot, consider other pages even if cited by the parties. *See* Pet. Reply 9 (citing Ex. 2003, 191:5–18); PO Sur-reply 6 (citing Ex. 2003, 180:10–181:21).

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B. Level of Ordinary Skill in the Art

Factors pertinent to a determination of the level of ordinary skill in the art include “(1) the educational level of the inventor; (2) type of problems encountered in the art; (3) prior art solutions to those problems; (4) rapidity with which innovations are made; (5) sophistication of the technology; and (6) educational level of active workers in the field.” *Envtl. Designs, Ltd. v. Union Oil Co. of Cal.*, 713 F.2d 693, 696 (Fed. Cir. 1983) (citing *Orthopedic Equip. Co. v. All Orthopedic Appliances, Inc.*, 707 F.2d 1376, 1381–82 (Fed. Cir. 1983)). “Not all such factors may be present in every case, and one or more of these or other factors may predominate in a particular case.” *Id.* at 696–97.

Petitioner argues that a person having ordinary skill in the art would have had “a Master’s degree in software engineering or computer science (or equivalent experience working in industry) and several years of experience designing, writing or implementing software products, either at the application or operating system level.” Pet. 12 (quoting Ex. 1003 ¶ 63). Petitioner further argues that a person having ordinary skill in the art “would have been familiar with various technological concepts, including those relating to user interfaces, operating systems and software applications, basic computer functionality, networking and data processing.” Pet. 12 (citing Ex. 1003 ¶ 63).

Patent Owner does not address the level of skill or Petitioner’s description of what a person having ordinary skill in the art would have been familiar with. *See* PO Resp.

Because Petitioner’s formulation of the level of ordinary skill in the art is consistent with the ’712 patent and the asserted prior art and is not challenged by Patent Owner, we adopt it and apply it in our analysis below.

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C. Claim Construction

We apply the same claim construction standard used in the federal courts, in other words, the claim construction standard that would be used to construe the claim in a civil action under 35 U.S.C. § 282(b), which is articulated in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc). 37 C.F.R. § 42.100(b) (2021). Under the *Phillips* standard, the “words of a claim ‘are generally given their ordinary and customary meaning,’” which is “the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application.” *Phillips*, 415 F.3d at 1312–13.

The parties argue that we should construe five terms: “tile,” “information source,” “partitioning a visual display rendered by the device into an array of tiles,” “update rate,” and “presented to the first tile.” Pet. 12–21; PO Resp. 6–26. We construe three of those terms below. For all other limitations, we need not expressly construe any claim terms at this time. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (noting that “we need only construe terms ‘that are in controversy, and only to the extent necessary to resolve the controversy’” (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999))).

In IPR2013-00292, the Board construed a number of terms in the ’403 patent,¹¹ which is the “ultimate parent” of the ’434 patent through a chain of continuations and continuations in part. IPR2013-00292, Paper 93

¹¹ U.S. Patent No. 6,724,403.

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(Ex. 1017, the “403 FWD”).¹² *See* Pet. 1. Because the ’403 patent is the ’434 patent’s “ultimate parent,” Petitioner submits that the 403 FWD constructions drive the proper constructions here. Pet. 10–19; Pet. Reply 1–11. Moreover, Petitioner argues, collateral estoppel bars Patent Owner from contesting constructions of the same terms in the ’434 patent.¹³ Pet. Reply 1 (citing *XY, LLC v. Trans Ova Genetics*, 890 F.3d 1282, 1294–95 (Fed. Cir. 2018)). Patent Owner argues that because the 403 FWD applied the “broadest reasonable interpretations,” it does not have preclusive effect here, where we construe claims using the *Philips* standard. PO Sur-Reply 1 (citing *SkyHawke Techs., LLC v. Deca Int’l Corp.*, 828 F.3d 1373, 1376 (Fed. Cir. 2016)). We need not resolve that dispute, because we conclude that to the extent the 403 FWD construed terms applicable in this proceeding, those constructions comport with the *Philips* standard.

1. *Tile(s)*

Petitioner argues that a “tile” is “a graphical user interface element whose content may be refreshed and that, when selected, provides access to an information source.” Pet. 12–18; Pet. Reply 1–8. The 403 FWD construed “tile” the same as Petitioner’s proposed construction here. Ex. 1017, 7–10.

Patent Owner submits that a “tile” is “a graphical representation of an associated information source capable of displaying refreshed content, the graphical representation being persistent and selectable to provide access to

¹² The Federal Circuit affirmed the 403 FWD’s unpatentability determinations. *SurfCast, Inc. v. Microsoft Corp.*, 639 F. App’x 651 (Fed. Cir. 2016).

¹³ Patent Owner does not dispute that the ’403 patent and ’434 patent specifications substantively match.

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underlying information of the associated information source, but providing a representation of the underlying information that is more limited than the representation provided by a window.” PO Resp. 6 (emphasis omitted); PO Sur-Reply 1–6.

Claim 1 recites “partitioning a visual display rendered by the device into an array of *tiles*.” Ex. 1001, 30:27–28 (emphasis added). The context of the use of “tile” in the claims does not provide any assistance in determining its meaning.

The specification discusses “Tile Objects” at some length. Ex. 1001, 10:28–14:7. It states that “[a] tile presents content from any information source.” Ex. 1001, 10:31–32. Further, “[t]iles are selectable and live” and the specification explains that “tiles are live in that each contains real-time or near real-time information” and, when selected, “the tile instantly provides the user with access to the underlying information.” Ex. 1001, 12:3–11.

The specification frames tiles as contrasting with two other graphical user interface elements—icons and windows. Ex. 1001, 10:33–11:8. It presents tiles as “a third graphical representation of programs and files” and explains that “each tile is a viewer of a single information source.” Ex. 1001, 10:62–11:2. To distinguish tiles, the specification states that, unlike icons, a tile “contains continually refreshed content” and compared to windows, “a tile will typically be smaller in size than a window, allowing the user to view multiple tiles simultaneously if desired.” Ex. 1001, 11:3–8. Significantly, that comparison to windows uses exemplary characteristics without defining aspects applicable to all tiles. The specification asserts that “many tiles may be displayed simultaneously without overlapping with one another in the way that windows must necessarily do.” Ex. 1001, 11:13–16.

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That said, the specification also gives an example of “expanding tile 406 to occupy the full area of the display” (Ex. 1001, 11:49–51), demonstrating that size does not define a tile or distinguish a tile from a window.

According to Patent Owner, a tile is a “graphical representation of an associated information source,” not merely a graphical user interface element. PO Resp. 7–10. Patent Owner submits that “a graphical user interface element,” as Petitioner proposes, “does not require a tile to be graphically displayed and does not require it to be a representation of anything.” PO Resp. 8. In Patent Owner’s view, while such an element is used for user interaction, it “need not be a representation of an information source or its underlying information.” PO Resp. 9. As Petitioner points out, however, other claim language requires tiles be displayed. Pet. Reply 2. We therefore do not agree with Patent Owner that Petitioner’s construction is deficient.

Moreover, in light of Petitioner’s unpatentability contentions for MSIE Kit discussed below, the graphical representation aspect of Patent Owner’s construction would not impact our conclusion. Patent Owner contends otherwise, in a general way, but does not explain that contention. *See* PO Resp. 10 (“These differences impact the prior art analysis.”), 39–45 (the cited discussion, which distinguishes MSIE Kit’s asserted tiles based only on providing the same representation “as any Internet Explorer window”).

Next, Patent Owner argues that a tile must provide “a representation of the underlying information that is more limited than the representation provided by a window.” PO Resp. 6, 10–14; *see also* Tr. 53:10–54:8. We do not agree.

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While, as described above, the specification purports to distinguish tiles from windows, it does so with permissive terms rather than a restrictive definition. *See* Ex. 1001, 11:5–8. During the hearing, Patent Owner was unable to describe particular restrictions that would embody the limited representation. For example, Patent Owner asserted that degraded resolution would satisfy its proposed construction (Tr. 64:24–65:11) but that does not comport with a distinction from a window. A window may depict content at a variety of zooms, some of which would show an image with degraded resolution. *See* Tr. 68:6–15 (Patent owner discussing how pixels can be lost on a zoomed image). Patent Owner asserts that a window with zoom functionality lacks “a fundamentally or different in nature likeness or image.” Tr. 68:11–15. But that assertion is detached from Patent Owner’s proposed construction and unsupported by the specification. We conclude that the specification does not sufficiently distinguish a tile from a window to support Patent Owner’s proposed construction.

In fact, Patent Owner admits that the specification does not have a clear definition but insists that it nonetheless defines a tile “as something other than either an icon or a window.” Tr. 48:20–25. We do not agree. When identifying features that the specification describes to distinguish tiles from windows, Patent Owner points to other claim limitations, such as “[s]electability to provide access to the underlying information.” Tr. 49:7–10; *see also* Tr. 50:3–8 (asserting a tile must be refreshable). Although such limitations may capture aspects that the specification uses to distinguish tiles from other graphical interface elements, they do not support further construing “tile” narrowly as Patent Owner asserts. Stated otherwise, the specification’s distinctions for tiles over icons or windows already appear as claim limitations and do not counsel in favor of further limiting “tile.”

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Further, Patent Owner's construction is unclear whether a tile must provide a graphical representation of its associated information source or of the information underlying that source. The proposed construction first requires a tile represent the source but then additionally requires it "provid[e] a representation of the underlying information," seemingly allowing no room for a tile that represents only the information source. PO Resp. 11. Those competing requirements would not comport with the specification. The exemplary tiles do not necessarily represent a source's underlying information, but instead may relate to the source itself. *See* Ex. 1001, Fig. 4 (tile 410, displaying the name of a broadcast signal; tile 408, displaying an icon indicating "New Mail!"), 11:51–55 (describing tile 408), 11:61–63 (describing tile 410). Thus, Patent Owner's proposed addition regarding the nature of a tile's representation would create an internal inconsistency in the meaning of a tile. We do not adopt Patent Owner's proposed restriction on the nature of a tile's representation.

Next, Patent Owner attempts to distinguish a tile "whose content may be refreshed" from one "capable of displaying refreshed content." PO Resp. 14–15. In this regard, Patent Owner distinguishes Petitioner's construction, which Patent Owner asserts "does not require that [tile] element to be capable of displaying the refreshed content." PO Resp. 14–15. We agree with Petitioner that the parties' different language regarding refreshed content does not implicate any aspect of our unpatentability analysis. *See* Pet. Reply 5.

Finally, Patent Owner contends that a tile must be "selectable to provide access to underlying information of the associated information source," not just an element that, "when selected, provides access to an information source." PO Resp. 15–18. As Patent Owner explains, it seeks a

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distinction that “tiles themselves are selectable to provide access to underlying information of associated information sources, rather than access being provided by selecting the contents of a tile.” PO Resp. 16. Patent Owner argues that Petitioner’s construction, referring to an element “that, when selected, provides access to an information source,” does not require the tile itself be selectable. PO Resp. 17–18. Patent Owner relies primarily on the specification’s description that “[t]iles are selectable and live” and that, “[w]hen selected, whether by mouse click or otherwise, the tile instantly provides the user with access to the underlying information.” PO Resp. 15–16 (quoting Ex. 1001, 12:3–5). Petitioner relies on that same specification disclosure to argue that we should not restrict the manner of selecting a tile. Pet. Reply 6. The specification indicates that a tile may be selected “by mouse click or otherwise.” Ex. 1001, 12:3–4.

Petitioner points out that the 403 FWD concluded that when “a user selects a link *included* in an Active Desktop item, the user necessarily selects the Active Desktop item.” Ex. 1017, 36. That conclusion, which was part of a decision affirmed on appeal, *Surfcaster*, 639 F. App’x 651, indicates that Patent Owner’s proposed claim construction here would not preclude the claims from reading on MSIE Kit, because selecting a link within an item selects the item itself. Thus, Patent Owner’s construction would not affect the outcome here. Regardless, we agree with Petitioner that, when the specification discloses a tile may be selected “by mouse click or otherwise,” it indicates a broader range of selection mechanisms than proposed by Patent Owner. *See* Pet. Reply 6–7.

Although Patent Owner asserts that its proposed construction alone focuses on tiles themselves being selectable, we do not view the two constructions as supporting that distinction. As Petitioner points out, its

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proposed construction requires that a tile, “when selected, provides access to an information source” and therefore requires “that tiles can be selected.” Pet. Reply 8. Although Patent Owner seeks a construction that would not permit selection through activation of a link within a tile, we do not read the specification as so restrictive.

Based on the foregoing, and consistent with the Board’s prior construction, we construe “tile” as “a graphical user interface element whose content may be refreshed and that, when selected, provides access to an information source.”

2. *“Partitioning . . . at Least a Portion of the Visual Display into an Array of Tiles”*

a) *Arguments of the Parties*

Petitioner argues that “partitioning . . . at least a portion of the visual display into an array of tiles” means “dividing a display or window into two or more tiles.” Pet. 18–19 (quoting Ex. 1016, 12–13). According to Petitioner, this construction “represents the ordinary meaning of the term, as it is consistent with the description of tiles in the specification.” Pet. 19 (citing Ex. 1001, 7:27–39, Fig. 1).

Patent Owner argues that the phrase means “dividing some or all of a display into multiple tiles displayed in an orderly fashion.” PO Resp. 19. Specifically, Patent Owner argues “that ‘partitioning’ and ‘arranging’ mean ‘dividing[]’ and ‘array of tiles’ means ‘multiple tiles displayed in an orderly fashion.’” PO Resp. 19.

Patent Owner further argues that “Petitioner’s attempt[] to redefine the ‘visual display’ recited by the claims to refer to ‘a display or window’ is inconsistent with the specification.” PO Resp. 19 (emphasis omitted); *see also* PO Sur-reply 6–7 (citing Ex. 1001, 3:48–49). Patent Owner further

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argues that the '712 patent draws a distinction between a window and a portion of the visual display:

The specification also distinguishes between a window and an area of a visual display. For example, “while a window may be resized as appropriate, it will frequently occupy the full display area . . .” (EX1001, 3:47-48; EX2001, ¶ 100.) This distinction is important to the tile technology introduced by the '712 Patent.

PO Resp. 20. According to Patent Owner, placing tiles in a window “will fail to provide the uniformity of appearance realized by dividing a visual display into an array of tiles” and “cannot provide a replacement for a desktop.” PO Resp. 20 (citing Ex. 1001, 4:7–43, 4:65–5:10, 6:3–11, 11:23–27, 14:15–17, 15:17–19; Ex. 2001 ¶¶ 91–92, 99–101, 123–126); *see also* PO Sur-reply 6–7. Patent Owner also argues that the fact that a window can occupy some or all of the visual display reinforces the idea that they are separate elements. PO Sur-reply 7–8.

With regard to “array,” Patent Owner argues it must mean something more than two or more tiles, as that is already captured in the use of the term “tiles.” PO Resp. 20–21. According to Patent Owner, in order “[f]or different tiles to be first *in an array* and second *in an array* and to display information from different sources, they must be ordered, *i.e.*, displayed in an orderly fashion.” PO Resp. 21. Patent Owner also argues this is consistent with the specification, which shows tiles displayed in an orderly fashion. PO Resp. 21–22 (citing Ex. 1001, 11:41, 11:49–51, Fig. 4). Specifically, Patent Owner directs us to Figures 7 through 11, which, according to Patent Owner, each show the tiles arranged in an orderly fashion. PO Resp. 22–24 (citing Ex. 1001, Figs. 7–11, 14:17–19, 16:2, 16:8–10, 16:18–52).

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Patent Owner also argues that the specification “criticizes the state of the art as forcing users to ‘contend with a wide range of icons and program windows that may occupy space on a user’s display screen.’” PO Resp. 24 (quoting Ex. 1001, 3:23–25). Patent Owner argues that the claimed invention solves this problem by “standardiz[ing] the ways in which different types of information are presented to the user.” PO Resp. (quoting Ex. 1001, 3:27–28). According to Patent Owner, “[c]onstruing an array to merely refer to tiles without also requiring the tiles to be displayed in an orderly fashion, would recreate the problems criticized by the specification.” PO Resp. 25.

Petitioner responds by pointing out that the Board’s construction in the Institution Decision¹⁴ essentially adopted the construction from the Maine proceeding. Pet. Reply 9 (citing Inst. Dec. 11–12; Pet. 18–19). However, Petitioner argues that adopting Patent Owner’s position that the claim “cannot be satisfied by dividing the area *within a window* into multiple tiles” would be legal error. Pet. Reply 9. According to Petitioner, because “[a] window displayed on a computer display obviously occupies some or all of that display, as the 712 Patent itself recognizes, . . . dividing some or all of the window is necessarily dividing some or all of the display.” Pet. Reply 9–10 (citing Ex. 1001, 3:48–49). Petitioner also argues it is inconsistent with the Board’s prior decision in the 403 FWD. Pet. Reply 10–12.

¹⁴ In the Institution Decision, we adopted Patent Owner’s proposed construction of “dividing some or all of a display into multiple tiles displayed in an orderly fashion.” Inst. Dec. 11–12. We further noted that “[i]n doing so, any array that is similar to that shown in a figure of the ’712 patent would be orderly.” Inst. Dec. 12.

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b) Our Analysis

As noted in footnote 14, we preliminarily construed this limitation to mean “dividing some or all of a display into multiple tiles displayed in an orderly fashion” and that “any array that is similar to that shown in a figure of the ’712 patent would be orderly.” Inst. Dec. 11–12. Although Petitioner proposed a different construction in the Petition, Petitioner did not maintain its construction in its Reply or argue that we erred. Accordingly, for the reasons given in the Institution Decision, which we incorporate by reference, we reach the same construction in this Decision.

However, the real dispute between the parties does not focus explicitly on our construction, but whether it implicitly excludes placing the array of tiles in a window.¹⁵ Based on the record, we agree with Petitioner that the claim limitation does not preclude having the array of tiles located within a window on the video display.

We begin, as always, “with the words of the claim themselves.” *Allergan Sales, LLC v. Sandoz, Inc.*, 935 F.3d 1370, 1373 (Fed. Cir. 2019) (quoting *Amgen Inc. v. Hoechst Marion Roussel, Inc.*, 457 F.3d 1293, 1301 (Fed. Cir. 2006)). The claim is silent as to which part of the visual display will contain the array of tiles. *See* Ex. 1001, 30:27–28. It is not limited to, as Patent Owner argues (PO Resp. 20), a replacement for a desktop. Nor, as Patent Owner also argues (PO Resp. 20), is there anything in the claim or our construction of tiles that requires the tiles to be presented “in a consistent

¹⁵ This issue is not relevant to the instant proceeding. However, it is relevant to IPR2022-00590, decided concurrently. Because the parties agree that the terms should have the same construction in all four pending proceedings (Tr. 11:1–8 (Petitioner), 54:11–17 (Patent Owner)), we address the dispute here.

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manner” and be capable of “run[ning] on any device.” Rather, the claim simply states “partitioning . . . a portion of the visual display into an array of tiles” without any other limitations. *See* Ex. 1001, 30:27–28.

Our construction is further supported by the specification of the ’712 patent. The specification makes it clear that windows are a part of the visual display. For example, the background section describes how a window is on the visual display: “Thus, while a window may be resized, it will frequently occupy the full display area, effectively limiting the user to a view of a single program.” Ex. 1001, 3:48–50; *see also* Ex. 1001, 10:49–50. Additionally, the ’712 patent describes how a window has “a display area 354.” Ex. 1001, 10:50–51. Thus, so long as the window is shown on the video display, the claim limitation is broad enough to encompass partitioning the portion of the video display where there is a window into an array of tiles.

Although we agree with Patent Owner that the video display and the window are two different elements (PO Resp. 19–20; PO Sur-reply 7–8), that fact does not require us to adopt Patent Owner’s construction. Because the window is shown on the video display, partitioning a window is necessarily also partitioning a video display.

Moreover, the portion of the specification cited by Patent Owner does not support its construction. The specification simply states “[t]hus, while a window may be resized as appropriate, it will frequently occupy the full display area, effectively limiting the user to a view of a single program.” Ex. 1001, 3:47–49 (cited by PO Resp. 20). That section provides no guidance as to whether there is a difference between partitioning a display and partitioning a window.

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Accordingly, for the reasons discussed above, “partitioning . . . at least a portion of the visual display into an array of tiles” means dividing some or all of a display into multiple tiles displayed in an orderly fashion and that any array that is similar to that shown in a figure of the ’712 patent would be orderly. Additionally, the claim is broad enough to encompass partitioning a window that is located on the video display.

3. *Presented to the First Tile*

Petitioner argues that “presented to the first tile” means “displayed within the first tile.” Pet. 20–21. According to Petitioner, “‘tiles’ are graphical structures on a computer display, so the phrase ‘presented to’ in this claim language cannot be meaningful if interpreted in a physical sense, and there is no disclosed functionality that could be an example presenting information to a tile, other than displaying that information within the tile.” Pet. 20–21 (citing Ex. 1001, 7:26–39, Fig. 1; Ex. 1003 ¶ 93). Patent Owner agrees with this construction. PO Resp. 26 (adopting Petitioner’s construction); *see also* PO Resp. 47–48 (arguing Petitioner’s construction is correct).

This phrase appears in the following limitation: “updating information from a first information source in the plurality of information sources *presented to the first tile* in accordance with the first update rate.” Ex. 1001, 30:34–36 (emphasis added). In the Institution Decision, we held that “although the claim requires updating information to the first tile, the claim does not recite displaying the updated information.” Inst. Dec. 27 (citing Ex. 1001, 30:34–36); *see also* PO Resp. 47–48 (acknowledging implicit construction in the Institution Decision); Pet. Reply 16 (same). Based on the record of the full trial, we maintain that construction.

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We begin, as always, “with the words of the claim themselves.” *Allergan Sale*, 935 F.3d at 1373 (quoting *Amgen*, 457 F.3d at 1301). Although the claim limitation recites that updated information be “presented to the first tile,” nothing in the words of the claim requires that updated information to be displayed or presented by the first tile. Ex. 1001, 30:34–36 (emphasis added). That is, the claim simply requires “updating information . . . presented to the first tile” without any discussion of updating what information is displayed. Ex. 1001, 30:34–36. This stands in contrast to the next limitation, which requires “updating *content* of the second tile,” which connotes updating the displaying content. *See* Ex. 1001, 30:34–38 (emphasis added).

The parties do not direct us to any language in the claim that requires the first tile to display the updated information. *See* Pet. 20–21; PO Resp. 26, 47–48. That is because nothing in the language explicitly or implicitly requires that the updated information be displayed. *See* Ex. 1001, 30:34–36.

The section of the specification cited by the parties does not support their proposed construction. That section describes Figure 1, which shows various tiles on a display. Ex. 1001, 7:26–39. Nothing in the cited sections discusses updating the title. Ex. 1001, 7:26–39. Nor does it use the word “presented.” Ex. 1001, 7:26–39.

D. Asserted Anticipation by MSIE Kit

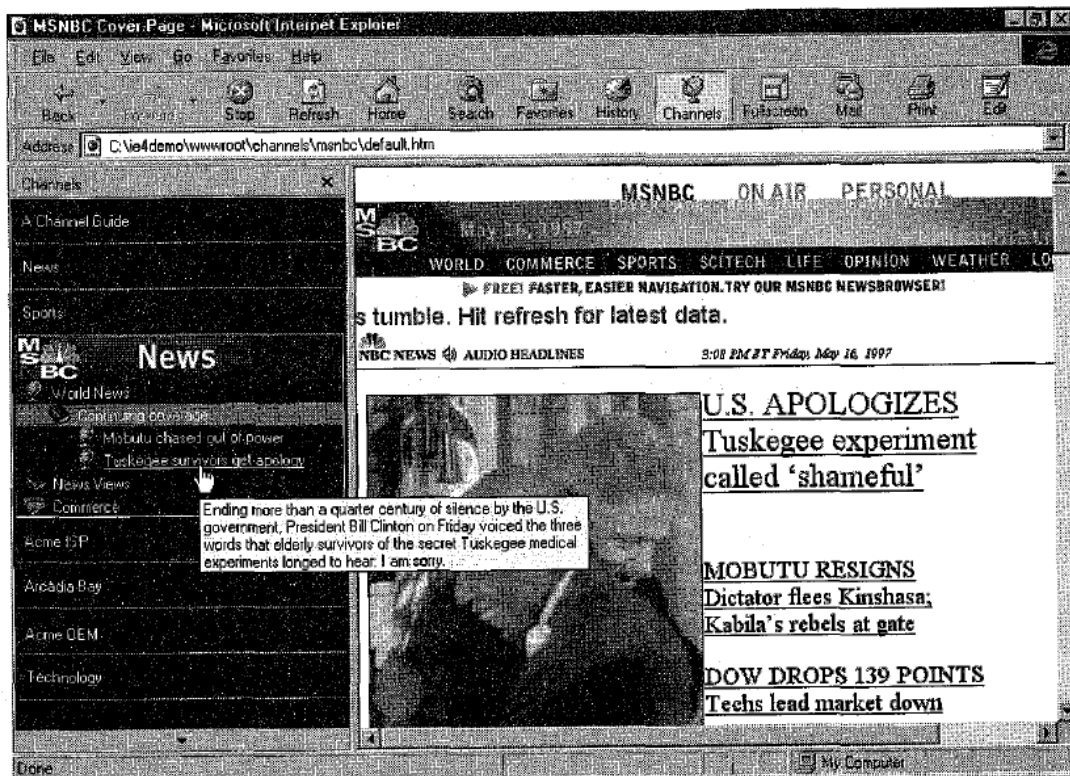
1. Summary of MSIE Kit

MSIE Kit describes features of Microsoft Windows Internet Explorer 4, including Microsoft Active Desktop functionality in conjunction with Windows 98 or Windows NT. Ex. 1010, 174, 180, 183. Specifically, MSIE Kit describes how a user may subscribe to “publisher-specified Active

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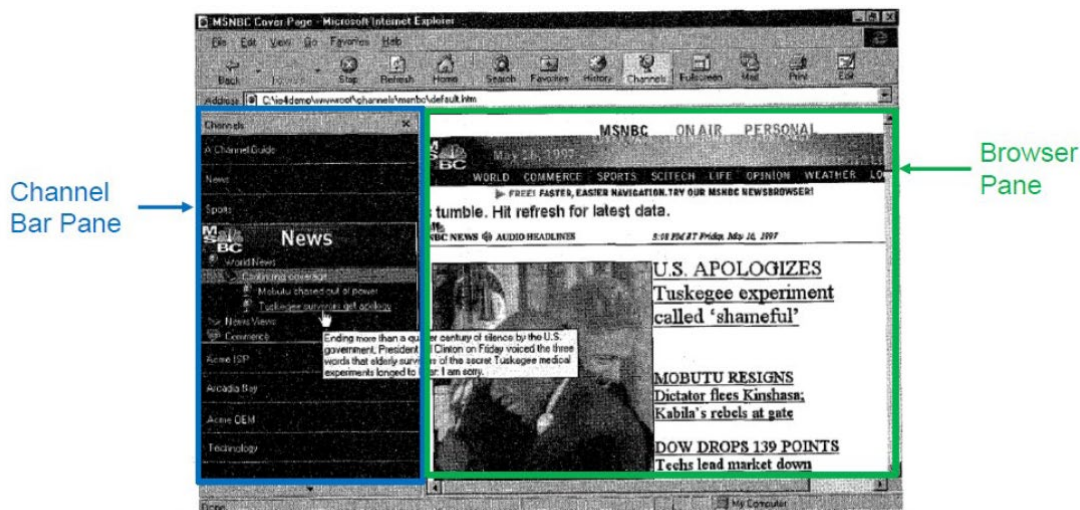
Channels” which “delivers a defined range of Web content.” Ex. 1010, xxxiv. “Users can check for updates on specific types of content and can accept a publisher’s predefined update schedule or specify their own custom schedule.” Ex. 1010, xxxiv. “Active Channels allow Web site authors to optimize, personalize, and more fully control how a site is Webcast, and adding a Channel Definition Format (CDF) file is the only step required to convert any existing Web site into an Active Channel.” Ex. 1010, xxxiv.

“After a user subscribes to an Active Channel, Internet Explorer will automatically add the subscribed channel logo to the Channel bar on the Active Desktop and in the browser, making the Web site more prominent and more easily accessible.” Ex. 1010, xxxv. MSIE Kit shows a sample desktop, which is reproduced below, and referred to as Figure xxxvi.



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Ex. 1010, xxxvi. Figure xxxvi shows an “Active Channel bar inside Internet Explorer 4.” Ex. 1010, xxxvi. Reproduced below is a version of Figure xxxvi annotated by Petitioner to highlight various elements.



Pet. 25 (annotating Ex. 1010, xxxvi). The annotated version of Figure xxxvi shows a “Channel Bar Pane” on the left (annotated in blue) with a “Browser Pane” on the right (annotated in green). Pet. 25; Ex. 1010, xxxvi, 212, 694.

2. Analysis of Claim 1

a) Limitation 1.a: “A Method Executed by a Device under the Control of a Program, the Device Including a Memory for Storing the Program, the method comprising.”

The preamble of claim 1 recites “[a] method executed by a device under the control of a program, the device including a memory for storing the program, the method comprising.” Ex. 1001, 30:24–26. Petitioner argues that MSIE Kit discloses the preamble. Pet. 24. More specifically, Petitioner argues MSIE Kit discloses “the Active Desktop and Active Channel interfaces available on computers running the Windows and Internet Explorer 4 programs” and that “computers necessarily include a processor to perform operations implemented by stored software in a

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memory.” Pet. 24 (citing Ex. 1010,¹⁶ 4, 174, 176, 179, 180; Ex. 1028, 515; Ex. 1003 ¶¶ 103–104, 170).

After reviewing Petitioner’s arguments and information regarding the preamble, including the Houh Declaration, which Patent Owner does not address separately (*see* PO Resp.), we are persuaded that Petitioner sufficiently demonstrates that MSIE Kit discloses the preamble.¹⁷

b) Limitation 1.b: “Partitioning a Visual Display Rendered by the Device into an Array of Tiles”

Claim 1 further recites “partitioning a visual display rendered by the device into an array of tiles.” Ex. 1001, 30:27–28. In analyzing this claim limitation, we initially discuss whether MSIE Kit discloses tiles. Then we address whether MSIE Kit discloses partitioning a visual display rendered by the device into an array of tiles.

(1) “Tile”

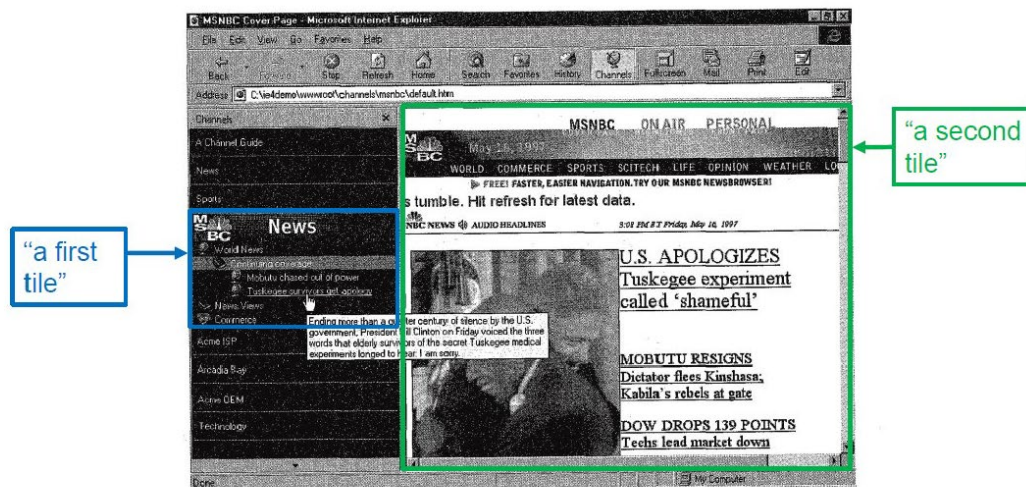
Petitioner argues MSIE Kit discloses tiles, specifically a first tile and a second tile. Pet. 25–29; Pet. Reply 13–14. For the reasons set forth below, we are sufficiently persuaded by Petitioner’s arguments.

MSIE Kit discloses an example of an internet explorer display with a Channel Bar Pane and a Browser Pane. Ex. 1010, xxxvi, 212, 694; Ex. 1003 ¶ 114. Figure xxxvi depicts a Channel Bar Pane including various Active Channel elements. *See* Ex. 1010, xxxvi; Ex. 1003 ¶ 114. This is illustrated in the annotated version of Figure xxxvi below.

¹⁶ Petitioner incorrectly cited Exhibit 1006. That is a typographical error, which we corrected.

¹⁷ Because we find that MSIE Kit discloses the preamble, we need not decide whether the preamble is limiting. *See Nidec*, 868 F.3d at 1017.

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Pet. 26 (annotating Ex. 1010, xxxvi). Figure xxxvi depicts a sample desktop with an internet explorer window divided into an Active Channel Bar Pane (on the left) which includes a number of Active Channel elements, one of which is expanded and highlighted in blue and annotated with the caption “a first tile.” Ex. 1010, xxxvi; Ex. 1003 ¶ 114. The right-side of Figure xxxvi shows a browser pane displaying a webpage and has been highlighted in green and annotated with the caption “a second tile”. Ex. 1010, xxxvi; Ex. 1003 ¶ 114.

As discussed in detail below, the Active Channel element satisfies our construction of “tile” and is a first tile. First, the Active Channel element is a graphical user interface element. Ex. 1003 ¶ 115. The Active Channel element is an area of the display which is separate from the rest of the display (as shown by the lines shown on Figure xxxvi dividing them), displays logos, links and/or content of an associated website, and which can be manipulated by a user. Ex. 1003 ¶ 115; Ex. 1010, xxxv–xxxvi, 212, 690. Accordingly, the Active Channel element acts as an interface to the software and computer system. Ex. 1003 ¶ 115. Such Active Channel elements are also similar to various tiles identified in the ’712 patent. *See* Ex. 1001,

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Figs. 1 (middle left and bottom left tiles), 4 (Element 404), 11:45–46 (describing the tile as “a portion of . . . text of a world-wide web page”).

Second, the Active Channel element’s content can be refreshed.

Ex. 1003 ¶ 116. Specifically, MSIE Kit describes how the Active Channel elements can be refreshed according to an assigned rate. Ex. 1003 ¶ 116; Ex. 1010, 185, 213, 215, 223. For example, MSIE Kit states that “[c]hannel updates use scheduled Web crawls. Users can accept the publisher’s schedule (specified in the CDF file) for updates or specify custom update schedule.” Ex. 1010, 213. A red gleam is then used to indicate that one of the elements has updated data. Ex. 1010, 213. MSIE Kit also states that “[p]ublishers can specify a schedule using the SCHEDULE element as a child element in the first CHANNEL element. All subchannels and items in a CDF file are updated according to this schedule.” Ex. 1010, 223.

Third, an Active Channel element can be selected to provide access to an information source. Ex. 1003 ¶ 117. Specifically, Active Channel elements can be selected by clicking on an element, which provides access to the underlying website or page, which Petitioner maps to the information source. Ex. 1003 ¶ 117; Ex. 1010, 212, 220, 694, 696. For example, MSIE Kit states that “[w]hen a user clicks the top-level channel, the lower-level items appear. Each item typically represents a Web page, but can represent any URL.” Ex. 1010, 212. “Similarly, as shown in the figure above, pointing to a hyperlink displayed in the Active Channel Bar selects the Channel associated with the hyperlink and displays a summary of the linked page.” Ex. 1003 ¶ 117; *see also* Ex. 1010, 694 (The summary page “provide[s] a brief description of available updates and provide[s] hyperlinks to the corresponding notification page for each update.”), 696 (“When users

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select the channel on the Channel bar or in the Favorites menu, the summary page appears in the browser's right pane.” (emphasis omitted)).

Petitioner has also sufficiently shown that the browser pane is also a tile, specifically the second tile. First, because the browser pane is a separate area of the display that can be manipulated by the user, it is a graphical user interface element. Ex. 1003 ¶ 119. For example, the user can select one of the hyperlinks displayed on the page in the browser pane. Ex. 1003 ¶ 121.

Second, the browser pane can be refreshed. Ex. 1003 ¶ 120. The refresh can be done by clicking one of the Active Channel elements, clicking the refresh button on the browser, or pressing F5 on the keyboard. *See* Ex. 1003 ¶ 120; Ex. 1010, 140, 212, 694, 696. Specifically, MSIE Kit states that “[w]hen a user clicks an item in the Channel bar hierarchy, the corresponding Web page displays in the browser.” Ex. 1010, 212. Similarly, MSIE Kit explicitly describes refreshing a webpage by clicking the refresh button (Ex. 1010, 133)¹⁸ or by pressing the F5 key (Ex. 1010, 558).¹⁹ Ex. 1003 ¶ 120.

Third, the browser pane can be selected to provide access to an information source. *See* Ex. 1003 ¶ 121. As discussed with regard to the graphical user interface element requirement, a user can click on a hyperlink located in the browser pane. Ex. 1003 ¶ 121 (citing Ex. 1010, 136, 137, 776). “Such a selection provides the user access to the information from the

¹⁸ “[Y]ou can always manually update the cache while browsing Web pages by clicking the **Refresh** button on the browser toolbar to see any changes to the page.” Ex. 1010, 133.

¹⁹ Stating that F5 is the shortcut key to “[r]efresh the current page.” Ex. 1010, 558.

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associated website.” Ex. 1003 ¶ 121; *see also* Ex. 1010, 177 (“Therefore, information in desktop items often includes hyperlinks or hot spots, so users can click designated area to open a browser window and obtain the details they want.”), 211 (describing how clicking on a hyperlink takes you to an information source).

Patent Owner argues that neither the Active Channel element nor the browser pane is a tile. PO Resp. 35–39. For the reasons discussed below, we do not agree with Patent Owner’s arguments.

First, Patent Owner argues that “[t]he browser pane relied upon by Petitioner is nothing less than a complete Internet Explorer window.” PO Resp. 35. Accordingly, to Patent Owner, it is therefore not a tile. PO Resp. 35; *see also* PO Resp. 35–36. However, that argument is premised on a claim construction that we rejected. *See* Section II.C.1., *supra*. Because the argument is not commensurate with the scope of the claim, it is inapposite.

Second, Patent Owner argues that the Active Channel elements cannot be refreshed. PO Resp. 36–39. Specifically, Patent Owner argues that although “CDF files allow a type of updating relating to the URLs associated with Active Channel elements and the schedule tag of the CDF file, . . . this updating does not display refreshed content in Active Channel elements.” PO Resp. 36 (citing Ex. 1010, 190–91, 211, 213, 315–16; Ex. 2001 ¶¶ 112, 129, 132, 138, 141–146). According to Patent Owner, that “updated information is displayed in the browser pane, never in the Active Channel element.” PO Resp. 36.

As support, Patent Owner directs us to the portions of MSIE Kit that describe how the CDF file is used in channel updating. PO Resp. 36–37. Patent Owner then argues that “[t]he channel updates relied upon by

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Petitioner do not update the displayed table of contents.” PO Resp. 38. Patent Owner also argues that “[t]hese channel updates use scheduled web crawls that check a website for updated content and may download the updated content to the user’s cache to provide offline accessibility.” PO Resp. 38 (citing Ex. 1010, 190-91, 213; Ex. 2001 ¶¶ 132, 138, 144). According to Patent Owner, “[t]he web crawls do not display the updated content in the Active Channel element,” but instead display a notification to the user—a red gleam in the left corner of the icon for the top-level channel. PO Resp. 38 (citing Ex. 1010, 190–91, 213; Ex. 2001 ¶¶ 139–139, 144). Because of this, Patent Owner argues, “the Active Channel element is not configured to or capable of displaying refreshed content—it merely notifies the user that refreshed content is available from a website or a local cache of that website.” PO Resp. 38.²⁰

Patent Owner’s description is correct, as far as it goes. MSIE Kit describes how it retrieves information from a web server and that the information can be downloaded to provide offline access. Ex. 1010, 190–91, 213. MSIE Kit also describes how it uses a red gleam to notify the user when updated content is available for a channel. Ex. 1010, 213. Furthermore, that “red gleam appears in the left corner of the icon for the top-level channel” and “does not appear for individual channel items or subchannels.” Ex. 1010, 213.

²⁰ Patent Owner also argues that a person having ordinary skill in the art would not modify MSIE Kit to make the Active Channel elements refreshable. PO Resp. 38–39. Although that is relevant to Petitioner grounds based on obviousness, we need not address it in this anticipation ground.

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However, Patent Owner does not discuss what happens next, and in doing so, misses the refreshed information. Once the red gleam appears, the user can click on the Active Channel element and expand it to see the updated information. Ex. 1003 ¶ 151; Ex. 1010, xxxvi (showing an expanded Active Channel element with updated URL links), 212 (“When a user clicks the top-level channel, the lower-level items appear. Each item typically represents a Web page, but can represent any URL.”), 220 (showing example of a CDF file of a news channel with updated articles). Such refreshed updating is explicitly described in MSIE Kit’s hypothetical scenarios of using the system with Active Channels with webcasting:

System administrators can use managed Webcasting to provide a wide variety of information delivery solutions. Possible scenarios include:

. . . .

A credit manager subscribes to an external (fee-based) Active Channel that provides a personalized desktop ticker that delivers news about significant changes in customer credit ratings. . . .

An executive subscribes to Active Channels providing industry news. Some channels are supplied by news providers, while other channels are fed by several electronic news feeds, brought in-house, filtered and categorized, and published internally. When notified that something new has arrived, the executive can scan headlines and decide what to read first.

Ex. 1010, 211. Such tickers and updated headlines show that the Active Channel element is refreshed and new data is displayed.

The implausibility of Patent Owner’s argument that the Active Channel element cannot be refreshed is shown by Figure xxxvi. The Active Channel element in Figure xxxvi is for MSNBC news and has links for various world news articles. If Patent Owner was correct and the Active Channel element

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can never be refreshed, then the news stories would never change. That is, the same “news” stories would be shown every day, year after year. That defies common sense.

(2) Partitioning a Visual Display . . . into an Array of Tile

Petitioner argues that MSIE Kit discloses “partitioning a visual display rendered by the device into an array of tiles” as recited in claim 1. Pet. 28, 29; Pet. Reply 13–14. For the reasons set forth below, we are sufficiently persuaded by Petitioner’s arguments.

As shown in Figure xxxvi, the Active Channel elements and Browser Pane are displayed as a grid within an Internet Explorer window on the video display. Ex. 1010, xxxvi; Ex. 1003 ¶ 122. That grid is an orderly arrangement of tiles with multiple tiles (Active Channel elements) in the first column and one tile (the Browser Pane) in the second column. Ex. 1010, xxxvi; Ex. 1003 ¶ 130. Both columns of tiles have the same height. Ex. 1010, xxxvi; Ex. 1003 ¶ 130. This is similar with what is shown in Figure 9 of the ’712 patent. That is, Figure 9 shows elements 802-1-1, 802-2-1, and 802-1-2 arranged as a grid of multiple columns each having the height and with one column having multiple tiles and the second column having a single tile. Ex. 1001, Fig. 9; *see also* Ex. 1001, 16:18–37 (stating that not all tiles need to be the same size). Accordingly, MSIE Kit discloses this limitation.

Patent Owner argues that “Petitioner’s argument fails because the element allegedly partitioned into an array of tiles is a *window*, not a *visual display*.” PO Reps. 34 (citing Ex. 1010, xxxvi, 104, 108; Ex. 2001 ¶¶ 97–101, 109, 122–126). According to Patent Owner, “[a]lthough a window may appear on a visual display, the two elements are distinct. This distinction is disclosed by the specification and understood by a person of skill in the art.

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This distinction has important consequences.” PO Resp. 34 (citation omitted); *see also* PO Resp. 34 (describing the advantages of uniformity of appearance).

We do not agree with Patent Owner’s argument. Patent Owner’s argument is premised on a claim construction that we rejected. *See* Section II.C.2., *supra*. Because the argument is not commensurate with the scope of the claim, it is inapposite.

c) Limitation 1.c: “Wherein Each Tile in the Array of Tiles Is Associated with an Information Source in a Plurality of Information Sources”

Claim 1 further recites “wherein each tile in the array of tiles is associated with an information source in a plurality of information sources.” Ex. 1001, 30:28–30. Petitioner argues MSIE Kit discloses that limitation. Pet. 29–30. Specifically, Petitioner argues that “[t]he disclosed system stores a link, such as a URL, which associates an Active Channel element with an information source, such as a website.” Pet. 29 (citing Ex. 1010, 111, 212). Petitioner also argues that “the browser pane of the Internet Explorer window can be associated with an ‘information source,’ *e.g.*, the web page it is displaying at any point in time, by the system using the URL of that web page to obtain the information to be displayed in the browser pane.” Pet. 29 (emphasis omitted) (citing Ex. 1010, xxxv, 111, 188, 212, 220, 690; Ex. 1003 ¶ 132). Petitioner also argues that “Active Channel elements and the browser pane may be associated with any of the plurality of websites and web pages available on the Web because they can include any web content supported by Internet Explorer.” Pet. 30 (citing Ex. 1010, 212, 221; Ex. 1003 ¶ 133).

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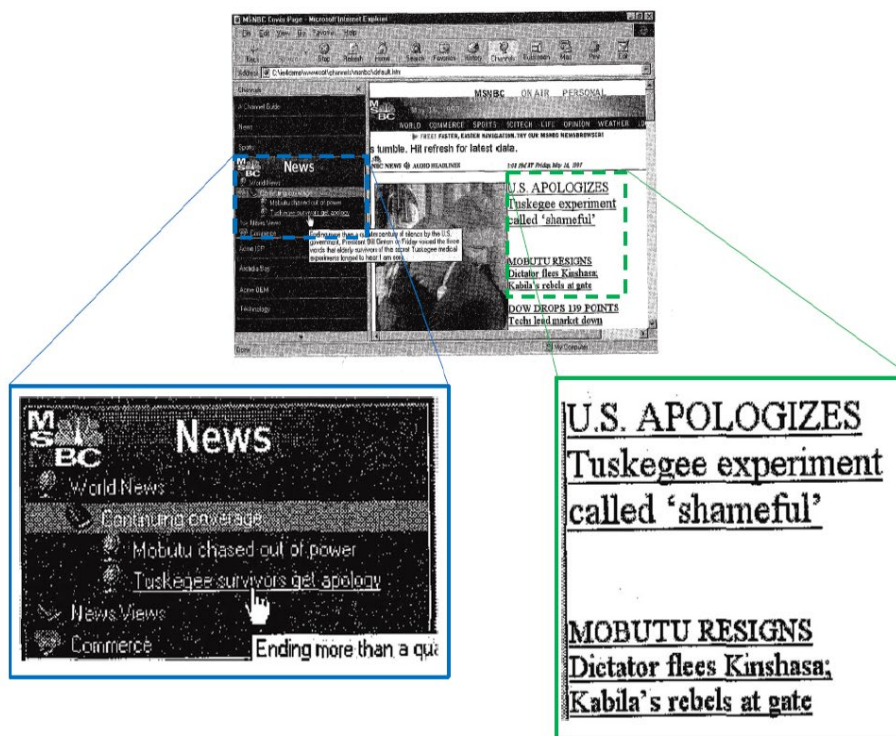
After reviewing Petitioner’s arguments and information regarding this limitation, including the Houh Declaration, which Patent Owner does not address separately (*see* PO Resp.), we are persuaded that Petitioner sufficiently demonstrates that MSIE Kit discloses this limitation.

d) Limitation 1.d: “Wherein Content of a Second Tile of the Array of Tiles Depends upon Content of a first tile of the Array of Tiles”

Claim 1 further recites “wherein content of a second tile of the array of tiles depends upon content of a first tile of the array of tiles.” Ex. 1001, 30:30–32. Petitioner argues MSIE Kit discloses this limitation. Pet. 30–31; Pet. Reply 14–16. For the reasons set forth below, we are sufficiently persuaded by Petitioner’s arguments.

MSIE Kit discloses that when a user selects an Active Channel element, it both expands to display a summary notification and causes the browser to display the same. *See* Ex. 1003 ¶ 136; Ex. 1010, xxxvi, 212, 694, 696. Reproduced below is an annotated and modified version of Figure xxxvi.

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Pet. 31 (citing Ex. 1010, xxxvi). Annotated and modified Figure xxxvi above shows one Active Channel element expanded and a portion of the Browser Pane expanded. Pet. 31; Ex. 1010, xxxvi. Two of the items in the Active Channel element are “Mobutu chased out of power” and “Tuskegee survivors get apology.” Pet. 31; Ex. 1010, xxxvi. The expanded portion of the browser pane says “U.S. APOLOGIZES Tuskegee called ‘shameful’” and “MOBUTU RESIGNS Dictator flees Kinshasa; Kabila’s rebels at gate.” Pet. 31; Ex. 1010, xxxvi. Although the words in the Active Channel element are not identical to those in the browser pane, they describe the same news article. This confirms that selecting an Active Channel element (first tile) will affect what is shown on the browser pane. *See* Ex. 1003 ¶ 137; Ex. 1010, 694 (“The top-level notification page is the Web page users see when they click on the top-level Channel bar. By default, notification pages appear in the browser window . . .”), 696 (“When users select the channel

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on the Channel bar or in the Favorites menu, the summary page appears in the browser's right pane.” (emphasis omitted)). Or, stated differently, the content of the Browser Pane (second tile) depends on the content of the selected Active Channel element (first tile). Ex. 1003 ¶¶ 137–138.

Moreover, MSIE Kit describes how the content in the Browser Pane can be changed based on clicking an element in an Active Channel item. *See* Ex. 1010, 212 (“When a user clicks an item in the Channel bar hierarchy, the corresponding Web page displays in the browser.”).

Patent Owner argues that MSIE Kit does not disclose this limitation. *See* PO Resp. 40–47; PO Sur-reply 10–11. As discussed below, we do not agree with those arguments.

First, Patent Owner argues that what Petitioner identifies as the first and second tile do not display the same summary notification page. PO Resp. 41–46. We find this argument inapposite. Nothing in the claim requires that the content be identical. All that is required is the content of the second tile depends on the content of the first tile. And, as discussed above, a user can select the content of the Browser Pane (second tile) by selecting either an Active Channel item (first tile) or a portion of the content of the Active Channel item (first tile). *See* Ex. 1010, 212, 694, 696; Ex. 1003 ¶ 137. Thus, the content of the Browser Pane depends on the content of the Active Channel element.

Second, Patent Owner argues the content of the Browser Pane “always depends on the content of the Web page URL, not on the content displayed in an Active Channel element (the alleged first tile).” PO Resp. 42 (citing Ex. 1010, 108; Ex. 2001 ¶¶ 140–146); *see also* PO Sur-reply 10. According to Patent Owner, “[w]hile a user may select a hyperlink in the Active Channel element to navigate the browser pane to a URL, the content

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of that URL is *not* displayed by the Active Channel element.” PO Resp. 42 (citing Ex. 1010, 108; Ex. 2001 ¶¶ 140–146). “Rather,” Patent Owner argues, relying on the testimony of Mr. Weadock, “the content displayed by the Active Channel element is defined by a different source.” PO Resp. 42 (citing Ex. 1010, 108; Ex. 2001 ¶¶ 140–146).

We do not agree with the conclusions of Patent Owner or Mr. Weadock. The claim does not require that the content of the first tile is used to generate the content of the second tile. Instead, the claim simply requires that the “content of a second tile . . . depends upon content of a first tile.” Because the content of the Browser Pane (second tile) depends on what the user selects for the Active Channel element, MSIE Kit discloses the limitation. It does not matter that the content of the browser pane comes directly from a website and not the Active Channel element. Nothing in the claim requires it to do so.

Third, Patent Owner makes various arguments regarding the CDF, title tags, and how they operated. *See* PO Resp. 42–43, 46–47; PO Sur-reply 10–11. Those arguments are inapposite as we do not rely on either the CDF or title tags in reaching our findings.

Importantly, neither Patent Owner nor Mr. Weadock address the clear disclosure of MSIE Kit pages 212, 694, and 696 which describe how a user selecting either the Active Channel element (first tile) or an item in the Active Channel element (first tile) controls what is displayed in the browser pane (second tile). *See* Ex. 2001 ¶¶ 141–146; PO Resp. 40–47; PO Resp. 10–11. That un rebutted evidence, cited at Petition pages 30 and 31 and by Dr. Houh in paragraph 137, is sufficiently persuasive to show that MSIE Kit discloses the limitation.

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e) Limitation 1.e: “Assigning a First Update Rate to the First Tile”

Claim 1 further recites “assigning a first update rate to the first tile.”
Ex. 1001, 30:33. Petitioner argues MSIE Kit discloses that limitation.
Pet. 31–32. Specifically, Petitioner argues that MSIE Kit discloses that
each Active Channel element may be updated based on a
programmed subscription schedule, EX1010, 185, 200, 211, 213,
215, 223, when the user indicates the Channel should be updated,
EX1010, 133, 140, 220, 558, 694, or when the user clicks on the
Channel and thereby expands the element to display a detailed
map of the Channel, EX1010, 220, 212, xxxvi; EX1003, ¶151.

Pet. 31–32.

After reviewing Petitioner’s arguments and information regarding this
limitation, including the Houh Declaration, which Patent Owner does not
address separately (*see* PO Resp.), we are persuaded that Petitioner
sufficiently demonstrates that MSIE Kit discloses this limitation.

f) Limitations 1.f and 1.g: Updating Tiles

Claim 1 recites “updating information from a first information source
in the plurality of information sources presented to the first tile in
accordance with the first update rate” and “updating content of the second
tile based on the information updated to the first tile.” Ex. 1001, 30:34–38.
Petitioner argues that MSI Kit discloses these limitations. Pet. 32–33;
Pet. Reply 16–19.

With regard to the first tile, as discussed above in Sections
II.D.2.(b)(1) and II.D.2.(e), a user can assign an update rate to each Active
Channel Element. *See also* Ex. 1003 ¶¶ 116, 150–151, 155 (citing relevant
portions of MSIE Kit). This will result in the Active Channel element
obtaining updated information. Ex. 1003 ¶ 155; Ex. 1010, 211 (describing
examples with updated displays), 213 (discussing updates), 215 (scheduling

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updates), 223 (“All subchannels and items in a CDF file are updated according to this schedule”), 694 (“Since only top-level channel shows the update gleam, you should use top-level notification pages to provide a summary of all available updated. The top-level notification page is the Web page users see when they click on the top-level Channel bar. . . . The summary page could provide a brief description of available updates and provide the hyperlinks to the corresponding notification page for each update.”).

As discussed above in the claim construction section, nothing in these limitations requires that the updated information presented to the first tile be displayed. *See* Section II.C.3. That said, although not required by the claim, MSIE Kit discloses displaying the updated information. *See* Ex. 1010, 213 (providing a red gleam), 694 (discussing updates to the summary page). Additionally, the updated information can be displayed by clicking an Active Channel element and causing it to expand, thus displaying the updated information. Ex. 1001 ¶ 156; Ex. 1010, 220 (“When expanded, this channel appears in the Internet Explorer Channel bar with the following structure.”), 212 (“When a user clicks the top-level channel, the lower-level items appear.”), 694 (“The top-level notification page is the Web page users see when they click on the top-level Channel bar.”).

With regard to the second tile, MSIE Kit discloses that the content displayed by the second tile (Browser Pane) is updated based on the updated content in the first tile (Active Channel element). *See* Ex. 1003 ¶¶ 159–161. Specifically, a user clicking an Active Channel element will expand the element to show the notification or summary page. Ex. 1003 ¶ 159; Ex. 1010, xxxvi (showing expanded notification page for the “news” element), 212 (“When a user clicks the top-level channel, the lower-level

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items appear.”), 220, 221 (“Keep in mind that the Channel bar displays a navigable outline of the URLs you specify in a CDF file. The exposed hierarchy of the channel helps users efficiently navigate through a channel to find the content that most interests them.”), 694. Doing so causes the Browser Pane to be updated to also display the notification page associated with the expanded Active Channel element. *See* Ex. 1003 ¶¶ 160–161; Ex. 1010, xxxvi, 212, 694, 696.

Patent Owner argues that MSIE Kit does not disclose these limitations. PO Resp. 47–51; PO Sur-reply 12–13. For the reasons set forth below, we do not agree with Patent Owner’s arguments.

First Patent Owner argues that we erred in the Institution Decision when we held that the claim limitation did not require the tile to display the updated information. PO Resp. 47–48; PO Sur-reply 13; *see also* Inst. Dec. 27 (“Moreover, although the claim requires updating information to the first tile, the claim does not recite displaying the updated information.” (citing Ex. 1001, 30:34–36)). However, we addressed and rejected those arguments in the claim construction section.

Regardless, although we hold that the claims do not require the first tile to display the updated information, as discussed above, we find that MSIE Kit discloses the Active Channel element (the first tile) displaying the updated information.

Second, Patent Owner argues that “expanding an Active Channel element simply displays more of the table of contents and does not update the element with information from a website.” PO Resp. 50; *see also* PO Resp. 48–50, PO Sur-reply 12–13. However, Patent Owner misunderstands Petitioner’s arguments, which we adopt in this Decision. We do not find that simply expanding the Active Channel element updates

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the element. Instead, as discussed above, we rely on MSIE Kit’s explicit disclosure of updating the information based on a schedule. We simply point to expanding of the Active Channel element as one way of displaying that updated information. *See, e.g.*, Ex. 1010, xxxvi, 212, 694.

Third, Patent Owner argues that “the Active Channel element (allegedly the first tile) is not updated by clicking a hyperlink.” PO Resp. 50 (citing Pet. 26–27). But that has nothing to do with our findings, which are not based on clicking a hyperlink.

Fourth, Patent Owner argues that although MSIE Kit discloses that updates are done, “the graphical Active Channel element is not updated with and does not display this website information.” PO Resp. 50 (citing Ex. 1010, 213, 216, 450). Instead, Patent Owner argues that the only update is a red gleam, which is not information from a website. PO Resp. 50–51 (citing Ex. 1010, 213; Ex. 2001 ¶¶ 138–139, 142–143).

Although the specific pages cited by Patent Owner do not discuss the updated information being displayed, other pages do. *See, e.g.*, Ex. 1010, 212, 694; Ex. 1003 ¶¶ 160–161. Patent Owner does not address those disclosures, which we have relied on.

Fifth, Patent Owner argues that because the first tile is not updated, the updates to the second tile cannot be based on updates to the first tile. PO Resp. 51. However, as discussed above, the foundation of Patent Owner’s argument is incorrect. Contrary to Patent Owner’s assertion, for the reasons discussed above, the Active Channel element (first tile) is updated.

Sixth, relying on its argument that Petitioner has not shown that MSIE Kit discloses the limitation “wherein content of a second tile of the array of tiles depends upon content of a first tile of the array of tiles,”

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Patent Owner argues that at most, “[Petitioner] has shown that CDF Files specify the content displayed in the browser pane separately and independently from the content displayed in the Active Channel elements.” PO Sur-reply 13 (incorporating arguments for “wherein content of a second tile of the array of tiles depends upon content of a first tile of the array of tiles”). We do not agree with those arguments for the reason set forth in Section II.D.2.(c).

g) Conclusion Regarding Claim 1

For the reasons set forth above, Petitioner has shown by a preponderance of the evidence that claim 1 is anticipated by MSIE Kit.

3. Analysis of Claims 2–4

Petitioner has demonstrated that MSIE Kit discloses all of the limitations set forth in claims 2–4. *See* Pet. 34–37.

Besides the arguments discussed above with regard to claim 1, Patent Owner does not dispute in this proceeding Petitioner’s argument regarding claims 2–4. *See* PO Resp. 33–51.

Based on the evidence and arguments presented in the Petition, which are not otherwise disputed by Patent Owner, we determine that Petitioner has demonstrated by a preponderance of the evidence that the subject matter of claims 2–4 was anticipated by MSIE Kit. *See Incept LLC v. Palette Life Scis., Inc.*, 77 F.4th 1366, 1375 (Fed. Cir. 2023) (“Where a party ‘does not raise any arguments with respect to any other claim limitation, nor does it separately argue [the] dependent claim,’ ‘[the] dependent claim . . . stands or falls together with [the] independent claim.’” (quoting *Genentech, Inc. v. Hospira, Inc.*, 946 F.3d 1333, 1340 (Fed. Cir. 2020))).

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E. Other Grounds

In addition to the ground discussed above based on anticipation by MSIE Kit, Petitioner argues the claims are unpatentable under additional grounds. Pet. 8–9. Some of those grounds are based on the claims being obvious over MSIE Kit with additional references. Pet. 8. Others are based on Excel97 with or without an additional reference. Pet. 8–9. Because we determine that claims 1–4 are anticipated by MSIE Kit, we do not address the parties’ arguments regarding those alternate grounds. *See Boston Scientific Scimed, Inc. v. Cook Gp. Inc.*, 809 F. App’x 984, 990 (Fed. Cir. 2020) (“We agree that the Board need not address issues that are not necessary to the resolution of the proceeding.”).

III. CONCLUSION²¹

For the foregoing reasons, we conclude that Petitioner has demonstrated by a preponderance of the evidence the unpatentability of claims 1–4 of the ’712 patent as anticipated by MSIE Kit.

²¹ Should Patent Owner wish to pursue amendment of the challenged claims in a reissue or reexamination proceeding subsequent to the issuance of this 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).

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In summary:

Claims	35 U.S.C. §	Reference(s)/Basis	Claims Shown Unpatentable	Claims Not shown Unpatentable
1–4	102(a), (b)	MSIE Kit	1–4	
1–4	103(a)	MSIE Kit, Jones ²²		
1–4	103(a)	MSIE Kit, Miklos ²³		
1–4	103(a)	MSIE Kit, Miklos, Jones ²⁴		
1–4	102(a), (b)	Excel97 ²⁵		
1–4	103(a)	Excel97 ²⁶		
1–4	103(a)	Excel97, Bhansali ²⁷		

²² As explained above, because we determine that claims 1–4 are unpatentable as anticipated by MSIE Kit, we decline to address those claims on this ground.

²³ As explained above, because we determine that claims 1–4 are unpatentable as anticipated by MSIE Kit, we decline to address those claims on this ground.

²⁴ As explained above, because we determine that claims 1–4 are unpatentable as anticipated by MSIE Kit, we decline to address those claims on this ground.

²⁵ As explained above, because we determine that claims 1–4 are unpatentable as anticipated by MSIE Kit, we decline to address those claims on this ground.

²⁶ As explained above, because we determine that claims 1–4 are unpatentable as anticipated by MSIE Kit, we decline to address those claims on this ground.

²⁷ As explained above, because we determine that claims 1–4 are unpatentable as anticipated by MSIE Kit, we decline to address those claims on this ground.

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1–4	103(a)	Excel97, Igra ²⁸		
1–4	103(a)	Excel97, Igra, Bhansali ²⁹		
Overall Outcome			1–4	

IV. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that, Petitioner has shown by a preponderance of the evidence that claims 1–4 of the '712 are unpatentable; and

FURTHER ORDERED that because this is a Final Written Decision, parties to the proceeding seeking judicial review of the decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

²⁸ As explained above, because we determine that claims 1–4 are unpatentable as anticipated by MSIE Kit, we decline to address those claims on this ground.

²⁹ As explained above, because we determine that claims 1–4 are unpatentable as anticipated by MSIE Kit, we decline to address those claims on this ground.

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Paper 22
Date: October 2, 2023

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MICROSOFT CORP.,
Petitioner,

v.

SURFCAST, INC.,
Patent Owner.

IPR2022-00423
Patent 9,032,317 B2

Before SCOTT B. HOWARD, JASON W. MELVIN, and
MICHAEL T. CYGAN, *Administrative Patent Judges*.

HOWARD, *Administrative Patent Judge*.

JUDGMENT
Final Written Decision
Determining All Challenged Claims Unpatentable
35 U.S.C. § 318(a)

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I. INTRODUCTION

A. *Background and Summary*

Microsoft Corp. (“Petitioner”) filed a Petition (Paper 1, “Pet.”) requesting *inter partes* review of claims 1–19 of U.S. Patent No. 9,032,317 B2 (Ex. 1001, “the ’317 patent”). Surfcast, Inc. (“Patent Owner”) filed a Preliminary Response to the Petition. Paper 6. We instituted an *inter partes* review of claims 1–19 of the ’317 patent on all grounds of unpatentability alleged in the Petition. Paper 9 (“Institution Decision” or “Inst. Dec.”).

After institution, Patent Owner filed a Response (Paper 13, “PO Resp.”), Petitioner filed a Reply (Paper 14, “Pet. Reply”), and Patent Owner filed a Sur-reply (Paper 15, “PO Sur-reply”).

An oral hearing¹ was held on July 12, 2023, and the record contains a transcript of this hearing. Paper 21 (“Tr.”).

We have jurisdiction under 35 U.S.C. § 6. This Final Written Decision is issued pursuant to 35 U.S.C. § 318(a). For the reasons that follow, we determine that Petitioner has shown by a preponderance of the evidence that all of the challenged claims are unpatentable.

B. *Real Parties in Interest*

Petitioner identifies itself as the real party in interest. Pet. 2.

Patent Owner identifies itself as the real party in interest. Paper 3, 2 (Patent Owner’s Mandatory Notices).

C. *Related Matters*

The parties identify the following district court proceedings:
SurfCast, Inc. v. Microsoft Corporation, No. 6:21-cv-01018-ADA (W.D.

¹ A single consolidated oral hearing was held for IPR2022-00423, IPR2022-00590, IPR2022-00591, and IPR2022-00592. Tr. 1, 3:2–5.

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Tex.) and *SurfCast, Inc. v. Microsoft Corporation*, No. 2:12-cv-00333-DBH (D. Me.) (“Maine Proceeding”). Pet. 3; Paper 3, 2. Additionally, Petitioner identifies various *inter partes* review proceedings, including a series of *inter partes* review proceedings in which the claims of a related patent were found unpatentable.² Pet. 1, 3.

D. The '317 Patent

The '317 patent is entitled “System and Method for Simultaneous Display of Multiple Information Sources” and is directed to a graphical user interface that organizes content from a variety of information sources into a grid of tiles, each of which can refresh its content independently of the others. Ex. 1001, codes (54), (57). As described in the “Background,” at the time of the invention, display technologies lacked a user interface capable of presenting any type of information in a consistent manner and in such a way that all open channels could indicate their activity on a continual basis. Ex. 1001, 4:39–47. In response to this need, the '317 patent describes a graphical user interface comprising a grid of tiles that resides on the user's computer desktop. Ex. 1001, 4:54–55. “The grid of tiles provides a uniform[] graphical environment in which a user can access, operate, and/or control multiple data sources on electronic devices.” Ex. 1001, 4:55–58. Figure 1 is reproduced below.

² *Microsoft Corporation v. SurfCast, Inc.*, IPR2013-00292 is representative of those proceedings. A copy of the Final Written Decision (“the 403 FWD”) is Exhibit 1017.

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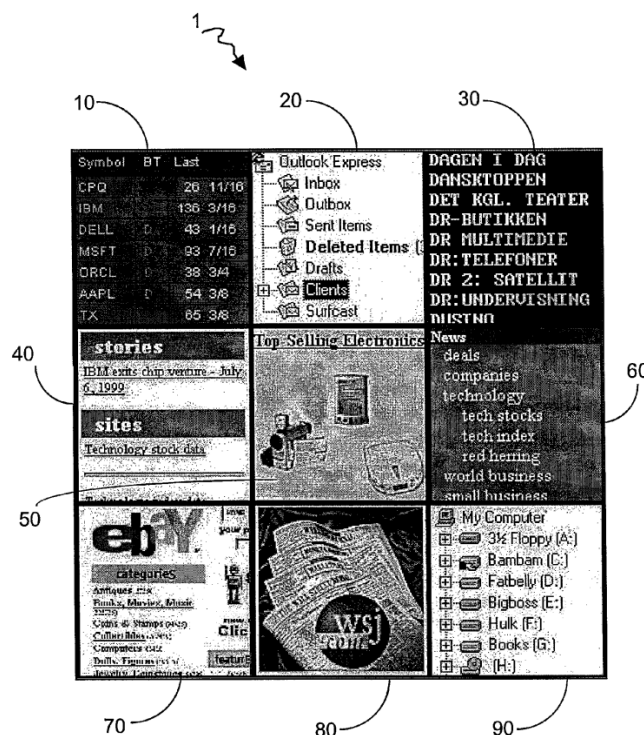


Figure 1 illustrates “a user interface comprising a grid of tiles as might be depicted on a display screen.” Ex. 1001, 6:25–27; *see also* Ex. 1001, 7:27–39 (describing the various tiles).

E. Illustrative Claims

Claims 1, 5, 12, and 16 are independent. Claims 1 and 5, reproduced below with the disputed limitations italicized, are illustrative of the claimed invention.³

1. [1.a] A system for communicating with multiple data sources, the system comprising:

[1.b] a client device adapted for communication with a server device, [1.c] wherein the client device includes a display device, a processor configured to execute instructions, and a memory connected to the processor, [1.d] wherein the processor executes instructions to:

³ For ease of reference, we use Petitioner’s claim numbering scheme.

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display, using the display device, *a grid of tiles*, [1.e] wherein a first tile of said grid of tiles is associated with a first data source residing on the server device, and a second tile of said grid of tiles is associated with a second data source, [1.f] and wherein the first tile displays a current content from the first data source and the second tile displays a current content from the second data source; and

[1.g] *check whether content in the first data source is updated relative to the current content of the first tile and, if so, display updated information from the first data source on the first tile.*

5. [5.a] A method executed by a client device under control of a program, the client device including a processor, a display device for rendering a visual display, and a memory for storing the program, the method comprising:

[5.b] *partitioning by the client device at least a portion of the visual display into an array of tiles*, [5.c] a first tile in the array of tiles being associated with a first information source, the first information source being located on a first server device;

[5.d] assigning by the client device a first update rate to the first tile;

[5.e] at a first update time in accordance with the first update rate, *sending a conditional request from the first client device to the first server device for an update of information in the first tile if the information from the first information source currently displayed in the first tile has not changed since a last update*;

[5.f] receiving at the client device a response to the conditional request from the first server device; and

[5.g] determining whether to update the first tile in accordance with the response from the first server device.

Ex. 1001, 30:21–39, 30:49–31:2 (emphases added).

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F. Prior Art and Asserted Grounds

Petitioner asserts that claims 1–19 would have been unpatentable on the following grounds:

Claim(s) Challenged	35 U.S.C. § ⁴	Reference(s)/Basis
1–19	102(a), (b)	MSIE Kit ⁵
1–19	103(a)	MSIE Kit
1–19	103(a)	MSIE Kit, Jones ⁶
5–11	103(a)	MSIE Kit, RFC2068 ⁷
5–11	103(a)	MSIE Kit, RFC2068, Jones
1–19 ⁸	103(a)	Excel97, ⁹ Bhansali ¹⁰
12–19	103(a)	Excel97, Bhansali, Perez ¹¹

Petitioner relies on the testimony of Henry Houh, Ph.D. Ex. 1003; Ex. 1065. Dr. Houh was cross-examined after his initial testimony. Ex. 2003.¹² Dr. Houh was not cross-examined after his reply testimony.

⁴ The Leahy-Smith America Invents Act (“AIA”) included revisions to 35 U.S.C. §§ 102, 103 that became effective on March 16, 2013. Because the application that issued as the ’317 patent was filed before March 16, 2013, we apply the pre-AIA versions of the statutory bases for unpatentability. *See* Ex. 1001, code (22).

⁵ Microsoft Press. (1998). *Microsoft Internet Explorer Resource Kit*. (Ex. 1010). All citations are to the native pagination.

⁶ U.S. Patent No. 6,819,345 B1, filed Feb. 17, 1998 (Ex. 1011).

⁷ Network Working Group, Request for Comment 2068, January 1997 (Ex. 1012).

⁸ Petitioner presents two theories/grounds for claims 12–19. *See* Pet. 8. We have consolidated them as a single ground.

⁹ Person, R. (1997). *Special Edition Using Microsoft Excel 97* (Ex. 1005).

¹⁰ U.S. Patent No. 6,006,239, filed Mar. 15, 1996 (Ex. 1006).

¹¹ U.S. Patent No. 5,319,777, issued June 7, 1994 (Ex. 1013).

¹² Contrary to our rules, Patent Owner only filed excerpts of the cross-examination testimony. *See* 37 C.F.R. § 42.53(f)(7) (2021) (“The testimony

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Patent Owner relies on the testimony of Glenn E. Weadock.
Ex. 2001. Mr. Weadock was not cross-examined in this proceeding.

II. ANALYSIS

A. *Legal Standards*

1. *Anticipation*

A patent claim is unpatentable under 35 U.S.C. § 102 if “the four corners of a single, prior art document describe every element of the claimed invention, either expressly or inherently, such that a person of ordinary skill in the art could practice the invention without undue experimentation.” *Advanced Display Sys., Inc. v. Kent State Univ.*, 212 F.3d 1272, 1282 (Fed. Cir. 2000). “A single prior art reference may anticipate without disclosing a feature of the claimed invention if such feature is necessarily present, or inherent, in that reference.” *Allergan, Inc. v. Apotex Inc.*, 754 F.3d 952, 958 (Fed. Cir. 2014). Moreover, the reference must also “disclose[] within the four corners of the document not only all of the limitations claimed but also all of the limitations arranged or combined in the same way as recited in the claim.” *Net MoneyIN, Inc. v. Verisign, Inc.*, 545 F.3d 1359, 1371 (Fed. Cir. 2008). However, “the reference need not satisfy an *ipsissimis verbis* test.” *In re Gleave*, 560 F.3d 1331, 1334 (Fed. Cir. 2009).

2. *Obviousness*

In *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1 (1966), the Supreme Court set out a framework for assessing obviousness under 35 U.S.C. § 103(a) that requires consideration of four factors: (1) the “level

must be filed as an exhibit” (emphasis added)). Accordingly, we only consider the filed pages and do not, because we cannot, consider other pages even if cited by the parties. *See* Pet. Reply 15 (citing Ex. 2003, 191:5–18); PO Sur-reply 11 (citing Ex. 2003, 180:10–181:21).

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of ordinary skill in the pertinent art,” (2) the “scope and content of the prior art,” (3) the “differences between the prior art and the claims at issue,” and (4) if in evidence, “secondary considerations” of non-obviousness such as “commercial success, long felt but unsolved needs, failure of others, etc.” *Id.* at 17–18. “While the sequence of these questions might be reordered in any particular case,” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 407 (2007), the U.S. Court of Appeals for the Federal Circuit has repeatedly emphasized that “it is error to reach a conclusion of obviousness until all those factors are considered,” *WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1328 (Fed. Cir. 2016).¹³

B. Level of Ordinary Skill in the Art

In determining whether an invention would have been obvious at the time it was made, we consider the level of ordinary skill in the pertinent art at the time of the invention. *Graham*, 383 U.S. at 17. “The importance of resolving the level of ordinary skill in the art lies in the necessity of maintaining objectivity in the obviousness inquiry.” *Ryko Mfg. Co. v. Nu-Star, Inc.*, 950 F.2d 714, 718 (Fed. Cir. 1991). The “person having ordinary skill in the art” is a hypothetical construct, from whose vantage point obviousness is assessed. *In re Rouffet*, 149 F.3d 1350, 1357 (Fed. Cir. 1998).

Factors pertinent to a determination of the level of ordinary skill in the art include “(1) the educational level of the inventor; (2) type of problems encountered in the art; (3) prior art solutions to those problems; (4) rapidity with which innovations are made; (5) sophistication of the technology; and

¹³ Because neither party addresses objective evidence of non-obviousness, we focus solely on the first three *Graham* factors.

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(6) educational level of active workers in the field.” *Envtl. Designs, Ltd. v. Union Oil Co. of Cal.*, 713 F.2d 693, 696 (Fed. Cir. 1983) (citing *Orthopedic Equip. Co. v. All Orthopedic Appliances, Inc.*, 707 F.2d 1376, 1381–82 (Fed. Cir. 1983)). “Not all such factors may be present in every case, and one or more of these or other factors may predominate in a particular case.” *Id.* at 696–97.

Petitioner argues that a person having ordinary skill in the art would have had “a Master’s degree in software engineering or computer science (or equivalent experience working in industry) and several years of experience designing, writing or implementing software products, either at the application or operating system level.” Pet. 11 (quoting Ex. 1003 ¶ 66). Petitioner further argues that a person having ordinary skill in the art “would have been familiar with various technological concepts, including those relating to user interfaces, operating systems and software applications, basic computer functionality, networking and data processing.” Pet. 11 (citing Ex. 1003 ¶ 66).

Patent Owner does not address the level of skill or Petitioner’s description of what a person having ordinary skill in the art would have been familiar with. *See* PO Resp.

Because Petitioner’s formulation of the level of ordinary skill in the art is consistent with the ’317 patent and the asserted prior art, and is not challenged by Patent Owner, we adopt it and apply it in our analysis below.

C. Claim Construction

We apply the same claim construction standard used in the federal courts, in other words, the claim construction standard that would be used to construe the claim in a civil action under 35 U.S.C. § 282(b), which is

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articulated in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc). 37 C.F.R. § 42.100(b) (2021). Under the *Phillips* standard, the “words of a claim ‘are generally given their ordinary and customary meaning,’” which is “the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application.” *Phillips*, 415 F.3d at 1312–13.

Petitioner argues that the following claim limitations need to be construed: (1) “tile,” (2) “data source”/“information source,” (3) “partitioning . . . at least a portion of the visual display into an array of tiles,” and (4) “update rate.” Pet. 12–17. Patent Owner also identifies “grid” and “sending a conditional request from the first client device to the first server device for an update of information in the first tile if the information from the first information source currently displayed in the first tile has not changed since a last update” as limitations that we should construe. PO Resp. 6–29.

In IPR2013-00292, the Board construed a number of terms in the ’403 patent,¹⁴ which is the “ultimate parent” of the ’434 patent through a chain of continuations and continuations in part. IPR2013-00292, Paper 93 (Ex. 1017, the “403 FWD”).¹⁵ See Pet. 1. Because the ’403 patent is the ’434 patent’s “ultimate parent,” Petitioner submits that the 403 FWD constructions drive the proper constructions here. Pet. 10–19; Pet. Reply 1–

¹⁴ U.S. Patent No. 6,724,403.

¹⁵ The Federal Circuit affirmed the 403 FWD’s unpatentability determinations. *SurfCast, Inc. v. Microsoft Corp.*, 639 F. App’x 651 (Fed. Cir. 2016).

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11. Moreover, Petitioner argues, collateral estoppel bars Patent Owner from contesting constructions of the same terms in the '434 patent.¹⁶ Pet. Reply 1 (citing *XY, LLC v. Trans Ova Genetics*, 890 F.3d 1282, 1294–95 (Fed. Cir. 2018)). Patent Owner argues that because the 403 FWD applied the “broadest reasonable interpretations,” it does not have preclusive effect here, where we construe claims using the *Phillips* standard. PO Sur-Reply 1 (citing *SkyHawke Techs., LLC v. Deca Int’l Corp.*, 828 F.3d 1373, 1376 (Fed. Cir. 2016)). We need not resolve that dispute, because we conclude that to the extent the 403 FWD construed terms applicable in this proceeding, those constructions comport with the *Phillips* standard.

Below, we address the construction of all of the disputed terms except “data source”/“information source” and “update rate.” No other claim limitations need to be construed in order to address the parties’ arguments. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (noting that “we need only construe terms ‘that are in controversy, and only to the extent necessary to resolve the controversy’” (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999))).

1. “Tile”

Petitioner argues that a “tile” is “a graphical user interface element whose content may be refreshed and that, when selected, provides access to an information source.” Pet. 12–15; Pet. Reply 1–8. The 403 FWD construed “tile” the same as Petitioner’s proposed construction here. Ex. 1017, 7–10.

¹⁶ Patent Owner does not dispute that the '403 patent and '434 patent specifications substantively match.

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Patent Owner submits that a “tile” is “a graphical representation of an associated information source capable of displaying refreshed content, the graphical representation being persistent and selectable to provide access to underlying information of the associated information source, but providing a representation of the underlying information that is more limited than that provided by an associated information source.” PO Resp. 7 (underlining omitted); *see also* PO Sur-Reply 1–6.

Claim 1 recites “display, using the display device, a grid of *tiles*.” Ex. 1001, 30:28 (emphasis added). The context of the use of “tile” in the claims does not provide any assistance in determining its meaning.

The specification discusses “Tile Objects” at some length. Ex. 1001, 10:28–14:7. It states that “[a] tile presents content from any information source.” Ex. 1001, 10:31–32. Further, “[t]iles are selectable and live” and the specification explains that “tiles are live in that each contains real-time or near real-time information” and, when selected, “the tile instantly provides the user with access to the underlying information.” Ex. 1001, 12:3–11.

The specification frames tiles as contrasting with two other graphical user interface elements—icons and windows. Ex. 1001, 10:33–11:8. It presents tiles as “a third graphical representation of programs and files” and explains that “each tile is a viewer of a single information source.” Ex. 1001, 10:62–11:2. To distinguish tiles, the specification states that, unlike icons, a tile “contains continually refreshed content” and compared to windows, “a tile will typically be smaller in size than a window, allowing the user to view multiple tiles simultaneously if desired.” Ex. 1001, 11:3–8. Significantly, that comparison to windows uses exemplary characteristics

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without defining aspects applicable to all tiles. The specification asserts that “many tiles may be displayed simultaneously without overlapping with one another in the way that windows must necessarily do.” Ex. 1001, 11:13–16. That said, the specification also gives an example of “expanding tile 406 to occupy the full area of the display” (Ex. 1001, 11:49–51), demonstrating that size does not define a tile or distinguish a tile from a window.

According to Patent Owner, a tile is a “graphical representation of an associated information source,” not merely a graphical user interface element. PO Resp. 8–11. Patent Owner submits that “a graphical user interface element,” as Petitioner proposes, “does not require a tile to be graphically displayed and does not require it to be a representation of anything.” PO Resp. 9. In Patent Owner’s view, while such an element is used for user interaction, it “need not be a representation of an information source or its underlying information.” PO Resp. 10. As Petitioner points out, however, other claim language requires tiles be displayed. Pet. Reply 2. We therefore do not agree with Patent Owner that Petitioner’s construction is deficient.

Moreover, in light of Petitioner’s unpatentability contentions for MSIE Kit discussed below, the graphical representation aspect of Patent Owner’s construction would not impact our conclusion. Patent Owner contends otherwise, in a general way, but does not explain that contention. *See* PO Resp. 11 (“These differences impact the prior art analysis.”), 39–45 (the cited discussion, which distinguishes MSIE Kit’s asserted tiles based only on providing the same representation “as any Internet Explorer window”).

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Next, Patent Owner argues that a tile must provide “a representation of the underlying information that is more limited than the representation provided by a window.” PO Resp. 7, 11–15; *see also* Tr. 53:10–54:8. We do not agree.

While, as described above, the specification purports to distinguish tiles from windows, it does so with permissive terms rather than a restrictive definition. *See* Ex. 1001, 11:5–8. During the hearing, Patent Owner was unable to describe particular restrictions that would embody the limited representation. For example, Patent Owner asserted that degraded resolution would satisfy its proposed construction (Tr. 64:24–65:11) but that does not comport with a distinction from a window. A window may depict content at a variety of zooms, some of which would show an image with degraded resolution. *See* Tr. 68:6–15 (Patent owner discussing how pixels can be lost on a zoomed image). Patent Owner asserts that a window with zoom functionality lacks “a fundamentally or different in nature likeness or image.” Tr. 68:11–15. But that assertion is detached from Patent Owner’s proposed construction and unsupported by the specification. We conclude that the specification does not sufficiently distinguish a tile from a window to support Patent Owner’s proposed construction.

In fact, Patent Owner admits that the specification does not have a clear definition but insists that it nonetheless defines a tile “as something other than either an icon or a window.” Tr. 48:20–25. We do not agree. When identifying features that the specification describes to distinguish tiles from windows, Patent Owner points to other claim limitations, such as “[s]electability to provide access to the underlying information.” Tr. 49:7–10; *see also* Tr. 50:3–8 (asserting a tile must be refreshable). Although such

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limitations may capture aspects that the specification uses to distinguish tiles from other graphical interface elements, they do not support further construing “tile” narrowly as Patent Owner asserts. Stated otherwise, the specification’s distinctions for tiles over icons or windows already appear as claim limitations and do not counsel in favor of further limiting “tile.”

Further, Patent Owner’s construction is unclear whether a tile must provide a graphical representation of its associated information source or of the information underlying that source. The proposed construction first requires a tile represent the source but then additionally requires it “provid[e] a representation of the underlying information,” seemingly allowing no room for a tile that represents only the information source. PO Resp. 11. Those competing requirements would not comport with the specification. The exemplary tiles do not necessarily represent a source’s underlying information, but instead may relate to the source itself. *See* Ex. 1001, Fig. 4 (tile 410, displaying the name of a broadcast signal; tile 408, displaying an icon indicating “New Mail!”), 11:51–55 (describing tile 408), 11:61–63 (describing tile 410). Thus, Patent Owner’s proposed addition regarding the nature of a tile’s representation would create an internal inconsistency in the meaning of a tile. We do not adopt Patent Owner’s proposed restriction on the nature of a tile’s representation.

Next, Patent Owner attempts to distinguish a tile “whose content may be refreshed” from one “capable of displaying refreshed content.” PO Resp. 15–16. In this regard, Patent Owner distinguishes Petitioner’s construction, which Patent Owner asserts “does not require that [tile] element to be capable of displaying the refreshed content.” PO Resp. 15–16. We agree with Petitioner that the parties’ different language regarding

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refreshed content does not implicate any aspect of our unpatentability analysis. *See* Pet. Reply 5.

Finally, Patent Owner contends that a tile must be “selectable to provide access to underlying information of the associated information source,” not just an element that, “when selected, provides access to an information source.” PO Resp. 16–19. As Patent Owner explains, it seeks a distinction that “tiles themselves are selectable to provide access to underlying information of associated information sources, rather than access being provided by selecting the contents of a tile.” PO Resp. 16. Patent Owner argues that Petitioner’s construction, referring to an element “that, when selected, provides access to an information source,” does not require the tile itself be selectable. PO Resp. 18–19. Patent Owner relies primarily on the specification’s description that “[t]iles are selectable and live” and that, “[w]hen a tile is selected, whether by mouse click or otherwise, the tile instantly provides the user with access to the underlying information.” PO Resp. 16 (quoting Ex. 1001, 12:3–5). Petitioner relies on that same specification disclosure to argue that we should not restrict the manner of selecting a tile. Pet. Reply 6. The specification indicates that a tile may be selected “by mouse click or otherwise.” Ex. 1001, 12:3–4.

Petitioner points out that the 403 FWD concluded that when “a user selects a link *included* in an Active Desktop item, the user necessarily selects the Active Desktop item.” Ex. 1017, 36. That conclusion, which was part of a decision affirmed on appeal, *Surfcaster*, 639 F. App’x 651, indicates that Patent Owner’s proposed claim construction here would not preclude the claims from reading on MSIE Kit because selecting a link within an item selects the item itself. Thus, Patent Owner’s construction would not affect

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the outcome here. Regardless, we agree with Petitioner that, when the specification discloses a tile may be selected “by mouse click or otherwise,” it indicates a broader range of selection mechanisms than proposed by Patent Owner. *See* Pet. Reply 6–7.

Although Patent Owner asserts that its proposed construction alone focuses on tiles themselves being selectable, we do not view the two constructions as supporting that distinction. As Petitioner points out, its proposed construction requires that a tile, “when selected, provides access to an information source” and therefore requires “that tiles can be selected.” Pet. Reply 5, 8. Although Patent Owner seeks a construction that would not permit selection through activation of a link within a tile, we do not read the specification as so restrictive.

Based on the foregoing, and consistent with the Board’s prior construction, we construe “tile” as “a graphical user interface element whose content may be refreshed and that, when selected, provides access to an information source.”

2. “Grid”

a) *Patent Owner’s Arguments*

Patent Owner argues that the term “grid” means “a regular arrangement of rows and columns, which may, but need not, allow a single tile to occupy more than one row and/or column.” PO Resp. 19. According to Patent Owner, “regular” in its construction means “that the ‘arrangement’ enforces conformity to an established rule or standard continuously.” PO Resp. 19. Patent Owner argues this is in contrast with “a *non-regular* arrangement [which] may happen to appear aligned with an established rule or standard at some point in time, but may at other times deviate from that

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arrangement because it is not required to maintain conformity with the rule or standard continuously.” PO Resp. 19 (emphasis in original).

In support of its construction, Patent Owner directs us to the claim construction order in the Maine proceeding. PO Reps. 20 (citing Ex. 1018, 76–77). Patent Owner also directs us to the section of the specification describing the “Grid Object”:

“Grid Object” section of the specification addresses “[t]he arrangement, layout and independent functioning of the tiles on the display . . .” (EX1001, 14:8–10.) “The grid controls the layout and priorities of the tiles.” (EX1001, 14:22.) “The grid can be configured to contain any number of tiles, from one to as many as can reasonably fit on the user’s display.” (EX1001, 15:61-63.) The grid’s ability to control the layout and function of tiles and to contain tiles requires enforcing conformity to the positions delimited by the rows and columns.

The specification also shows that conformity to the grid is maintained continuously. For example, when a “preconfigured” or “standard” grid can be “customized” by a user, for example, by using a “‘drag and drop’ technique” to add tiles to the grid. (EX1001, 19:9-39; *also see* 14:58-61.) Thus, conformity is maintained continuously while the user is interacting with and reconfiguring the grid.

PO Resp. 21; *see also* PO Sur-reply 7. Patent Owner also argues that although the software is exemplary, the object of “grid object” is not. PO Sur-reply 7.

Additionally, Patent Owner argues that continuously does not mean unalterable. PO Sur-reply 7–8. Instead, according to Patent Owner, the grid “enforce[s] conformity with the rows and columns of the grid when the tiles are positioned in the grid object.” PO Sur-reply 8.

Patent Owner also argues that its construction is consistent with dictionary definitions of the term “regular”:

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The continuous regularity of a grid is also consistent with dictionary definitions of the term regular, for example, “lasting or happening over a long period” (EX2019, 2 (definition 7)), “conforming in form, build, or arrangement to a rule, principle, type, standard, etc.” (EX2020, 1 (definition 1)), and “conforming in form, build, or arrangement to a rule, principle, type, standard, etc.; orderly; symmetrical [regular features]” (EX2014, 3 (definition 1)).

PO Resp. 22.

Patent Owner further argues that Petitioner’s own proposed construction supports Patent Owner’s understanding of “regular.” According to Patent Owner, because “‘two sets of lines or linear elements’ only form a grid when they are ‘at right angles to each other,’ . . . the defined grid only remains a grid when ‘two set of lines or linear elements’ are maintained or enforced to conform continuously to positions ‘at right angles to each other.’” PO Sur-reply 6–7.

b) Petitioner’s Arguments

Petitioner argues that “[a] ‘grid’ is ‘two sets of lines or linear elements at right angles to each other.’” Pet. Reply 8 (citing Ex. 2028, 7 (Microsoft Computer Dictionary, Fourth Ed. (1999))). Petitioner further argues that its construction “is consistent with how the word is used in the specification, which for example describes the row and columns arrangement of tiles depicted in Figure 1 as a ‘grid of tiles.’” Pet. Reply 8–9 (citing Ex. 1001, 6:25–27, 6:47–48, 7:27–30, Fig. 1). According to Petitioner, this construction is also consistent with how the words are used in the claim and “not as some type of active element in the system that ‘continuously enforce[es] conformity’ or otherwise controls the operations of the system.” Pet. Reply 9. Petitioner further argues that “nowhere does the intrinsic

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record suggest that the claimed ‘grid’ must be unalterable, so that the tiles can never deviate from their original arrangement.” Pet. Reply 9.

Petitioner further argues that the claim construction in the Maine proceeding does not support Patent Owner’s proposed construction. Pet Reply 9. According to Petitioner, “that Court never suggested that the word ‘regular’ had some type of special meaning, or that the claimed grid, however construed, must ‘continuously enforce conformity to the positions delimited by the rows and columns continuously.’” Pet. Reply 9.

Petitioner further argues that although the specification mentions the grid controlling the layout and priorities of the tiles, “that passage is described as part of ‘exemplary software,’ so it is not definitional.” Pet. Reply 10 (citing Ex. 1001, 14:9–11). According to Petitioner, just because the specification shows the tiles displayed as a grid, “[t]hat does not mean that the tiles must be forever anchored at such positions.” Pet. Reply 10.

Petitioner further argues that “every use of an invention described in the specification need not be found in the claims” and that Patent Owner’s construction is inconsistent with the findings in the 403 FWD. Pet. Reply 10–11.

Finally, Petitioner argues that the final portion of Patent Owner’s proposed construction—“may, but need not, allow a single tile to occupy more than one row and/or column”—is completely optional and therefore places no limitation on a grid. Pet. Reply 11.

c) Our Analysis

We focus our analysis on the dispute between the parties. However, we see no real dispute between the proposed constructions. For example, both constructions require an arrangement of rows and columns.

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Additionally, both constructions would allow, but not require, a single tile to occupy more than a single row or column. This is explicit in Patent Owner’s construction and implicit in Petitioner’s.¹⁷ Nor is there any real dispute that the grid must be regular. That is explicitly part of Patent Owner’s proposed construction. And it is consistent with Petitioner’s construction.

Instead, the dispute between the parties is not about the construction of the term “grid,” but the meaning of the word “regular” in that construction. Based on the full record and for the reasons given below, we do not agree with Patent Owner that “regular” requires a special construction limiting the claims to an arrangement that enforces conformity to an established rule or standard *continuously*.

Claim 1 recites “display, using the display device, a *grid of tiles*.” Ex. 1001, 30:28 (emphasis added). Besides indicating that there are multiple tiles in a grid, the context of the use of “grid of tiles” in the claims does not provide any assistance in determining its meaning.

The cited portions of the specification do not support Patent Owner’s construction. According to the specification, “[t]he grid controls the layout and priorities of the tiles.” Ex. 1001, 14:22. Similarly, the “Grid Object” section of the specification addresses “[t]he arrangement, layout, and independent functioning of the tiles on the display.” Ex. 1001, 14:8–11; *see also* Ex. 1001, 14:17–20 (“Grid 700 comprises a matrix or array of tiles

¹⁷ We note that the district court in the Maine proceeding added the optional language to give guidance to the jury that spanning—a tile located in multiple rows and/or columns—is permissible. Ex. 1018, 74. Because there is no jury and spanning is not an issue, there is no need to include the optional language explicitly in the construction. Regardless, because it describes an optional feature, that construction has no bearing on the outcome of this proceeding.

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. . .”). Although the specification clearly links the grid to the arrangement or look of the tiles, nothing in those sections indicates that the arrangement must be maintained continuously. To the contrary, the specification is silent as to any temporal requirement.

Moreover, the continuous requirement is inconsistent with other portions of the specification. Specifically, the specification describes how tiles can be moved and, while being moved, may overlap other tiles. *See* Ex 1001, 11:17–20 (“Tiles may overlap one another during configuration of a grid, or when moving tiles from one location to another, but typically, tiles are arranged adjacent to one another.”). Because the specification describes how the tiles can be moved out of their location in the grid and overlap tiles still on the grid, the grid cannot “enforce[e] conformity to the positions . . . continuously” as Patent Owner argues.

We also do not agree with Patent Owner that even if the grid is alterable, it is still continuous. *See* PO Sur-reply 7–8. Continuous means “marked by uninterrupted extension in space, time, or sequence.” Ex. 3001.¹⁸ Uninterrupted extension is the antithesis of alterable. Thus, a grid cannot be both alterable and continuous.

Finally, Patent Owner’s argument is premised not on construing the term “grid,” but on reading its construction into the word “regular” in its proposed construction. But that is not consistent with the ordinary meaning of the word grid, which simply describes the arrangement of the elements

¹⁸ Exhibit 3001 is the Merriam-Webster definition of “continuous.” *See* <https://www.merriam-webster.com/dictionary/continuous>, downloaded July 17, 2023.

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without imposing a temporal requirement. *See* Ex. 1028, 208 (defining grid as “[t]wo sets of lines or linear elements at right angles to each other.”).

Nor is the construction consistent with the dictionary definitions Patent Owner has added to the record. We acknowledge that the seventh definition of the word “regular” in the Oxford Learners Dictionary refers to a temporal period. *See* Ex. 2019, 2. But, the first definition of regular is “following a pattern, especially with the same time and space between each thing and the next.” Ex. 2019, 1. That definition is most consistent with the other dictionary definition to which the Patent Owner cites and the specification in describing an orderly arrangement of the tiles. *See* Ex. 2020 (defining “regular” as “conforming in form, build, or arrangement to a rule, principle, type, standard, etc.; orderly; symmetrical regular features”) (Collins English Dictionary); Ex. 1001, 14:9–11 (“The arrangement, layout, and independent functioning of the tiles on the display”), 14:22 (“The grid controls the layout and priorities of the tiles.”). In light of the specification’s silence regarding a temporal component and, instead, its focus on the arrangement of tiles, we see insufficient support for Patent Owner’s temporal component.

Accordingly, for the reasons given above, “grid” as used in the claims of the ’317 patent means “a regular arrangement of rows and columns.” However, we do not adopt Patent Owner’s understanding of the word “regular” and instead use the everyday meaning as reflected in the dictionary definitions cited approvingly above.

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3. *“Partitioning . . . at Least a Portion of the Visual Display into an Array of Tiles”*

a) *Arguments of the Parties*

Petitioner argues that “partitioning . . . at least a portion of the visual display into an array of tiles” means “dividing a display or window into two or more tiles.” Pet. 16 (quoting Ex. 1016, 12–13). According to Petitioner, this construction “represents the ordinary meaning of the term, as it is consistent with the description of tiles in the specification.” Pet. 16 (citing Ex. 1001, 7:27–39, Fig. 1).

Patent Owner argues that the phrase means “dividing some or all of a display into multiple tiles displayed in an orderly fashion.” PO Resp. 23. Specifically, Patent Owner argues “that ‘partitioning’ and ‘arranging’ mean ‘dividing[]’ and ‘array of tiles’ means ‘multiple tiles displayed in an orderly fashion.’” PO Resp. 23.

Patent Owner further argues that “Petitioner’s attempt[] to redefine the ‘visual display’ recited by the claims to refer to ‘a display or window’ is inconsistent with the specification.” PO Resp. 23–24 (emphasis omitted); *see also* PO Sur-reply 8 (citing Ex. 1001, 3:48–49). Patent Owner further argues that the ’317 patent draws a distinction between a window and a portion of the visual display:

The specification also distinguishes between a window and an area of a visual display. For example, “while a window may be resized as appropriate, it will frequently occupy the full display area . . .” (EX1001, 3:48-49; EX2001, ¶¶ 83, 142.) This distinction is important to the tile technology introduced by the ’317 Patent.

PO Resp. 24. According to Patent Owner, placing tiles in a window “will fail to provide the uniformity of appearance realized by dividing a visual

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display into an array of tiles” and “cannot provide a replacement for a desktop.” PO Resp. 24–25 (citing Ex. 1001, 4:7–43, 4:65–5:10, 6:3–11, 11:23–27, 14:15–17, 15:17–19; Ex. 2001 ¶¶ 54, 56, 90–92, 99–101, 104, 107, 142–142); *see also* PO Sur-reply 8–9. Patent Owner also argues that the fact that a window can occupy some or all of the visual display reinforces the idea that they are separate elements. PO Sur-reply 9–10.

With regard to “array,” Patent Owner argues it must mean something more than two or more tiles, as that is already captured in the use of the term “tiles.” PO Resp. 25. According to Patent Owner, in order “[f]or different tiles to be first *in an array* and second *in an array* and to display information from different sources, they must be ordered, *i.e.*, displayed in an orderly fashion.” PO Resp. 25. Patent Owner also argues this is consistent with the specification, which shows tiles displayed in an orderly fashion. PO Resp. 25–26 (citing Ex. 1001, 11:49–51, 14:17–19, 16:7–59, Figs. 7–11). Patent Owner also argues that “[c]onstruing an array to merely refer to tiles without also requiring the tiles to be displayed in an orderly fashion, would recreate the problems criticized by the specification.” PO Resp. 26.

Petitioner responds by pointing out that the Board’s construction in the Institution Decision¹⁹ essentially adopted the construction from the Maine proceeding. Pet. Reply 11 (citing Inst. Dec. 14–15; Pet. 15). However, Petitioner argues that adopting Patent Owner’s position that the claim “cannot be satisfied by dividing the area *within a window* into

¹⁹ In the Institution Decision, we adopted Patent Owner’s proposed construction of “dividing some or all of a display into multiple tiles displayed in an orderly fashion.” Inst. Dec. 14–15. We further noted that “[i]n doing so, any array that is similar to that shown in a figure of the ’317 patent would be orderly.” Inst. Dec. 15.

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multiple tiles” would be legal error. Pet. Reply 11–12. According to Petitioner, because “[a] window displayed on a computer display obviously occupies some or all of that display, as the 317 Patent itself recognizes, . . . dividing some or all of the window is necessarily dividing some or all of the display.” Pet. Reply 12 (citing Ex. 1001, 3:48–49). Petitioner also argues it is inconsistent with the Board’s prior decision in the 403 FWD. Pet. Reply 12–14.

b) Our Analysis

As noted in footnote 19, we preliminarily construed this limitation to mean “dividing some or all of a display into multiple tiles displayed in an orderly fashion” and that “any array that is similar to that shown in a figure of the ’317 patent would be orderly.” Inst. Dec. 14–15. Although Petitioner proposed a different construction in the Petition, Petitioner did not maintain its construction in its Reply or argue that we erred. Accordingly, for the reasons given in the Institution Decision, which we incorporate by reference, we reach the same construction in this Decision.

However, the real dispute between the parties does not focus explicitly on our construction, but whether it implicitly excludes placing the array of tiles in a window.²⁰ Based on the record, we agree with Petitioner that the claim limitation does not preclude having the array of tiles located within a window on the video display.

²⁰ This issue is not relevant to the instant proceeding. However, it is relevant to IPR2022-00590, decided concurrently. Because the parties agree that the terms should have the same construction in all four pending proceedings (Tr. 11:1–8 (Petitioner), 54:11–17 (Patent Owner)), we address the dispute here.

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We begin, as always, “with the words of the claim themselves.” *Allergan Sales, LLC v. Sandoz, Inc.*, 935 F.3d 1370, 1373 (Fed. Cir. 2019) (quoting *Amgen Inc. v. Hoechst Marion Roussel, Inc.*, 457 F.3d 1293, 1301 (Fed. Cir. 2006)). The claim is silent as to which part of the visual display will contain the array of tiles. *See* Ex. 1001, 30:53–54. It is not limited to, as Patent Owner argues (PO Resp. 24), a replacement for a desktop. Nor, as Patent Owner also argues (PO Resp. 24), is there anything in the claim or our construction of tiles that requires the tiles to be presented “in a consistent manner” and be capable of “run[ning] on any device.” Rather, the claim simply states “partitioning . . . a portion of the visual display into an array of tiles” without any other limitations. *See* Ex. 1001, 30:53–54.

Our construction is further supported by the specification of the ’317 patent. The specification makes it clear that windows are a part of the visual display. For example, the background section describes how a window is on the visual display: “Thus, while a window may be resized, it will frequently occupy the full display area, effectively limiting the user to a view of a single program.” Ex. 1001, 3:48–50; *see also* Ex. 1001, 10:49–50. Additionally, the ’317 patent describes how a window has “a display area 354.” Ex. 1001, 10:50–51. Thus, so long as the window is shown on the video display, the claim limitation is broad enough to encompass partitioning the portion of the video display where there is a window into an array of tiles.

Although we agree with Patent Owner that the video display and the window are two different elements (PO Resp. 24; PO Sur-reply 9–10), that fact does not require us to adopt Patent Owner’s construction. Because the

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window is shown on the video display, partitioning a window is necessarily also partitioning a video display.

Moreover, the portion of the specification cited by Patent Owner does not support its construction. The specification simply states “[t]hus, while a window may be resized as appropriate, it will frequently occupy the full display area, effectively limiting the user to a view of a single program.” Ex. 1001, 3:48–50 (cited by PO Resp. 24). That section provides no guidance as to whether there is a difference between partitioning a display and partitioning a window.

Accordingly, for the reasons discussed above, “partitioning . . . at least a portion of the visual display into an array of tiles” means dividing some or all of a display into multiple tiles displayed in an orderly fashion and that any array that is similar to that shown in a figure of the ’317 patent would be orderly. Additionally, the claim is broad enough to encompass partitioning a window that is located on the video display.

4. “*Sending a Conditional Request*”

Claim 5 recites, *inter alia*, “at a first update time in accordance with the first update rate, sending a conditional request from the first client device to the first server device for an update of information in the first tile *if the information from the first information source currently displayed in the first tile has not changed since a last update.*” Ex. 1001, 30:60–65 (emphasis added). The focus of the parties’ dispute is whether the emphasized “if clause” (condition) applies to when the request is sent (Patent Owner) or the content of the request (Petitioner).

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a) Patent Owner's Arguments

Patent Owner argues that the term “impos[es] a condition precedent that must be satisfied before sending the conditional request or sending the update message, which is the ordinary meaning of the language ‘sending . . . if.’” PO Resp. 27–28.²¹

Patent Owner argues that Petitioner “misinterprets this claim language to encompass a mere coincidence rather than imposing a condition precedent.” PO Resp. 28. According to Patent Owner, if the applicant intended a meaning consistent with Petitioner’s interpretation, the applicant would have used the term “while” instead of “if,” as the applicant did elsewhere. PO Resp. 28 (citing Ex. 1001, 26:21–45); *see also* PO Sur-reply 13. Patent Owner also argues that Petitioner’s construction is inconsistent with the dictionary definition of “if.” PO Resp. 28 (citing Ex. 2021, 1 (Cambridge English Dictionary); Ex. 2022, 1 (Merriam-Webster Dictionary)). Patent Owner also argues that treating the clause as covering a mere coincidence would render the clause superfluous. PO Resp. 28–29.

Patent Owner further argues that because Petitioner’s proposed construction asks whether there is no need for an update, it “makes no sense.” PO Sur-reply 13. Patent Owner also argues that there is no intrinsic evidence to support Petitioner’s construction. PO Sur-reply 13–14.

Patent Owner further argues that the specification of the ’317 patent refers to the HTTP1.1 specification, which “explains that ‘[a] conditional GET method requests that the entity be transferred only under the circumstances described by the conditional header field(s).’” PO Resp. 29 (quoting Ex. 1012, 50). Patent Owner also argues that the conditional GET

²¹ We sometimes refer to this as the “condition precedent” construction.

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is not the only support for this claim language. PO Sur-reply 12–13. Instead, Patent Owner argues, it is supported by the discussion of tiles having conditional content based on communication with other tiles. PO Sur-reply 12 (citing Ex. 1001, 13:21–32). According to Patent Owner, a person having ordinary skill in the art would have understood “‘if . . . has not changed’ to mean that a device on which the tile resides makes a determination about this condition precedent.” PO Sur-reply 12–13.

Patent Owner further argues that there is no inconsistency between its construction and dependent claim 9. PO Sur-reply 11–12. Specifically, Patent Owner argues that “[i]n claim 9, the client device is simply responding to an additional determination supplied by the server in response to the conditional request.” PO Sur-reply 12.

Patent Owner further argues that its construction does not always result in the claim language being satisfied. PO Sur-reply 14. Instead, Patent Owner argues, the condition is not satisfied if the content has been changed, such as by the user changing the content of a tile or explicitly requesting an update/refresh. PO Sur-reply 14 (citing Ex. 1001, 28:43–45).

b) Petitioner’s Arguments

Petitioner argues that the limitation “require[s] that the conditional request is asking for an update if the copy of the tile-displayed information that is stored at the server ‘has not changed.’” Pet. Reply 17; *see also* Pet. 29 (implicitly construing the limitation).²²

Petitioner argues that Patent Owner’s “interpretation is inconsistent with the claim language.” Pet. Reply 15. Specifically, Petitioner argues that

²² We sometimes refer to this as the “conditional request” construction.

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dependent claim 9²³ only makes sense if the determination that the relevant information has not changed is only made after receiving the response to the request, not via a determination made prior to the request being sent. Pet. Reply 15–16.

Petitioner further argues that its construction is consistent with the specification. Pet. Reply 16. According to Petitioner, the specification “never discloses a client device making a determination that information displayed in a tile ‘has not changed’ before sending a conditional request.” Pet. Reply 16. Instead, Petitioner argues, “the only plausible support for this claim language comes from a passage in the specification that refers to the two ‘conditional gets’ of HTTP1.1, neither of which entail a client making a determination that information displayed at a client ‘has not changed’ before sending a conditional request.” Pet. Reply 16 (citing Pet. 28–29, 31; Ex. 1011, 123–24; Ex. 1003 ¶¶ 177–180, 222–224).

Petitioner further disputes Patent Owner’s argument regarding the word “while.” According to Petitioner, the applicant did not use “while” in claim language; instead, it was only used in pseudocode. Pet. Reply 16–17.

Petitioner also argues that the conditional request construction does not render the clause superfluous. Pet. Reply 17. To the contrary, Petitioner argues that it is the condition precedent construction which “render[s] the claim language a nullity because it would always be satisfied.” Pet. Reply 17.

²³ Claim 9 depends from claim 5 and recites “wherein no update of the first tile is performed if the response to the conditional request indicates that the information in the first tile has not changed since a previous update of the first tile.” Ex. 1001, 31:12–15.

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c) Our Analysis

Based on the full record, and for the reasons given below, we do not agree with Patent Owner that the “if clause” imposes a condition precedent before the request is sent from the first client device to the server. Instead, we agree with Petitioner that the limitation simply requires sending a conditional request that asks if tile-displayed information that is stored at the server “has not changed since a last update.”

We turn to the specification of the ’317 patent. Both parties direct us to the specification’s recitation of a conditional GET of HTTP1.1. *See* PO Resp. 29 (citing Ex. 1001, 25:15–17); Pet. Reply 16 (“Rather, as the petition pointed out, the only plausible support for this claim language comes from a passage in the specification that refers to the two ‘conditional gets’ of HTTP1.1, neither of which entail a client making a determination that information displayed at a client ‘has not changed’ before sending a conditional request.”). That section of the specification states that “a pre-fetch utility such as URL pre-fetch manager 2208 can be implemented.” Ex. 1001, 25:16–17. One strategy for performing the pre-fetch is the conditional GET:

Another function of a pre-fetch utility is to periodically check the validity of the items in cache to make sure they are up to date. As would be familiar to one of ordinary skill in the art, some of the new HTTP1.1 methods would prove very useful for this, namely the conditional gets.

Ex. 1001, 25:24–16. According to the HTTP1.1 protocol (Ex. 1012), a GET request “retrieve[s] whatever information (in the form of an entity) is identified by the Request-URI.” Ex. 1012, 50. Such a GET is called a “‘conditional GET’ if the request message includes an If-Modified-Since, If-Unmodified-Since, If-Match, If-None-Match, or If-Range header field. A

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conditional GET method requests that the entity be transferred only under the circumstances described by the conditional header field(s).” Ex. 1012, 50.

That conditional GET, which both parties point to as support, is consistent with Petitioner’s construction, which we adopt. The conditional GET has the condition in the request, not as a condition precedent to sending the request. *See* Ex. 1012, 50; Ex. 1003 ¶ 179.²⁴ The conditional GET in the HTTP1.1 protocol does not discuss a condition precedent to sending the request.

In its Sur-reply, Patent Owner also directs us to a different portion of the specification relating to conditional tile content. PO Sur-reply 12 (citing Ex. 1001, 13:21–32). We do not agree with Patent Owner’s argument based on that portion of the specification. That section of the specification involves tiles communicating with each other and having “conditional content.” *See* Ex. 1001, 13:21–22. Such conditional content refers to “the content of one tile depend[ing] upon the content of another.” Ex. 1001, 13:22–23. This has nothing to do with conditional requests. *See* Ex. 1001, 13:21–32.

We have considered Patent Owner’s remaining arguments and, for the reasons given below, do not find they support imposing a condition precedent.

First, we do not agree that the conditional request construction “encompass a mere coincidence.” PO Resp. 28–29. In making that argument, Patent Owner does not accurately represent Petitioner’s

²⁴ Exhibit 1003, paragraph 179 incorrectly identifies the HTTP1.1 protocol as Exhibit 1011. However, the quotes are from Exhibit 1012.

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arguments. Petitioner never argues that the claim was broad enough to cover a mere coincidence. *See* Pet. 25–27. Instead, as discussed above, Petitioner’s construction requires a specific type of request to be sent. *See* Pet. 26–27; Pet. Reply 16.

Second, we do not agree with Patent Owner’s arguments relating to the difference between the words “while” and “if” or the definition of the word “if.” *See* PO Resp. 28; PO Sur-reply 13. As with the prior argument, Patent Owner is not accurately representing Petitioner’s claim construction, which focuses on the type of request that is sent as opposed to its timing. *See* Pet. 26–27; Pet. Reply 16.

Third, we agree with Patent Owner that its condition precedent construction does not always result in the claim language being satisfied. *See* PO Sur-reply 14. But we find Patent Owner’s argument inapposite. For the reasons discussed above, we do not believe that the “if clause” imposes a condition precedent on when the conditional request is sent.

Accordingly, for the reasons set forth above, the “if clause” does not impose a condition precedent on when the conditional request is sent. Instead, the “if clause” describes the content of the conditional request.

D. Asserted Anticipation by MSIE Kit

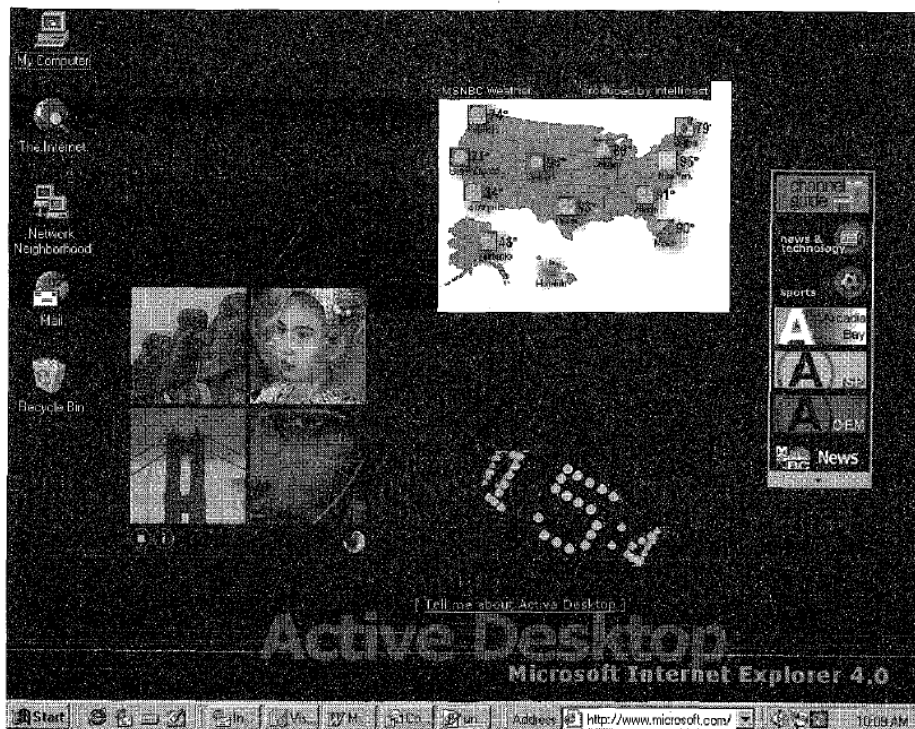
1. Summary of MSIE Kit

MSIE Kit describes features of Microsoft Windows Internet Explorer 4, including Microsoft Active Desktop functionality in conjunction with Windows 98 or Windows NT. Ex. 1010, 174, 180, 183. Specifically, MSIE Kit describes Active Desktop items presented on a user’s desktop. Ex. 1010, 175, 180, 183, 211. Each Active Desktop item is associated with an information source on the Web. Ex. 1010, 176–77, 180, 183, 211.

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Additionally, each Active Desktop item is presented typically on the desktop in a borderless frame without a title bar or scrollbars. Ex. 1010, 176, 183. By default, the Active Desktop items are laid out in a 3x2 grid. Ex. 1010, 183.

Each Active Desktop item displays information from a URL and is updated periodically. Ex. 1010, 176–177, 180, 188, 201. The user may choose how frequently to update, or a content provider may specify the frequency in a CDF (Channel Definition Format) file. Ex. 1010, 176–77, 183, 188, 223. Users may select an Active Desktop item in order to move it on the desktop or may select a link within the item to open that link in a new browser window. Ex. 1010, 177, 183. MSIE Kit shows a sample desktop, which is reproduced below.



Ex. 1010, xxx. The figure shows an Active Desktop which includes a 2x2 grouping of Active Desktop items. Ex. 1010, xxx. We refer to the figure as Figure xxx.

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2. *Analysis of Claim 1*

a) *Limitation 1.d: “A Grid of Tiles”*

Limitation [1.d] recites, *inter alia*, a “grid of tiles.” Ex. 1001, 30:28. Petitioner maps the grid of tiles to the default arrangement of the Active Desktop items. Pet. 23. Specifically, Petitioner argues MSIE Kit explains that “[b]y default, Internet Explorer lays out new Active Desktop items on a 3 by 2 grid.” Pet. 23 (quoting Ex. 1010, 183). For the reasons discussed below, we are persuaded by Petitioner’s arguments. First, we will discuss whether the Active Desktop items are tiles. Second, we will discuss whether the Active Desktop items are arranged as a grid.

(1) Whether Active Desktop Items Are Tiles

Petitioner submits that Active Desktop items are each tiles because they “are rectangular, borderless frames on the display that a user may interact with,” “can be refreshed at a specified rate,” and “provide access to an information source when selected.” Pet. 23–24 (citing Ex. 1010, xxx, 137, 174–77, 180–83, 740; Ex. 1003 ¶¶ 147–148, 150–158). As to selection, Petitioner relies on “clicking a link within the Item to open a browser window displaying the linked information,” “clicking on a hot spot defined on the Item” to do the same thing, “dragging/resizing the Item,” and “using keyboard navigation to and within the Item.” Pet. 23–24.

Patent Owner argues that Active Desktop items are not “tiles” because they “provide the same representation of underlying Web page information as any Internet Explorer window.” PO Resp. 37–38. Because, as discussed above, we do not agree that a “tile” may be distinguished based on comparing its representation to that of a window (*see* Section II.C.1), Patent Owner’s argument is not persuasive.

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Patent Owner argues that Active Desktop items are not “tiles” because clicking a link or hot spot within an Active Desktop item does not “select” the tile itself. PO Resp. 39–40. Because, as discussed above regarding claim construction, we do not agree that a “tile” limits how it may be selected (*see* Section II.C.1), Patent Owner’s argument is not persuasive. We agree with Petitioner that clicking a link or hot spot in an Active Desktop item selects the item as claimed because doing so provides access to the item’s information source. Pet. 23–24.

(2) Whether Active Desktop Items Are Arranged in a Grid

Petitioner argues that the Active Desktop items (tiles) are arranged as a grid. Pet. 23, 24; Pet. Reply 19–20. For the reasons discussed below, we are persuaded by Petitioner’s arguments.

MSIE Kit describes how it, by default, arranges “new Active Desktop items *on a 3 by 2 grid*.” Ex. 1010, 183 (emphasis added). A person having ordinary skill in the art would understand MSIE Kit to be discussing a regular arrangement of rows (3) and columns (2). *See* Ex. 1010, 183; Ex. 1065 ¶¶ 8 (“[T]he fact that Active Desktop items may be arbitrarily positioned by the user does not change the fact that MSIE Kit also discloses a default grid layout that discloses ‘dividing some or all of a display into multiple tiles displayed in an orderly fashion.’”), 9 (“While Active Desktop items may be placed at arbitrary x/y positions, when a default layout is used, they are arranged in an orderly fashion at selected ones of those x/y positions.”).

This is confirmed by Figure xxx, which shows a grid of Active Desktop items. *See* Ex. 1010, xxx. Specifically, Figure xxx shows a

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desktop with a 2 by 2 arrangement of Active Desktop items. Ex. 1010, xxx. That is a regular arrangement of rows (2) and columns (2).

We have considered Patent Owner's contrary arguments, but we do not agree with them. Specifically, Patent Owner's arguments are premised on its proposed claim construction. PO Resp. 41–44; PO Sur-reply 18–19. Because we rejected Patent Owner's proposed construction, *see* Section II.C.2.(c), those arguments are inapposite.

For example, Patent Owner focuses on whether MSIE Kit enforces conformity with the rows and column continuously. PO Resp. 41–44; PO Sur-reply 18–19. Specifically, Patent Owner focuses on the arbitrary location of the Active Desktop items and that the Active Desktop items can overlap each other. PO Resp. 41–44; PO Sur-reply 18–19. But such features are immaterial with our claim construction. Under our claim construction, all that is required is that a grid is displayed, not that it is forced to remain in place. When the grid of Active Desktop items is created, the location of the relative position of the Active Desktop items is not arbitrary; instead, by default the Active Desktop items are arranged in a 3 by 2 grid. *See* Ex. 1010, iii; Ex. 1065 ¶¶ 7, 10–11. Even if that changes in the future, with Active Desktop items being moved or enlarged such that Active desktop items overlap, MSIE Kit still describes creating a grid.

Moreover, although not required by our claim construction, MSIE Kit also discloses that the default grid arrangement can be kept. As Dr. Houh testified, “MSIE Kit discloses that administrators can install Active Desktop items on a user's desktop and prevent users from rearranging or removing Desktop Items, including locking down the ‘default’ Active Desktop layout

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of a ‘3 by 2 grid’ of Desktop Items.”²⁵ Ex. 1003 ¶ 165 (citing Ex. 1010, 235, 601); *see also* Ex. 1065 ¶ 7; Ex. 1010, 235 (“Once you’ve built your custom packages, you can use the IEAK Configuration Wizard to lock down channel options and restrict users from changing settings.”), 601 (“You can control, or *lock down*, features and functions in these areas. . . . More important, you can prevent users from adding or deleting channels that you have preset, or *from rearranging or adding Active Desktop items*.” (first emphasis in original, second emphasis added)). Because the default grid is locked and cannot change, it necessarily maintains the grid without any arbitrary movement or overlap. *See* Ex. 1003 ¶ 165; Ex. 1065 ¶ 7.

(3) Conclusion Regarding “Grid of Tiles”

Accordingly, MSIE Kit discloses “a grid of tiles” as recited in claim 1.

b) Limitation 1.g: Checking and Displaying Updating Information

Claim 1 further recites “[1.g] check whether content in the first data source is updated relative to the current content of the first tile and, if so, display updated information from the first data source on the first tile.” Ex. 1001, 30:36–39. Petitioner argues MSIE Kit discloses this limitation. Pet. 25–27; Pet. Reply 21–23. For the reasons discussed below, we are persuaded by Petitioner’s arguments.

MSIE Kit describes how Active Desktop items (tiles) can be updated according to a subscription schedule. Specifically, MSIE Kit describes how to use subscriptions that check for updates and that the “updated content automatically appears in the desktop frame.” Ex. 1010, 213–14; *see also*

²⁵ Petitioner underlines the names of references in its papers and Dr. Houh does so as well in his testimony. We have eliminated the underlining in all quotations.

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Ex. 1003 ¶ 175.²⁶ MSIE Kit also describes how “Internet Explorer 4 provides a mechanism for end users to schedule recurring monitoring, or crawling, of Web sites and automatic downloading of updated information.” Ex. 1010, xxxii; *see also* Ex. 1010, 190 (A benefit of Webcasting is “[a]utomated visiting and crawling of sites on a scheduled basis to check for updated content.”), 186 (“Internet Explorer 4 then activates the Active Desktop Subscription Wizard on the user’s computer and allows the user to receive updated information about this Active Desktop item.”); Ex. 1003 ¶ 174.

MSIE Kit further describes how it checks to see if the information has been modified and if the Active Desktop item (tile) needs to be updated. Ex. 1010, 192; Ex. 1003 ¶ 179. Specifically, MSIE Kit states that the site crawler compares the date of the information on the computer with the date of the file on the webserver. Ex. 1010, 191–92. “If the dates are different, it knows the page has been changed” Ex. 1010, 192; *see also* Ex. 1003 ¶ 176. A person having ordinary skill in the art would have understood that this could have been done using a conditional GET request based on the saved date. Ex. 1003 ¶ 177; Ex. 1010, 192. By checking to see if the saved date is different, the system determines whether the content has been updated and downloads and displays the updated information. Ex. 1003 ¶ 178; Ex. 1010, 213–214.

Patent Owner argues that the conditional GET request “do[es] not check whether the file at the server is updated relative to the content of the first tile;” instead, the request “simply compare[s] two date/time values.”

²⁶ Because Dr. Houh’s testimony in this section is consistent with MSIE Kit, we give it significant weight.

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PO Resp. 46–47 (citing Ex. 1010, 192, 746; Ex. 2001 ¶ 188). According to Patent Owner, this is important because the clocks might not be synchronized, resulting in the user being “erroneously notified of updated content where none exists.” PO Resp. 47 (citing Ex. 1010, 192; Ex. 2001 ¶ 189); *see also* PO Resp. 47 (providing an example); PO Sur-reply 20–21 (arguing that checking dates is a weak validator).

We do not agree with Patent Owner’s argument. Although Patent Owner has identified an outlier case in which the system incorrectly determines an update, Patent Owner does not address the situation where there is no clock error. In other words, at best, Patent Owner has shown that MSIE Kit may not always practice the claim limitation. However, so long as the prior art sometimes practices the claimed invention, that is enough for anticipation. “[A] prior art reference may anticipate or render obvious an apparatus claim—depending on the claim language—if the reference discloses an apparatus that is reasonably capable of operating so as to meet the claim limitations, even if it does not meet the claim limitations in all modes of operation.” *ParkerVision, Inc. v. Qualcomm Inc.*, 903 F.3d 1354, 1361 (Fed. Cir. 2018) For example, the Federal Circuit held that it was sufficient to show that a reference anticipated in “the process of startup,” even if the reference did not show anticipation during “normal operation,” reasoning that “[n]othing in the claims requires that the current threshold increase during the power supply’s normal operation.” *Power Integrations, Inc. v. Fairchild Semiconductor International, Inc.*, 843 F.3d 1315, 1336 (Fed. Cir. 2016); *see also* *Hewlett-Packard Co. v. Mustek Sys., Inc.*, 340 F.3d 1314, 1326 (Fed. Cir. 2003) (“Just as ‘an accused product that sometimes, but not always, embodies a claimed method nonetheless

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infringes,’ a prior art product that sometimes, but not always, embodies a claimed method nonetheless teaches that aspect of the invention.” (quoting *Bell Communications Research, Inc. v. Vitalink Communications Corp.*, 55 F.3d 615, 622–623 (Fed. Cir. 1995))). Because there is no dispute that MSIE Kit discloses a system that sometimes practices the claim limitation, it discloses that limitation.

c) Remaining Limitations

The preamble²⁷ of claim 1 recites “[1.a] [a] system for communicating with multiple data sources, the system comprising.” Ex. 1001, 30:21–22. Petitioner argues that MSIE Kit discloses the preamble. Pet. 20–21. According to Petitioner, MSIE Kit “discloses a system, such as a personal computer running Internet Explorer 4, that can communicate with multiple web sites.” Pet. 20 (citing Ex. 1010, xxiv, xxxx, 4, 174–78, 180, 184–85; Ex. 1003 ¶ 110). Petitioner further argues that “[e]ach web site may be associated with and displayed in an Active Desktop Item located on the user’s desktop, and is therefore a ‘data source’ for its associated Item because it is a source of data for that Item.” Pet. 20–21 (emphasis omitted) (citing Ex. 1010, 246; Ex. 1003 ¶ 111).

Claim 1 further recites “[1.b] a client device adapted for communication with a server device.” Ex. 1001, 30:23–24. Petitioner argues that MSIE Kit discloses this limitation. Pet. 21. According to Petitioner, the computer running Internet Explorer 4 (the client device) communicates with web sites—which Petitioner maps to shared resources

²⁷ Because Petitioner has sufficiently shown that the preamble is disclosed by MSIE Kit, we need not determine if the preamble is limiting. *See Nidec*, 868 F.3d at 1017.

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provided by a server device—for display in Active Desktop items. Pet. 21 (citing Ex. 1010, xvi, xxx, 88, 174–78, 180, 184–86, 192, 219–23, 246, 384, 391–94; Ex. 1003 ¶¶ 114–116).

Claim 1 further recites “[1.c] wherein the client device includes a display device, a processor configured to execute instructions, and a memory connected to the processor.” Ex. 1001, 30:24–26. Petitioner argues that MSIE Kit discloses this limitation. Pet. 21–22. Specifically, Petitioner argues that MSIE Kit discloses “operation of the Active Desktop software on ‘a display device’ of a user’s computer.” Pet. 21–22 (emphasis omitted) (citing Ex. 1010, 131–132).

Claim 1 further recites “[1.d] wherein the processor executes instructions to: display, using the display device, *a grid of tiles*.” Ex. 1001, 30:26–28 (emphasis added).²⁸ Petitioner argues that MSIE Kit discloses this limitation. Pet. 22–25. Specifically, Petitioner argues that “[t]he Internet Explorer functionality described in MSIE Kit was necessarily implemented by a processor executing computer instructions.” Pet. 23 (citing Ex. 1028, 115, 243–44, 359, 415; Ex. 1003 ¶ 142). Petitioner further argues that MSIE Kit “discloses the user’s display device is divided/arranged/partitioned so as to display” items, including what we have found to be a grid of tiles. Pet. 23 (citing Ex. 1003 ¶ 144); Section II.D.2.(a).

Claim 1 further recites “[1.e] wherein a first tile of said grid of tiles is associated with a first data source residing on the server device, and a second tile of said grid of tiles is associated with a second data source.”

²⁸ As discussed above in Section II.D.2.(a), Patent Owner disputes whether MSIE Kit discloses a “grid of tiles.” However, Patent Owner’s dispute is over what Petitioner identifies as a “grid of tiles,” not whether the processor has instructions to display the item. See PO Resp. 36–44.

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Ex. 1001, 30:28–32. Petitioner argues that MSIE Kit discloses this limitation. Pet. 25. Specifically, Petitioner argues MSIE Kit “discloses a 3x2 grid of Active Desktop Items” “and that each Item in the grid may be associated with a different data source, such as a website or page.” Pet. 25 (citing Ex. 1010, xvi, xxx, xxxi, 174–78, 180, 183).

Claim 1 further recites “[1.f] and wherein the first tile displays a current content from the first data source and the second tile displays a current content from the second data source.” Ex. 1001, 30:32–35. Petitioner argues MSIE Kit discloses this limitation. Pet. 25. Specifically, Petitioner argues that “Active Desktop Items are refreshed at a specified rate assigned to that item” and “display[] current content of their associated data source.” *Id.* (citing Ex. 1010, xxx, 177, 180, 223; Ex. 1003 ¶ 172).

After reviewing Petitioner’s arguments and information regarding the limitations identified above, including the Houh Declaration, which Patent Owner does not address separately (*see* PO Resp.), we are persuaded that Petitioner sufficiently demonstrates that MSIE Kit discloses each of the limitations recited in this section.

d) Conclusion Regarding Claim 1

For the reasons set forth above, Petitioner has demonstrated by a preponderance of the evidence that the subject matter of claim 1 was anticipated by MSIE Kit.

3. Analysis of Claims 2–4 and 12–15

Petitioner has demonstrated that MSIE Kit discloses all of the limitations set forth in claims 2–4 and 12–15. Pet. 27–28, 33–36.

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Besides the arguments discussed above with regard to claim 1, Patent Owner does not dispute in this proceeding Petitioner’s argument regarding claims 2–4 and 12–15. *See* PO Resp. 36–49.

Based on the evidence and arguments presented in the Petition, which are not otherwise disputed by Patent Owner, we determine that Petitioner has demonstrated by a preponderance of the evidence that the subject matter of claims 2–4 and 12–15 was anticipated by MSIE Kit. *See Incept LLC v. Palette Life Scis., Inc.*, 77 F.4th 1366, 1375 (Fed. Cir. Aug. 16, 2023) (“Where a party ‘does not raise any arguments with respect to any other claim limitation, nor does it separately argue [the] dependent claim,’ ‘[the] dependent claim . . . stands or falls together with [the] independent claim.’” (quoting *Genentech, Inc. v. Hospira, Inc.*, 946 F.3d 1333, 1340 (Fed. Cir. 2020))).

4. *Analysis of Claim 5*

a) *Limitation [5.b]: “Partitioning at Least a Portion of the Visual Display into an Array of Tiles”*

Claim 5 recites “[5.b] partitioning by the client device at least a portion of the visual display into an array of tiles.” Ex. 1001, 30:53–54. Petitioner relies on its arguments for claim 1 relating to the “grid of tiles.” Pet. 28. Petitioner further argues that although MSIE Kit indicates that “Active Desktop Items ‘consist of’ a tag that includes x- and y- positions, which tag permits the item to be placed anywhere on the screen,” that is not inconsistent with the default placement of the Active Desktop items in a grid. Pet. Reply 21 (citing Ex. 1010, 175; Ex. 1003 ¶ 156; Ex. 1065 ¶¶ 7–11).

Patent Owner relies on its arguments regarding a “grid of tiles,” discussed above for claim 1. *See* PO Resp. 36–44; PO Sur-reply 15–19.

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Patent Owner further argues that MSIE Kit does not partition the visual display into an array of tiles because the items are placed in an arbitrary position and “[t]he arbitrary x- and y positions are antithetical to dividing a display into multiple tiles displayed in an orderly fashion.” PO Resp. 45 (citing Ex. 1010, 175; Ex. 2001 ¶¶ 108, 112, 186); *see also* PO Sur-reply 20 (“Arbitrary positioning is inconsistent with dividing a display into multiple tiles displayed in an orderly fashion.” (citing Ex. 2001 ¶¶ 108, 112, 186)).

Because the parties’ arguments are substantially the same as those presented above for claim 1 regarding the “grid of tiles,” for the same reasons we find that Petitioner has sufficiently shown that MSIE Kit discloses “partitioning by the client device at least a portion of the visual display into an array of tiles” as recited in claim 1.

We do not agree with Patent Owner’s argument about the arbitrary position of the Active Display Items. First, even though the Active Display Items can be moved to an arbitrary position, MSIE Kit describes a default position in a 3 by 2 grid. Ex. 1010, 183. Such an arrangement is orderly. Second, as discussed above in Section II.D.2.a.(2), an administrator can lock the Active Display Items in that position so that they remain orderly.

b) Limitation [5.e]: Sending a Conditional Request

Claim 5 further recites

[5.e] at a first update time in accordance with the first update rate, sending a conditional request from the first client device to the first server device for an update of information in the first tile if the information from the first information source currently displayed in the first tile has not changed since a last update.

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Ex. 1001, 30:60–65. Petitioner argues that MSIE Kit discloses this limitation. Pet. 29; Pet. Reply 23. For the reasons discussed below, we are persuaded by Petitioner’s arguments.

MSIE Kit discloses that the system can schedule a web crawl that allows for updating at a user determined rate. Ex. 1003 ¶ 175; Ex. 1010, 180 (“Internet Explorer 4 will automatically update the desktop item on a schedule you choose.”), 188 (“Using basic Webcasting, users can ‘subscribe’ to any existing Web site and have Internet Explorer automatically visit and ‘crawl’ the site on a scheduled basis to check for updated content.”), 191–92 (discussing Link-Crawl architecture), 215–16 (same). MSIE Kit also discloses that “Internet Explorer will examine a web page including its modification date to determine whether the page has changed.” Ex. 1003 ¶ 176 (citing Ex. 1010, 191–92, 215–16); *see also* Ex. 1010, 191 (“During the link crawls, Internet Explorer can check to see if the page has changed, based on the current file size and date. . . .”), 192 (“The sitecrawler compares the date of the file in the Temporary Internet Files folder to the date of the same file on the Web server on which it resides. If the dates are different, it knows the page has changed.”). This includes checking the header portion of the web pages. Ex. 1003 ¶ 176; Ex. 1010 191–92. In order to determine whether the web page content should be downloaded, “Internet Explorer (i.e., the instructions executing on the client device) also uses a conditional GET request that causes the Web server to send back web page content only if the server determines such content has been updated since a prior update time.” Ex. 1003 ¶ 177 (citing Ex. 1010, 192); *see also* Ex. 1010, 192. That “request for information is made conditional by consideration of a header field in the request—called

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the ‘If_Modified_Since header field’—indicating whether the information has been modified since the last time the client cached a copy of that web page.” Ex. 1003 ¶ 177 (citing Ex. 1010, 191); *see also* Ex. 1010, 191. “If the page has not changed since that time, the response will indicate the page has not been modified, thereby updating the client on the status of the page.” Ex. 1003 ¶ 177 (citing Ex. 1010, 192); *see also* Ex. 1010, 192. Specifically, MSIE Kit states:

The sitecrawler compares the date of a file in the Temporary Internet Files folder to the date of the same file on the Web server on which it resides. If the dates are different it knows the page has changed. The file date from the server is sent in a special header field in an HTTP response.

The If_Modified_Since header field is used with the GET method to make it conditional: if the requested page has not been modified since the time specified in this field, an item will not be returned from the server; instead, a 304 (not modified) response will be returned without any message-body.

Ex. 1010, 192.

Patent Owner argues that because MSIE Kit does not meet the condition precedent for sending a request, MSIE Kit does not disclose this limitation. PO Resp. 48–49; PO Sur-reply 21.

We do not agree. Because we did not adopt Patent Owner’s proposed condition precedent claim construction and, instead, conclude that the claim simply required a conditional request, Patent Owner’s argument is inapposite. *See* Section II.C.4.

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c) Remaining Undisputed Limitations

The preamble²⁹ of claim 5 recites “[5.a] [a] method executed by a client device under control of a program, the client device including a processor, a display device for rendering a visual display, and a memory for storing the program, the method comprising.” Ex. 1001, 30:49–52.

Petitioner argues that “because Internet Explorer 4.0 is a program and MSIE Kit describes its operation on a client device,” MSIE Kit discloses the preamble. Pet. 28 (citation omitted).

Claim 5 further recites “[5.c] a first tile in the array of tiles being associated with a first information source, the first information source being located on a first server device.” Ex. 1001, 30:54–57. Petitioner argues that MSIE Kit discloses this limitation for the same reason as discussed for claim 1. Pet. 28. Additionally, Petitioner argues that “MSIE Kit explains that each Active Desktop Item can be associated with a web page (“*a first information source*”) stored on a web server (“*a first server device*”) on the Internet.” Pet. 28 (emphasis in original).

Claim 5 further recites “[5.d] assigning by the client device a first update rate to the first tile.” Ex. 1001, 30:58–59. Petitioner argues that “MSIE Kit discloses that a user operating the client device may specify an update rate for each desktop item, e.g., daily.” Pet. 28 (citing Ex. 1010, 196, 200–02, 230–34). Petitioner also argues that because MSIE Kit discloses that Internet Explorer will display multiple items and assign an update rate to each, “[a] ‘first’ update rate would therefore be assigned to a ‘first’ such Item.” Pet. 28 (citing Ex. 1010, xxx, 177, 183; Ex. 1003 ¶ 203).

²⁹ Because there is no dispute that MSIE Kit discloses the preamble, we need not determine whether it is limiting. *See Nidec*, 868 F.3d at 1017).

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Claim 5 further recites “[5.f] receiving at the client device a response to the conditional request from the first server device.” Ex. 1001, 30:66–67. Petitioner argues that “MSIE Kit discloses that the client device will receive an update from the server in response to the GET request.” Pet. 29 (citing Ex. 1003 ¶¶ 177, 235; Pet. 25–27).

Claim 5 further recites “[5.g] determining whether to update the first tile in accordance with the response from the first server device.” Ex. 1001, 31:1–2. Petitioner argues that MSIE Kit discloses that the client determines whether to update based on the response to a conditional GET request; updating with update information if provided and not updating when no information is available. Pet. 29–30 (citing Ex. 1010, 120, 177, 192, 214; Ex. 1003 ¶¶ 205–236, 238–240).

After reviewing Petitioner’s arguments and information regarding the limitations identified above, including the Houh Declaration, which Patent Owner does not address separately (*see* PO Resp.), we are persuaded that Petitioner sufficiently demonstrates that MSIE Kit discloses each of the limitations recited in this section, with the exception of the tiles, which is disputed and discussed above.

d) Conclusion Regarding Claim 5

For the reasons set forth above, Petitioner has demonstrated by a preponderance of the evidence that the subject matter of claim 5 was anticipated by MSIE Kit.

5. Analysis of Claims 6–11 and 16–19

Petitioner argues that MSIE Kit discloses all of the limitations set forth in claims 6–11 and 16–19. *See* Pet. 30–33, 37.

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Besides the arguments discussed above with regard to claims 1 and 5, Patent Owner does not dispute in this proceeding Petitioner's argument regarding claims 6–11 and 16–19. *See* PO Resp. 36–49.

Based on the evidence and arguments presented in the Petition, which are not otherwise disputed by Patent Owner, we determine that Petitioner has demonstrated by a preponderance of the evidence that claims 6–11 and 16–19 are anticipated by MSIE Kit. *See Incept*, 77 F.4th at 1375.

E. Other Grounds

In addition to the ground discussed above based on anticipation by MSIE Kit, Petitioner argues the claims are unpatentable under alternate grounds. Pet. 8. Some of those grounds are based on the claims being obvious over MSIE Kit, with or without additional references. Pet. 8. Others are based on a combination of Excel97 and Bhansali, with or without an additional reference. Pet. 8. Because we determine that claims 1–19 were anticipated by MSIE Kit, we do not address the parties' arguments regarding those alternate grounds. *See Boston Sci. Scimed, Inc. v. Cook Gp. Inc.*, 809 F. App'x 984, 990 (Fed. Cir. 2020) (“We agree that the Board need not address issues that are not necessary to the resolution of the proceeding.”).

III. CONCLUSION³⁰

For the foregoing reasons, we conclude that Petitioner has demonstrated by a preponderance of the evidence the unpatentability of claims 1–19 of the '317 patent as anticipated by MSIE Kit.

³⁰ Should Patent Owner wish to pursue amendment of the challenged claims in a reissue or reexamination proceeding subsequent to the issuance of this decision, we draw Patent Owner's attention to the April 2019 *Notice Regarding Options for Amendments by Patent Owner Through Reissue or*

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In summary:

Claims	35 U.S.C. §	Reference(s)/Basis	Claims Shown Unpatentable	Claims Not shown Unpatentable
1–19	102(a), (b)	MSIE Kit	1–19	
1–19	103(a)	MSIE Kit ³¹		
1–19	103(a)	MSIE Kit, Jones ³²		
5–11	103(a)	MSIE Kit, RFC2068 ³³		
5–11	103(a)	MSIE Kit, RFC2068, Jones ³⁴		
1–19	103(a)	Excel97, Bhansali ³⁵		

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).

³¹ As explained above, because we determine that claims 1–19 are unpatentable as anticipated by MSIE Kit, we decline to address those claims on this ground.

³² As explained above, because we determine that claims 1–19 are unpatentable as anticipated by MSIE Kit, we decline to address those claims on this ground.

³³ As explained above, because we determine that claims 1–19 are unpatentable as anticipated by MSIE Kit, we decline to address those claims on this ground.

³⁴ As explained above, because we determine that claims 1–19 are unpatentable as anticipated by MSIE Kit, we decline to address those claims on this ground.

³⁵ As explained above, because we determine that claims 1–19 are unpatentable as anticipated by MSIE Kit, we decline to address those claims on this ground.

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12–19	103(a)	Excel97, Bhansali, Perez ³⁶		
Overall Outcome			1–19	

IV. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that, Petitioner has shown by a preponderance of the evidence that claims 1–19 of the '317 patent are unpatentable;

FURTHER ORDERED that because this is a Final Written Decision, parties to the proceeding seeking judicial review of the decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

³⁶ As explained above, because we determine that claims 1–19 are unpatentable as anticipated by MSIE Kit, we decline to address those claims on this ground.

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