

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)

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

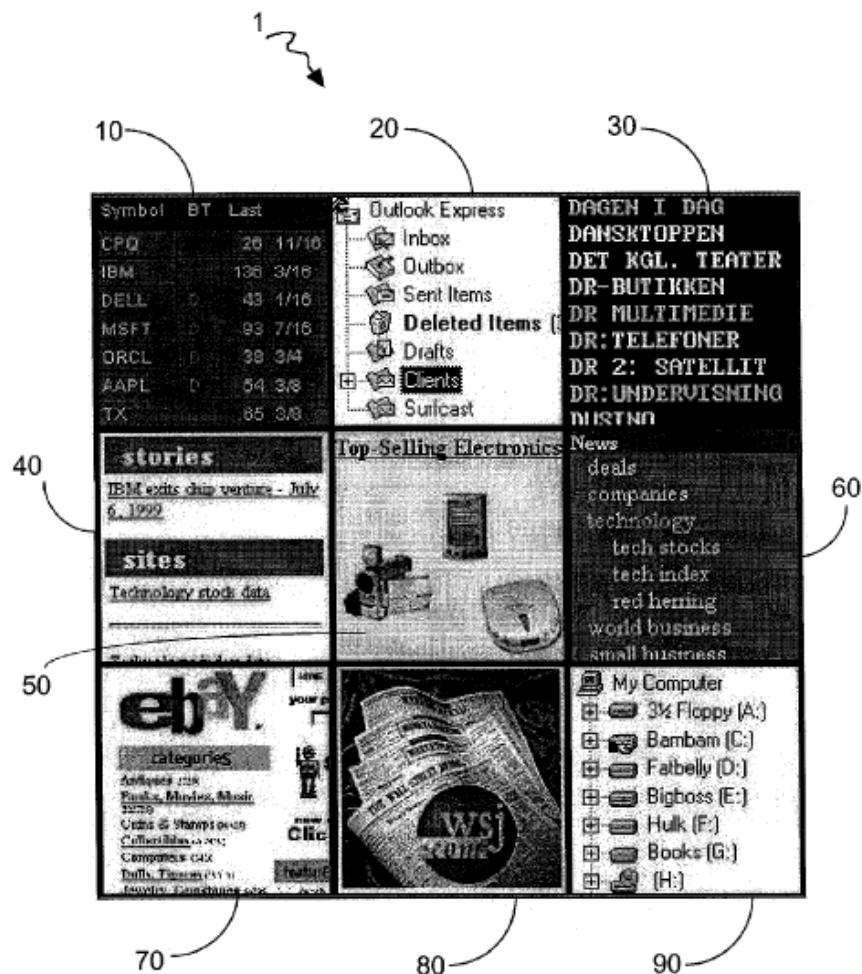
Petitioner identifies only itself as the real party in interest. Pet. 2. Patent Owner identifies only itself as the real party in interest. Paper 3, 2.

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.

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.



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

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).

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

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.

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.

(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))).

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. 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.

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

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

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

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

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.”

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

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.

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.

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

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

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

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.

(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”).

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.

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.

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.

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*

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).

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.

IPR2022-00591
Patent 9,946,434 B2

FOR PETITIONER:

Joseph Micallef
SIDLEY AUSTIN LLP
jmicallef@sidley.com

FOR PATENT OWNER:

Shaun Gregory
Jason Houdek
TAFT STETTINIUS & HOLLISTER LLP
sgregory@taftlaw.com
jhoudek@taftlaw.com