

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

HTC CORPORATION AND HTC AMERICA, INC.,
Petitioner,

v.

KONINKLIJKE PHILIPS N.V.,
Patent Owner.

Case IPR2017-00857
Reissued Patent RE44,006 E

Before KRISTEN L. DROESCH, BARBARA A. PARVIS, and
MICHELLE N. WORMMEESTER, *Administrative Patent Judges*.

DROESCH, *Administrative Patent Judge*.

FINAL WRITTEN DECISION
35 U.S.C. § 318(a), 37 C.F.R. § 42.73

I. INTRODUCTION

We have jurisdiction to hear this *inter partes* review under 35 U.S.C. § 6, and this Final Written Decision is issued pursuant to 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73. For the reasons that follow, we determine that Petitioner has shown by a preponderance of the evidence that claim 1 (“the challenged claim”) of U.S. Reissued Patent No. RE44,006 E (Ex. 1001, “the ’006 Reissued Patent”) is unpatentable.

A. Procedural History

HTC Corporation and HTC America, Inc. (“Petitioner”) filed a Petition (Paper 2, “Pet.”) for *inter partes* review of the challenged claim. Paper 2 (“Pet.”). Koninklijke Philips N.V. (“Patent Owner”) timely filed a Preliminary Response. Paper 6. Pursuant to 35 U.S.C. § 314, we instituted trial on September 6, 2017, as to the challenged claim of the ’006 Reissued Patent (Paper 7, “Institution Decision” or “Dec.”), and on May 2, 2018, we modified the Institution Decision to institute review of the challenged claim on all grounds presented in the Petition (Paper 23, “SAS Order”).

Accordingly, this *inter partes* review includes the following challenges:

(1) claim 1 as unpatentable under 35 U.S.C. § 103(a) over O’Neill¹;
(2) O’Neill and Robertson²; (3) O’Neill and Freeman³; and (4) Naughton⁴ and O’Neill. See Dec. 5, SAS Order 2.

Following institution of trial, Patent Owner filed a Patent Owner Response (Paper 14, “PO Resp.”), to which Petitioner filed a Reply (Paper

¹ Ex. 1007, US Patent 5,621,906, issued Apr. 15, 1997 (“O’Neill”).

² Ex. 1009, US Patent 5,295,243, issued Mar. 15, 1994 (“Robertson”).

³ Ex. 1010, US Patent 6,006,227, issued Dec. 21, 1999 (“Freeman”).

⁴ Ex. 1008, US Patent 5,995,106, issued Nov. 30, 1999 (“Naughton”).

17, “Reply”). Petitioner relies on Declarations of Jacob O. Wobbrock (Ex. 1005; Ex. 1016) to support its positions, and Patent Owner relies on a Declaration of Ravin Balakrishnan, Ph.D. (Ex. 2005). Patent Owner filed a Motion for Observations regarding the Testimony of Jacob O. Wobbrock (Paper 25), and Petitioner filed a Response (Paper 28). Oral argument was held on June 1, 2018. A transcript of the oral argument is included in the record. Paper 32 (“Tr.”).

B. Related Matters

The parties indicate the ’006 Reissued Patent is asserted in the following proceedings (Pet. 2–3; Paper 3, 1–2):

Koninklijke Philips N.V. v. ASUSTEK Computer Inc., No. 1-15-cv-01125 (D. Del.)

Koninklijke Philips N.V. v. HTC Corp., 1:15-cv-01126 (D. Del.)

Koninklijke Philips N.V. v. Visual Land Inc., No. 1-15-cv-01127 (D. Del.)

Koninklijke Philips N.V. v. Southern Telecom, Inc., No. 1-15-cv-01128 (D. Del.)

Koninklijke Philips N.V. v. Double Power Tech., Inc., No. 1-15-cv-01130 (D. Del.)

Koninklijke Philips N.V. v. Yifang USA Inc. d/b/a E-Fun, Inc., No. 1-15-cv-01131 (D. Del.); and

Koninklijke Philips N.V. v. Acer Inc., No. 1-15-cv-01170 (D. Del.).

C. The ’006 Reissued Patent (Ex. 1001)

The ’006 Reissued Patent is a reissue of U.S. Patent No. 6,211,921, which issued on April 3, 2001, from Application No. 08/772,080, filed December 20, 1996. *See* Ex. 1001, [64]. The ’006 Reissued Patent

discloses a user interface screen including rotating menu options. *See id.* at Abstract. Options are highlighted and therefore selectable as they rotate past a fixed selection position on the screen. *See id.*

Figure 2 of the '006 Reissued Patent is reproduced below:

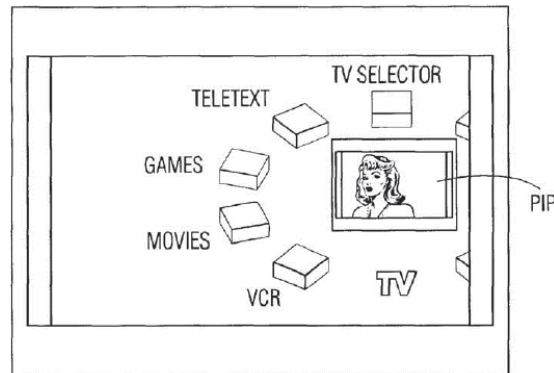


Figure 2 depicts a television screen displaying a menu. *See Ex. 1001, 1:61–62.* The menu appears as a carousel that rotates on the screen and is displayed in a perspective that creates an apparent plane of rotation that is not parallel to the screen face. *See id.* at 1:61–66. Due to the apparent plane of rotation, a highlighted option appears to be in front and is easier to find. *See id.* at 1:66–2:1. Although “the menu is actually elliptical, the menu appears to be in a circle, because of the perspective.” *Id.* at 2:4–5. The center of the apparent circle is off center on the screen, so that at least one menu option can be rotated off the screen, and any number of menu options can be added to the menu without affecting the shape of the display. *See id.* at 2:16–22. “The menu options can be displayed in any fashion desired. They can, for instance, be boxes, as shown, or icons, or letters.” *Id.* at 2:31–32. To maintain perspective, the appearance of the menu options change during rotation, for example, the boxes of the menu change in size, shape, and apparent orientation during rotation. *See id.* at 2:8–11. “During

operation of the menu, the options rotate, with a selectable option appearing highlighted at the bottom front, as shown in Figure 2.” *Id.* at 2:33–35.

D. The Challenged Claim

Claim 1 is reproduced below (brackets indicate deletions and italics indicate additions to the claim in the ’006 Reissued Patent):

An electronic device comprising:
at least one display apparatus; and
a controller arranged to cause the display *apparatus* to show a rotating *elliptical* menu comprising a plurality of menu options, *wherein the menu is displayed with a perspective in which* all of the menu options that are displayed [being displayed so as to] appear to lie substantially [upon] *in an elliptical arrangement located on* a single apparent plane disposed about a menu center, the menu center being displayed offset from a display center of the display apparatus, so that at least one menu option appears to be rotatable off an edge of the display *apparatus* at any one time; *and,*
wherein a sense of perspective is maintained by changing the shape or size of the displayed menu options during rotation of the menu.

Ex. 1001, 3:55–4:3.

II. ANALYSIS

A. Claim Construction

Claims of an unexpired patent that will not expire before issuance of a final written decision are interpreted using the broadest reasonable interpretation in light of the specification. *See* 37 C.F.R. § 42.100(b); *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2144–46 (2016). Petitioner and Patent Owner agree that the ’006 Reissued Patent expired and is, therefore, subject to a district court-type claim construction. *See* Pet. 17–18; PO Resp. 8 (both citing *In re Rambus, Inc.*, 694 F.3d 42, 46 (Fed. Cir.

2012); *Phillips v. AWH Corp.*, 415 F.3d 1303, 1316 (Fed. Cir. 2005) (en banc); *Chi Mei Innolux v. SEL*, IPR2012-0065, slip op. at 10 (PTAB April 30, 2013)). Because the '006 Reissued Patent has expired, we need not apply the broadest reasonable construction; instead, we may apply a district court-type claim construction, and we do so here. *See* 37 C.F.R.

§ 42.100(b). Thus, we construe the claims in accordance with their ordinary and customary meanings, as would be understood by a person of ordinary skill in the art at the time of the invention, in the context of the '006 Reissued Patent Specification. *See generally Phillips*, 415 F.3d at 1312–14.

In *Phillips*, the court emphasized the importance of a patent's specification as intrinsic evidence for construing claim terms. *See* 415 F.3d at 1315–17. “[T]he specification . . . is the single best guide to the meaning of a disputed claim term.” *Id.* at 1314 (quoting *Vitrionics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)). Although claims are construed in the context of the patent, it is well settled that limitations from the specification are not to be read into the claims. *See Commark Comm’cns Inc. v. Harris Corp.*, 156 F.3d 1182, 1186–87 (Fed. Cir. 1998). Other claims of a patent can also provide enlightenment as to the meaning of a claim term. *Phillips*, 415 F.3d at 1314 (citing *Vitrionics*, 90 F.3d at 1582). “The presence of a dependent claim that adds a particular limitation gives rise to a presumption that the limitation in question is not present in the independent claim.” *Id.* at 1314–15 (citing *Liebel–Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 910 (Fed. Cir. 2004)). The doctrine of claim differentiation is at its strongest when the limitation that is sought to be read into an independent claim already appears in a dependent claim. *See Liebel–Flarsheim*, 358 F.3d at 910.

The court in *Phillips* stated that extrinsic evidence, such as dictionary definitions, may be useful, but is unlikely to result in a reliable interpretation of claim scope unless considered in the context of the intrinsic evidence. *See Phillips*, 415 F.3d at 1319.

Menu Comprising a Plurality of Menu Options

Claim 1 recites a “menu comprising a plurality of menu options.” Ex. 1001, 3:58–59. Petitioner does not offer an explicit claim construction for this claim phrase. *See* Pet. 17–18; Reply 1–14. Nonetheless, Petitioner asserts that claim 1 “does not require that the menu options must be ‘selectable.’” Pet. 34 (citing Ex. 1005 ¶ 133). Petitioner contends that the ’006 Reissued Patent specification discloses both selectable and un-selectable menu options. *See id.* at 31 (reproducing Ex. 1001, Fig. 2 with annotations; quoting Ex. 1001, Abstract, 2:33–35; citing Ex. 1001, claim 5, Ex. 1005 ¶ 133); *see also* Reply 3 (arguing same, citations omitted). Petitioner further points out that “the ‘selectable’ menu options and ‘selection position’ are claimed in dependent claims 5 and 23, not independent claim 1.” Pet. 34 (quoting Ex. 1001, claim 5; citing Ex. 1001, claim 23); Reply 6 (quoting Ex. 1001, claims 5, 23). Petitioner contends that “under the doctrine of claim differentiation, the recited ‘menu options’ in [c]laim 1 must encompass any combination of selectable or non-selectable options.” *Id.* (citing *AK Steel Corp. v. Sollac and Ugine*, 344 F.3d 1234, 1242 (Fed. Cir. 2003)); *see also* Reply 6 (quoting *Phillips*, 415 F.3d at 1314–15).

Patent Owner provides an explicit claim construction for “menu comprising a plurality of menu options” as follows: “a list of displayed options corresponding to available machine functions from which list the

user can select a machine function to be initiated.” PO Resp. 10 (citing Ex. 2005 ¶¶ 54–55). Patent Owner further explains, “not everything displayed on a screen qualifies as such a menu. Instead, displayed options in the list must correspond to available machine functions and the user must be able to select from the list a machine function to be initiated.” *Id.* Patent Owner further asserts that “this construction does not require that each displayed option be immediately selectable, and encompasses the case where some manipulation is required before the option is selected by the user.” *Id.* at 11 (citing Ex. 2005 ¶ 58); *see id.* at 18 (arguing the same, citing Ex. 2005 ¶ 17).

Patent Owner further contends that its construction is consistent with the '006 Reissued Patent specification, numerous technical dictionaries from the relevant time, and the testimony of Petitioner's declarant Dr. Wobbrock. *See* PO Resp. 11; *see also* Tr. 17:5–18:10 (arguing the same). Patent Owner contends that its construction is consistent with the '006 Reissued Patent specification because Figure 2 depicts a menu that includes menu options such as teletext, games, movies, VCR, TV, etc., and at any given moment, only one option is highlighted and thus immediately selectable, but the other options can be rotated so as to become highlighted and thus immediately selectable. *See* PO Resp. 13–14 (citing Ex. 1001, Fig. 2, 1:61–2:43; Ex. 2005 ¶¶ 61–62); *see also* Tr. 17:11–25 (addressing the '006 Reissued Patent specification). Patent Owner contends that all options, whether highlighted at a given time or not, are still displayed options that can be selected by a user to initiate a machine function. *See id.* at 14 (citing Ex. 2005 ¶ 63). At oral argument, counsel for Patent Owner stated “[w]e also think an acceptable construction would include the grayed out [menu options] because in other circumstances they may be selectable.” Tr. 20:5–7.

Patent Owner further asserts that not everything on a screen qualifies as a menu option. *See* PO Resp. 10, 14. Patent Owner argues that the picture-in picture or “PIP” in Figure 2 cannot be selected by the user to initiate an available machine function. *See id.* at 14. Patent Owner asserts the display of text in Figure 6 of the ’006 Reissued Patent “is not a list of displayed options corresponding to available machine functions, wherein the user can select from the list a machine function to be selected, and cannot be chosen by a user to actuate an available machine function, and thus is not a ‘menu comprising a plurality of menu options.’” *Id.* (citing Ex. 2005 ¶ 65) (emphasis added).

Patent Owner further contends that its proposed construction is consistent with dictionary definitions for “menu” and “menu item” which refer to operations that a user can perform or actions to be initiated. *See* PO Resp. 15–18 (reproducing Ex. 2002, Figures labeled “Menu” and “Menu item”; citing Ex. 2001, Ex. 2002, Ex. 2003, Ex. 2005 ¶¶ 66–76). Patent Owner argues that the definitions make clear that “menu option” is broad enough to encompass both an option that is immediately selectable and one that requires manipulation before it is selected by a user. *See id.* at 18 (citing Ex. 2005 ¶ 77).

Patent Owner asserts that Dr. Wobbrock agreed with Patent Owner’s view that the claimed “menu option” does not require immediate selectability, but also covers the case where a user has to perform some manipulation to select the option. *See* PO Resp. 12. In support of its assertion, Patent Owner contends that Dr. Wobbrock: (1) admitted during cross-examination that conventional pull-down menus generally included a display of available options, one of which would be selected using the

mouse when the cursor was positioned over that particular option; and (2) recognized that menu options are still menu options, even if they are not highlighted and thus not immediately selectable. *See id.* (citing Ex. 2007, 57:1–58:16, 60:2–11, 75:15–76:13); *see also* Tr. 16:19–25 (discussing Dr. Wobbrock’s testimony, citing Ex. 2007, p. 76). Patent Owner also contends that Dr. “Wobbrock acknowledged during cross-examination that in the examples discussed in his declaration, the objects that he identified as menu options perform an action when selected by a user.” *Id.* at 13 (citing Ex. 1005 ¶¶ 54–67; Ex. 2007, 112:7–10, 118:1–15). Patent Owner further asserts that Dr. Wobbrock described menu options as a type of widget while stating that such widgets allow the user to choose one or more options from a set of options. *See* PO Resp. 12 (citing Ex. 1005 ¶ 54; Ex. 2007, 52:3–18, 104:25–105:22, 73:13–75:19, 97:11–99:6, 100:2–101:6, 112:11–113:3); *see also* Tr. 17:26–18:10 (discussing Dr. Wobbrock’s testimony, citing Ex. 1005 ¶¶ 54–67). Patent Owner further argues that Dr. Wobbrock concurred that a displayed page of text in a word-processing program does not correspond to an available machine function and would not be a menu option because he admitted that a displayed document which is a plain body text without adornments cannot be considered a menu. *See* PO Resp. 13 (citing Ex. 2007, 69:4–70:2, 70:24–72:16, 85:18–87:1).⁵

Patent Owner further asserts that its construction for “menu comprising a plurality of menu options” is not disturbed by the doctrine of claim differentiation because, in order for Petitioner’s argument to have

⁵ Patent Owner cites Ex. 2007, 85:18–8:1, which appears to be a typographical error.

merit, “selectable” would have to be the only difference between the dependent claims and claim 1. *See* PO Resp. 21 (citing *Andersen Corp. v. Fiber Composites, LLC*, 474 F.3d 1361, 1369–70 (Fed. Cir. 2007)). Patent Owner asserts that claims 5 and 23 differ from claim 1 not only in using the word “selectable,” but also in referring to the rotating menu option in question as a “selection position.” Patent Owner contends:

if claim differentiation applies, it merely suggests that claim 1 is broad enough to cover both (1) the case where the menu comprises a specific selection position, and (2) the case where the menu is not so configured (e.g., the rotation brings the menu options into view, but they can be selected in a manner other than moving one to a specific selection position). ([Ex. 2005 ¶¶ 59–60.]) This is not inconsistent at all with Patent Owner’s claim construction.

PO Resp. 21–22.

In response to Patent Owner’s arguments, Petitioner contends that Patent Owner’s proposed construction contradicts the specification and the claims because: (1) the specification discloses both selectable and un-selectable menu options; (2) the claims differentiate between options and selectable options; (3) Patent Owner’s dictionary definitions confirm that the well-understood meaning of menus encompasses both selectable and non-selectable menu options; and (4) Dr. Wobbrock’s testimony confirms that menu options do not have to be selectable. *See* Reply 3–8, 10–14 (citations omitted); Tr. 5:21–25, 6:21–7:10, 7:19–24.

In view of Petitioner’s assertions that the ’006 Reissued Patent discloses selectable and un-selectable menu options, and Patent Owner’s arguments that its construction does not require that each displayed option be immediately selectable, we modify Patent Owner’s construction for

“menu comprising a plurality of menu options” as follows: “a list of displayed options (not necessarily immediately selectable), corresponding to available machine functions from which list the user can select a machine function to be initiated.”

In connection with Patent Owner’s claim construction arguments regarding selectability, Patent Owner argues that Dr. Wobbrock’s “testimony should be given diminished weight” because Dr. Wobbrock did not offer any definition for “menu comprising a plurality of menu options,” and refused to do so on cross-examination. *See* PO Resp. 11–12 (citing Ex. 2007, 51:16–52:24, 72:18–73:11, 138:6–140:2, 286:3–292:6). We do not agree with Patent Owner’s argument because Patent Owner does not cite persuasive legal authority to support its argument that a Petitioner’s declarant must provide an explicit construction for a claim phrase or term.

Also in connection with Patent Owner’s claim construction arguments regarding selectability, Patent Owner contends that Dr. Wobbrock acknowledges that he did not qualify as a person of ordinary skill in the art as of 1996, the date relied on by Petitioner for its definition of a person of ordinary skill in the art. *See* PO Resp. 18 (citing Ex. 2007, 124:3–125:12, 119:1–149:16). It is unclear, however, what implication Patent Owner suggests. *See* PO Resp. 18.

Assuming Patent Owner suggests that Dr. Wobbrock’s testimony is inadmissible, or should be accorded little weight, Patent Owner does not cite persuasive legal authority to support its suggestion that Dr. Wobbrock must have been a person of ordinary skill in the art at the time of the invention. Federal Rules of Evidence (“FRE”) Rule 702 permits a witness qualified as an expert by knowledge, skill, experience, training, or education to testify in

the form of an opinion if a) the expert's knowledge will help the trier of fact to understand the evidence or to determine a fact in issue, (b) the testimony is based upon sufficient facts or data, (c) the testimony is the product of reliable principles and methods, and (d) the witness has applied the principles and methods reliably to the facts of the case. There is no requirement imposed by the FRE that a witness's qualifications perfectly match the field of the patent at issue; all that is required is "an adequate relationship between [the witness's] experience and the claimed invention." *SEB S.A. v. Montgomery Ward & Co.*, 594 F.3d 1360, 1373 (Fed. Cir. 2010); *see also Mytee Prods., Inc. v. Harris Research, Inc.*, 439 F. App'x 882, 886–87 (Fed. Cir. 2011) (non-precedential) (upholding district court's admission of testimony of an expert who "had experience relevant to the field of the invention," despite admission that he was not a person of ordinary skill in the art). Instead, under FRE Rule 702, an expert need only be "qualified in the pertinent art." *Sundance, Inc. v. DeMonte Fabricating Ltd.*, 550 F.3d 1356, 1363–64 (Fed. Cir. 2008).

Petitioner argues that Patent Owner's dictionary definitions also do not support the proposed construction, specifically the terms "machine function," and "list." *See* Reply 8–10 (citations omitted); *see also* Tr. 5:21–25, 9:11–10:9, 11:1–12:8. Specifically, Petitioner contends that only one of the four dictionary definitions includes the term "machine function." *See* Reply 9. Petitioner asserts that Dr. Wobbrock testifies that a person of ordinary skill in the art would not have limited "menu" to only including "machine functions" or commands, because values or potentially other things can also be put in menus. *See id.* (quoting Ex. 2007, 60:13–61:9; citing Ex. 1005 ¶ 54; Ex. 1016 ¶¶ 7–8). Petitioner argues "menus at the

time allowed for the display of a command/machine function (e.g., Save, Open, Print) or values (e.g., Yellow, 14pt font, etc.).” *Id.* (citing Ex. 1005 ¶ 54; Ex. 1016 ¶¶ 7–8; Ex. 2007, 60:13–61:9). At oral hearing, when addressing “machine function” in its proposed construction, counsel for Patent Owner stated: “[w]hat is critical is that there is some computer action, function[,] or command or whatever you would like to term it that is being performed when that option is selected.” Tr. 21:14–17.

Petitioner also argues that a person of ordinary skill in the art would not have limited the definition of “menu” to “list” because menus of other shapes and types were also common at the time of the invention. *See* Reply 9–10 (reproducing Figure from Ex. 1016 ¶ 3; citing Ex. 1016 ¶¶ 3–6). At oral hearing, when addressing the meaning of “list” in its proposed construction, counsel for Patent Owner stated: (1) “lists can be of any particular shape that you might want” (Tr. 11–12); and (2) “I don’t think the term list is specifically needed but a list could be circular. It could be radial.” (Tr. 22:24–25).

In view of the parties additional arguments addressing “machine function” and “list” in Patent Owner’s proposed construction, we further modify Patent Owner’s construction for “menu comprising a plurality of menu options” as follows: “a list (of any shape) of displayed options (not necessarily immediately selectable) corresponding to available computer actions, functions, or commands from which list the user can select a computer action, function, or command to be initiated.” In regard to Petitioner’s argument that “menus at the time allowed for the display of a command/machine function (e.g., Save, Open, Print) or values (e.g., Yellow, 14pt font, etc.)” (Reply 9), we note that Patent Owner’s modified claim

construction does not require a list of displayed computer actions, functions, or commands, but requires a display of options that *correspond to* available computer actions, functions, or commands value options. Utilizing Petitioner’s example, a list of displayed values (e.g., Yellow, 14pt font, etc.) can correspond to available computer actions, functions, or commands from which list the user can select a computer action, function, or command to be initiated (e.g., change color to yellow, change font to 14pt).

Lastly, Patent Owner argues that Petitioner is incorrect in “taking the position that where a GUI provides means for scrolling text, the scrolled text itself—as distinct from, for example, a button or other mechanism for actuating the scrolling—necessarily constitutes a ‘menu option.’” See PO Resp. 19 (citing Ex. 2005 ¶¶ 78–79); see *id.* at 19–20 (citing Ex. 2001, 366; Ex. 2002, 350; Ex. 2003, 461; Ex. 2004, 599; Ex. 2005 ¶¶ 80–85; Ex. 2007, 69:4–70:2, 70:24–72:16, 85:18–87:1).⁶ We do not agree with Patent Owner’s arguments, because Petitioner confirms that it has never taken the position that scrolling or scrolled text constitutes a menu option. See Reply 17, n.3.

In sum, based on the record before us, the ordinary and customary meaning of “menu comprising a plurality of menu options,” as would be understood by a person of ordinary skill in the art at the time of the invention, is Patent Owner’s proposed construction as modified by Patent Owner’s additional positions, as follows: “a list (of any particular shape) of displayed options (not necessarily immediately selectable) corresponding to

⁶ See footnote 5.

available computer actions, functions, or commands from which list the user can select a computer action, function, or command to be initiated.”

As demonstrated in the analysis below, for the purpose of this Final Written Decision, no additional claim terms or phrases require an explicit construction. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co. Ltd.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017), *cert. denied*, 138 S. Ct. 1695 (April 30, 2018) (“[W]e 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))).

B. Principles of Law

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

“A determination of whether a patent claim is invalid as obvious under § 103 requires consideration of all four *Graham* factors, and it is error to reach a conclusion of obviousness until all those factors are considered.” *Apple v. Samsung Elecs. Co., Ltd.*, 839 F.3d 1034, 1048 (Fed. Cir. 2016) (en banc) (citations omitted). “This requirement is in recognition of the fact that

each of the *Graham* factors helps inform the ultimate obviousness determination.” *Id.*

An expansive and flexible approach applies to determining whether a claimed invention would have been obvious. *KSR*, 550 U.S. at 415. The Supreme Court outlined several principles underlying its earlier instructions regarding obviousness, including the following: “[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results” (*id.* at 416), and “when a patent claims a structure already known in the prior art that is altered by the mere substitution of one element for another known in the field, the combination must do more than yield a predictable result” (*id.*).

The obviousness inquiry includes the question of “whether the improvement is more than the predictable use of prior art elements according to their established functions.” *KSR*, 550 U.S. at 417. And often it will be necessary “to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.” *Id.* at 418. The analysis should be made explicit to facilitate review of the obviousness determination. *Id.* (quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)). “[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *Kahn*, 441 F.3d at 988. Yet, “the analysis need not seek out precise teachings directed to the specific subject matter of the challenged

claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *KSR*, 550 U.S. at 418.

“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”)). This burden never shifts to Patent Owner. See *Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015) (citing *Tech. Licensing Corp. v. Videotek, Inc.*, 545 F.3d 1316, 1326–27 (Fed. Cir. 2008)) (discussing the burden of proof in *inter partes* review). Furthermore, 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). Thus, to prevail in an *inter partes* review, Petitioner must explain how the proposed combinations of prior art would have rendered the challenged claim unpatentable. At this final stage, we determine whether a preponderance of the evidence of record shows that the challenged claim would have been obvious over the proposed combinations of prior art.

We analyze the grounds of unpatentability in accordance with the above-stated principles.

C. 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 of ordinary skill in the art is a hypothetical person who is presumed to have known the relevant art at the time of the invention. *In re GPAC, Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995).

Petitioner asserts:

a person of ordinary skill in the art in 1996 pertaining to the domain of the '006 [Reissued] Patent would have a B.S. in computer science, computer engineering, electrical engineering, or similar degree, or equivalent industrial work experience. In lieu of a formal degree, such a person would have at least two (2) years of experience working in one or more of those enumerated fields. With or without the degree, such a person would have experience building interactive computer applications, including acquiring signals from input devices and portraying user interfaces on-screen.

Pet. 17. Patent Owner does not explicitly contest Petitioner’s description of a person of ordinary skill in the art. *See* PO Resp. 8. Accordingly, we adopt Petitioner’s description of a person of ordinary skill in the art.

D. Grounds of Unpatentability

1. Unpatentability over O’Neill

a. Overview of O’Neill (Ex. 1007)

O’Neill discloses a graphical user interface that arranges information on surfaces placed in a perspective row arrangement where a user can access any surface by moving within the row via the computer system input means and access the information on any surface by moving within the surface via the input means. *See* Ex. 1007, 2:29–35.

Figure 4 of O'Neill is reproduced below:

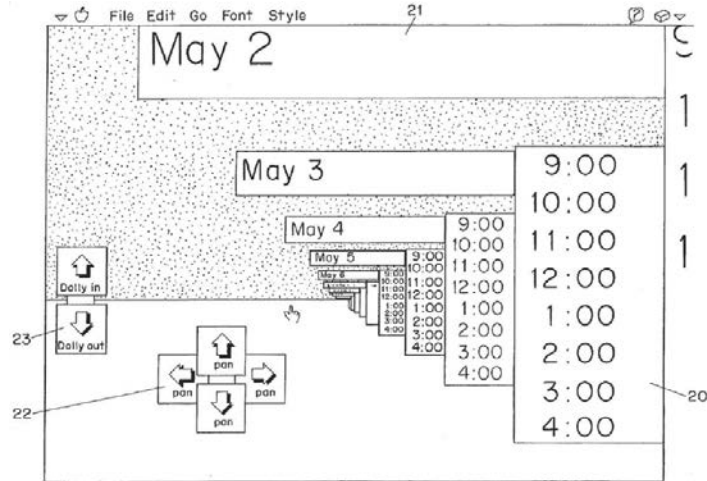
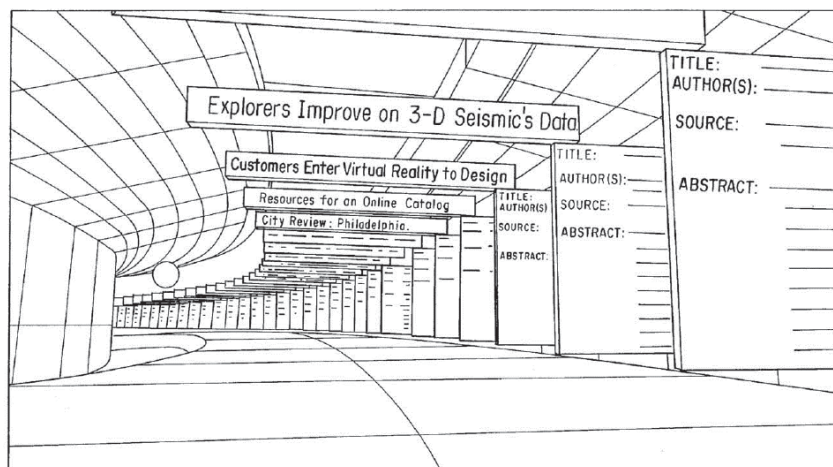


Figure 4 illustrates a graphical user interface including information surfaces 20 placed in a perspective row arrangement. *See* Ex. 1007, 3:13–18. Surfaces 20 each have masthead 21 that provides information as to the content of surfaces 20. *See id.* at 3:18–20. In order to access a surface, the user would click on the appropriate directional button or just move the mouse. *See id.* at 3:27–29. The surfaces would then move forward until the desired surface is reached. *See id.* at 3:29–30.

Figure 6 of O'Neill is reproduced below:



“Figure 6 illustrates a second embodiment of a graphical user interface.” Ex. 1007, 3:8–9.

O’Neill further discloses that possible applications include dynamic three-dimensional address and telephone books. *See* Ex. 1007, 4:37–42.

O’Neill specifically discloses that, with the described graphical user interface, “if a person would like the telephone number of Joe Smith, the telephone operation would dolly up the ‘S’ masthead, then to a secondary ‘Smith’ masthead, and ultimately to ‘Smith, Joe.’ Then the operator would look at the information on the surface.” *Id.* at 4:42–49.

b. Claim 1

Petitioner asserts that O’Neill teaches “[a]n electronic device comprising at least one display apparatus and a controller,” as recited in claim 1, based on O’Neill’s disclosure of a graphical user interface on a computer system, a display apparatus, and processor means. *See* Pet. 29–30 (citing Ex. 1007, 2:29–31, 4:20–23, Figs. 3, 5, claim 1; Ex. 1005 ¶¶ 116–122). Petitioner contends that O’Neill teaches or suggests “a controller arranged to cause the display apparatus to show a rotating elliptical menu comprising a plurality of menu options,” as recited in claim 1, based on O’Neill’s disclosures of a menu including a series of mastheads connected to information surfaces, and a user accessing information by clicking on the appropriate directional button or moving the mouse. *See* Pet. 30–37 (citing Ex. 1007, 2:33–34, 41–42, 3:24–34, 4:30–33, 44–49, claim 1, Figs. 5, 6; Ex. 1005 ¶¶ 119–140). Consistent with Patent Owner’s proposed construction for “menu comprising a plurality of menu options,” Petitioner further asserts: (1) O’Neill’s mastheads displayed in a perspective row arrangement, teaches Patent Owner’s proposed “list of displayed options”

(citing Ex. 1007, 3:15–19, Figs. 4, 6; Ex. 1016 ¶¶ 24–25); (2) O’Neill’s mastheads correspond to associated information surfaces and selection of the masthead corresponds with a request to display the corresponding information surface teaches Patent Owner’s proposed “corresponding to available machine functions” (citing Ex. 1007, 3:19–29, 4:39–42; Ex. 1016 ¶¶ 24, 26); and (3) the user can select the mastheads by clicking on the appropriate directional button or moving the mouse teaches Patent Owner’s proposed “from which the user can select a machine function to be initiated” (citing Ex. 1007, 2:29–35, 3:27–29, 4:8–13; 4:44–49; Ex. 1016 ¶¶ 24, 27). See Reply 15–17.

Petitioner further contends that Figure 6 shows that O’Neill contemplated curvature in the menu layout, and Figure 6 displays only a portion of the elliptical shape. See Pet. 36–37 (citing Ex. 1005 ¶¶ 134–135). Petitioner asserts, “all circles are ellipses, and therefore, a circular shaped menu, as a matter of law and basic geometry, is also an elliptical shaped menu.” *Id.* at 37 (citing Ex. 1005 ¶¶ 68–71). Petitioner also asserts that O’Neill teaches or suggests “wherein the menu is displayed with a perspective in which all of the menu options that are displayed appear to lie substantially in an elliptical arrangement located on a single apparent plane disposed about a menu center, the menu center being displayed offset from a display center of the display apparatus, so that at least one menu option appears to be rotatable off an edge of the display apparatus at any one time,” as recited in claim 1, based primarily on O’Neill’s disclosure in Figure 6. See Pet. 39–42 (citing Ex. 1007, 2:39–51, 3:13–18, 29–33, Fig. 6; Ex. 1005 ¶¶ 134–147). Petitioner further contends that O’Neill teaches “wherein a sense of perspective is maintained by changing the shape or size of the

displayed menu options during rotation of the menu,” as recited in claim 1, based on O’Neill’s disclosures of: (1) a perspective row arrangement; (2) creating an effect of text coming at you or receding in perspective such that the farthest surface will be smaller than the surface closest to the user; and (3) specific algorithm and scaling factor equations for calculating a new position, height, and width of surfaces, and size of the font on the surface. *See id.* at 42–43 (citing Ex. 1007, 2:39–33, 41–44, 3:27–34, 3:37–4:5, 4:54–57, Fig. 6; Ex. 1005 ¶¶ 149–152).

Petitioner further contends, “to the extent Patent Owner argues that O’Neill does not disclose an elliptical menu, it would have been obvious to one of skill in the art to adapt O’Neill’s round corridor menu to be elliptically-shaped.” Pet. 38 (citing Ex. 1005 ¶ 138). Petitioner asserts it would have been obvious to one skilled in the art to adapt O’Neill’s round corridor menu to be elliptically-shaped because the ’006 Reissued Patent does not ascribe any benefit to the use of an elliptical shape over another round shape, and the selection of the shape for the menu would have been an aesthetic design choice. *See id.* at 27, 37–38 (citing Ex. 1005 ¶ 138; *Powers-Kennedy Contracting Corp. v. Concrete Mixing & Conveying Co.*, 282 U.S. 175, 185 (1930); *Gardner v. TEC Sys., Inc.*, 725 F.2d 1338, 1346 (Fed. Cir. 1984); *In re Dailey*, 357 F.3d 669, 672–73 (CCPA 1966); *Ex parte Marron*, 2016 WL3902628 at *6 (PTAB July 14, 2016); Manual of Patent Examining Procedure § 2144). Petitioner contends it would have been obvious to a person of ordinary skill in the art to use an elliptical menu in place of a circular, oval, or other shaped menu because the use of a circular, oval, or elliptical shape in the design of a user interface would have been well-known to a person of ordinary skill in the art, is an aesthetic design

choice, and it would have been obvious to substitute one shape for another. *See id.* at 38 (citing Ex. 1005 ¶ 138). Lastly, Petitioner asserts a person of ordinary skill in the art would have been motivated to try an elliptical shape in place of a circular or oval menu because it would have been nothing more than a simple substitution of one known element for another and would provide a predictable result. *See id.* at 38–39 (citing Ex. 1005 ¶ 138; *KSR*, 550 U.S. at 421).

On the foregoing bases, Petitioner has established, with sufficient supporting evidence, that O’Neill teaches or suggests all of the limitations of claim 1, and has set forth sufficient reasons to establish that it would have been obvious to one of ordinary skill in the art at the time of the invention to modify O’Neill’s round corridor menu in Figure 6 to be elliptical shaped. *See Pet.* 36–39; *KSR*, 550 U.S. at 418 (inferences and creative steps that a person of ordinary skill in the art would employ can be taken into account.).

Patent Owner argues that O’Neill fails to disclose or suggest “menu options” in accordance with Patent Owner’s construction. *See PO Resp.* 22 (citing Ex. 2005 ¶ 87). Specifically, Patent Owner asserts that O’Neill’s information surfaces 20 and mastheads 21 are not a “menu comprising a plurality of menu options.” *See id.* at 27. Patent Owner contends that “O’Neill’s ‘accessing’ of an information surface 20 is nothing more than the user using dolly and pan buttons or alternative input means (e.g., mouse), *provided separately from the displayed mastheads and information surfaces*, to look at or view the information surface, much like moving through a word-processing document or a PDF file.” *Id.* at 27 (emphasis added) (citing Ex. 1007, 4:26–36, 3:27, 4:28, 4:49; Ex. 2005 ¶¶ 104–105), *see also id.* at 28 (“O’Neill’s dollying and panning-style ‘accessing’ of information

surfaces 20 consists of nothing more than scrolling through displayed information akin to scrolling or paging through screens of text in a word-processing document” (citing Ex. 2005 ¶ 105), *id.* at 29 (“O’Neill merely describes a mechanism for the user to scroll through information surfaces consisting of displayed tex.”). Patent Owner argues, “nothing in O’Neill suggests that the displayed mastheads 21 or information surfaces 20 *provide anything that can be clicked on* to initiate a machine function chosen by a user.” *Id.* at 28 (emphasis added). Patent Owner argues that a user would click on dolly and pan buttons, which do not correspond to the menu of the claimed invention. *See id.* In support of its arguments, Patent Owner also takes issue with Petitioner’s declarant Dr. Wobbrock’s testimony, arguing that Dr. Wobbrock: (1) incorrectly reimagines O’Neill’s mastheads and information surfaces as being able to receive input or to run applications; (2) implies that the user somehow clicks upon or otherwise provides input to O’Neill’s information surfaces. *See id.* at 29 (citing Ex. 1005 p. 56, ¶ 126; Ex. 2005 ¶¶ 105–109). Patent Owner argues, “nothing in O’Neill suggests that any of the curved displayed content through which one dollies provides options corresponding to available machine functions which list the user can select such a function to be initiated.” *Id.* at 30 (citing Ex. 2005 ¶ 109).

In response, Petitioner argues that Patent Owner’s arguments likening O’Neill’s disclosure to scrolling or paging through displayed information or text in a word-processing document ignore O’Neill’s explicit disclosure of a three-dimensional user interface that can be used to navigate hierarchical systems including windowing systems, such as file directory structures of computer hard drives or database systems, or a telephone directory application. *See Reply 17–18* (citing Ex. 1007, 4:37–42, 4:45–49).

Petitioner further argues that Patent Owner's arguments ignore the language Patent Owner's proposed construction by "argu[ing] that O'Neill does not meet two new limitations: (1) clicking to perform a selection; and (2) clicking the option itself as opposed to clicking on a button that selects the option." *Id.* at 18; *see id.* at 18–19 (quoting PO Resp. 28; citing PO Resp. 30). Petitioner asserts that neither of these additional limitations is included in the language of Patent Owner's proposed construction, and a person of ordinary skill in the art would not interpret Patent Owner's proposed construction as requiring these additional limitations. *See id.* at 19 (citing Ex. 1016 ¶¶ 16–22). Petitioner contends that a person of ordinary skill in the art would understand that there were numerous means of selection well-known in the art at the time of the invention that did not require clicking or clicking on the menu option itself. *See id.* at 19 (citing Ex. 1016 ¶¶ 16–17).

We agree with Petitioner that Patent Owner's construction does not require clicking to perform a selection and does not require clicking the displayed option itself. Patent Owner's construction, as modified by Patent Owner's additional positions, broadly encompasses selection of a list of displayed options by other methods. For example, O'Neill teaches or suggests that a masthead 21 and corresponding desired information surface 20 are selected when the masthead and corresponding desired information surface is reached by a user clicking on the appropriate directional button or moving the mouse to move the information surfaces 20 forward until the desired information surface 20 is reached. Because Patent Owner's construction does not require clicking a displayed option itself, Patent Owner's additional argument that "providing any mechanism to click on, for example mastheads or information surfaces would make O'Neill's dollying

and panning mechanisms superfluous and cause the design to suffer from the very drawbacks O'Neill seeks to overcome," is misplaced. PO Resp. 28 (citing Ex. 2005 ¶ 108); *see also id.* at 22–24, 28 (arguing O'Neill criticizes designs in which the user clicks on the desired card to browse the content, and instructs against repetitive clicking of the mouse to view information (reproducing Ex. 1007, Fig. 2, quoting Ex. 1007, 1:51–54, 2:17–19; citing Ex. 1007, 1:5–9, 1:40–61; Ex. 2005 ¶¶ 88–91, 107)).

Related to its previous arguments, Patent Owner argues that when considering O'Neill's additional embodiment disclosing secondary mastheads, "there is no indication that the primary or secondary mastheads, or the information surfaces correspond to machine functions to be selected by a user." *Id.* at 30–31 (quoting Ex. 1007, 4:44–49; citing Ex. 2005 ¶¶ 110–111). We do not agree with Patent Owner's argument because Patent Owner seeks to add limitations to Patent Owner's claim construction, specifically, that the machine functions must be selected by a user or that the machine functions must be the same as the list of displayed options. Patent Owner's proposed construction, as modified by Patent Owner's additional positions, do not require machine functions to be selected by a user and do not require the list of displayed options to be available machine functions, computer actions, functions, or commands. Instead, Patent Owner's proposed construction, as modified by Patent Owner's additional positions, merely requires the list of displayed options to *correspond to* available machine functions, computer actions, functions, or commands. Moreover, O'Neill's specific example of a *dynamic* three-dimensional telephone book, suggests that when a telephone operator would "dolly up to" or select the "S" masthead, the selection of the "S" masthead initiates a command to

display secondary mastheads, including the secondary masthead “Smith” to which a telephone operator may “dolly up to” or select to ultimately view a desired information surface. *See* Ex. 1007, 4:37–49.

On the foregoing bases, we determine that Petitioner has shown, with sufficient supporting evidence, that O’Neill teaches or suggests each of the limitations recited in claim 1. We further determine that Petitioner has provided sufficient reasoning, supported by sufficient evidence, to establish that it would have been obvious to a person of ordinary skill in the art at the time of the invention to modify O’Neill’s round corridor menu to have an elliptical shape. Patent Owner does not present evidence of secondary considerations. For all of the foregoing reasons, and after having analyzed the entirety of the record, we determine Petitioner has established by a preponderance of the evidence that the subject matter of claim 1 would have been obvious over O’Neill.

2. Unpatentability over O’Neill and Robertson

a. Overview of Robertson (Ex. 1009)

Robertson discloses techniques for presenting a three-dimensional node-link structure with a hierarchical geometry. *See* Ex. 1009, 1:48–53.

Figure 1 of Robertson is reproduced below:

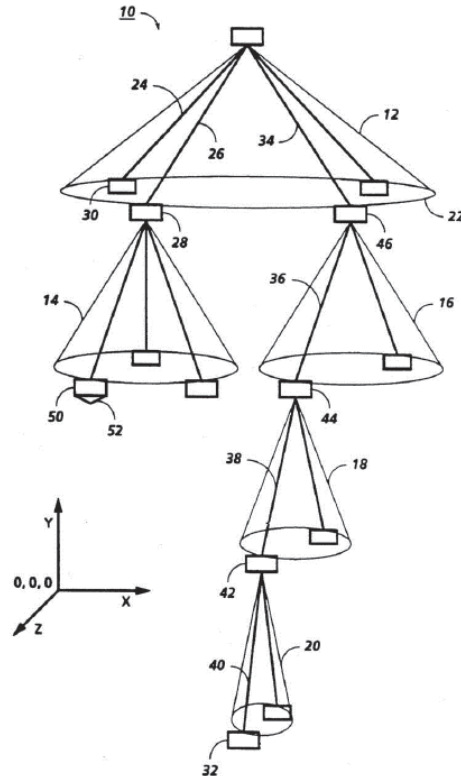


Figure 1 depicts a display view showing a hierarchical structure with conic substructures that can rotate about vertical axes. See Ex. 1009, 4:9–11. Structure 10 includes conic substructures 12, 14, 16, 18, and 20 in hierarchical levels, including several cues within structure 10 to allow three-dimensional perception. See *id.* at 6:52–55. “For example, the bases . . . of the conic substructures, illustratively elliptical as can be seen from base 22 of conic substructure 12, are perceptible as tilted circles receding from the viewing point.” *Id.* at 6:52–59. Robertson further teaches “to improve the use of screen display space, a fixed elliptical or other oblong shape might be chosen for the conic substructures.” *Id.* at 17:23–25.

b. Claim 1

Petitioner relies on the asserted teachings of O’Neill, discussed above in Section II.D.1.b., and asserts that Robertson teaches a user interface that

displays a rotating elliptical menu. *See* Pet. 62–64 (citing Ex. 1009, 6:53–57, 17:24, Figs. 1, 2; Ex. 1005 ¶¶ 197–202). Petitioner asserts:

[t]o the extent that Patent Owner argues that O’Neill does not explicitly disclose an ‘elliptical’ shaped menu and that such a feature would not have been obvious, Robertson explicitly discloses an ‘elliptical shaped, rotating menu and it would have been obvious to a person of ordinary skill in the art to combine the teachings of O’Neill and Robertson.

Pet. 62. Petitioner further contends that it would have been obvious to a person of ordinary skill in the art to use the elliptical menu shapes described in Robertson as the menu shape of O’Neill because, absent a disclosed non-obvious advantage to an elliptical shape, the modification amounts to a design choice. *See* Pet. 64–65 (citing Ex. 1005 ¶¶ 238–243; *Powers-Kennedy*, 282 U.S. at 185; *Gardner*, 725 F.2d at 1346; *Dailey*, 357 F.3d at 672–73; *KSR*, 550 U.S. at 421). Petitioner asserts that it would have been obvious to combine the elliptical teaching from Robertson with the teachings of O’Neill because both references were seeking to overcome the same problems associated with displaying large amounts of data to a user. *See id.* at 28, 65–66 (citing Ex. 1009, Title, 1:65–68; Ex. 1007, 6:53–64, 7:24–25, Figs. 1, 2; Ex. 1005 ¶¶ 234–243). Finally, Petitioner contends a person of ordinary skill in the art would have been motivated to combine the elliptical menus of Robertson with O’Neill because it would have been obvious to try, as the use of a circular, oval, or elliptical shape in the design of a user interface would have been well-known to a person of ordinary skill in the art, would have been an aesthetic design choice, and would have provided predictable results. *See id.* at 66–67; (citing Ex. 1005 ¶¶ 238–240).

On the foregoing bases, Petitioner has established, with sufficient supporting evidence, that O’Neill and Robertson teach or suggest all of the

limitations of claim 1, and has set forth sufficient reasoning to establish that it would have been obvious to one of ordinary skill in the art at the time of the invention to modify O'Neill's menu to be elliptical shaped, in view of Robertson's teachings of an elliptical shaped menu. *See* Pet. 62, 64–67; *KSR*, 550 U.S. at 418 (inferences and creative steps that a person of ordinary skill in the art would employ can be taken into account.).

Patent Owner initially argues that “Petitioner[] ha[s] offered nothing to remedy the deficiencies of O'Neill discussed above.” *See* PO Resp. 31 (citing Ex. 2007, 274:21–275:14, Ex. 2005 ¶¶ 121–123). We do not agree with Patent Owner's arguments. In regard to the alleged deficiencies of O'Neill asserted by Patent Owner (*see* PO Resp. 22, 27–31), as explained above in Section II.D.1.b., Patent Owner's construction for “menu comprising a plurality of menu options” does not require: (1) clicking to perform a selection, (2) clicking the displayed option itself; (3) machine functions to be selected by a user; and (4) the list of displayed options to be a list of available machine functions.

Patent Owner also argues that Petitioner does not explain how the combination of O'Neill with Robertson's ellipses “could be carried out.” PO Resp. 31 (citing Ex. 1005 ¶¶ 113–114). Specifically, Patent Owner argues “it is [] far from clear how O'Neill, which criticizes card files where the user has to click upon each card, and Robertson, which requires the user to click upon individual nodes, could be combined to remedy other deficiencies of O'Neill.” *Id.* at 35 (citing Ex. 1005 ¶ 127). In support of its argument, Patent Owner contends that Petitioner's declarant Dr. Wobbrock admitted on cross-examination that he did not consider exactly how O'Neill and Robertson could be combined. *See id.* at 36 (citing Ex. 2007, 279:10–

285:15). In response to Patent Owner's arguments, Petitioner asserts that Patent Owner does not address Petitioner's reasoning to combine the teachings of O'Neill and Robertson noted in the Institution Decision. *See* Reply 20–21 (citing Pet. 64–67; Dec. 18–19).

Patent Owner's arguments are misplaced. Contrary to Patent Owner's suggestion, Petitioner does not propose combining the teachings of O'Neill with Robertson's teachings of clicking on individual nodes. And Patent Owner acknowledges that Petitioner alleges "only that an elliptical shape would have been combined." PO Resp. 31 (citing Ex. 2007, 274:21–275:15; Ex. 2005 ¶¶ 121–123). Yet, Patent Owner does not substantively address Petitioner's reasoning, supported by evidence, that it would have been obvious to one with ordinary skill in the art at the time of the invention to use the elliptical menu shape described in Robertson as the menu shape of O'Neill. *See* Pet. 64–67 (citing Ex. 1005 ¶¶ 237–240).

Patent Owner further misapprehends Dr. Wobbrock's cross-examination testimony. In contrast to Patent Owner's assertions, Dr. Wobbrock did not testify that he did not consider exactly how O'Neill and Robertson could be combined. *See* Ex. 2007, 279:10–285:15. Rather, Dr. Wobbrock testified that he did not consider a combination involving incorporating Figure 1 of Robertson into Figure 6 of O'Neill. *See* Ex. 2007, 279:10–18, 280:21–281:7. Dr. Wobbrock's testimony that he did not consider bodily incorporating Robertson's Figure 1 into O'Neill's Figure 6 is consistent with a proper obviousness analysis because the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference. *See In re Keller*, 642 F.2d 413, 425 (CCPA 1981).

Patent Owner also contends that a person of ordinary skill in the art would not have turned to Robertson's ellipses to attempt to modify O'Neill. See PO Resp. at 31–32 (citing Ex. 1005 ¶¶ 113–114); *see also id.* at 34 (citing Ex. 2005 ¶ 126, arguing a person of ordinary skill in the art would have had no reason to turn to Robertson's hierarchical structures). Patent Owner contends that Robertson's hierarchical structures bear no relationship to O'Neill's information surfaces because Robertson's are three-dimensional node-link structures having many nodes connected by links in parent-child relationships, whereas O'Neill's information surfaces are more like pages of a book, being scrolled or flipped. See PO Resp. 34. Patent Owner further asserts, "Robertson's displayed design bears no resemblance to O'Neill;" it "is not elliptical in shape and ellipses shown are merely incorporated into the overall design," and "Robertson's elliptical shapes do not rotate off the screen." *Id.* at 35–36 (reproducing Ex. 1007, Fig. 6; Ex. 1009; Fig. 1; citing Ex. 2005 ¶ 128). In support of its arguments, Patent Owner further contends that Dr. Wobbrock stated that his basis for attempting to combine O'Neill and Robertson was that O'Neill's Fig. 4 supposedly shows a hierarchical menu, but Dr. Wobbrock admitted that O'Neill's Figure 6 is used when combining with Robertson, and Dr. Wobbrock states that Figure 6 is not hierarchical. See *id.* at 34 (citing Ex. 2007, 273:7–277:4). Patent Owner further contends that Dr. Wobbrock "conceded that in considering the proposed combination, he only focused on features necessary to meet claim 1, which is classic hindsight construction." *Id.* (citing Ex. 2007, 281:9–285:15).

Patent Owner's arguments are misplaced. First, as acknowledged by Patent Owner, Petitioner does not rely on Robertson's hierarchical three-

dimensional node-link structures in combining the teachings of the references. See PO Resp. 31 (asserting that Petitioner alleges “only that an elliptical shape would have been combined”; citing Ex. 2007, 274:21–275:15; Ex. 2005 ¶¶ 121–123). Patent Owner’s arguments also are premised incorrectly on limiting Robertson’s teachings of an elliptical shape to Robertson’s disclosed hierarchical structures or three-dimensional node-link structures. The use of Robertson’s elliptical shape in a hierarchical structure or three-dimensional node-link structure, however, need not be preserved as Patent Owner suggests. Rather, “[a] reference must be considered for everything it teaches by way of technology and is not limited to the particular invention it is describing and attempting to protect.” *EWP Corp. v. Reliance Universal Inc.*, 755 F.2d 898, 907 (Fed. Cir. 1985) (emphasis omitted).

Patent Owner’s arguments also misapprehend Dr. Wobbrock’s cross-examination testimony. The portions of Dr. Wobbrock’s testimony cited by Petitioner do not show that Dr. Wobbrock’s basis for combining O’Neill and Robertson was that O’Neill’s Figure 4 shows a hierarchical menu. Dr. Wobbrock testified:

So what I’m proposing that Robertson adds to O’Neill is just that, as I’ve said before, I believe O’Neill does disclose all the limitations of Claim 1 in the ’006 patent. To the extent that one would argue it doesn’t disclose ellipticality because it doesn’t use the word “elliptical,” I believe it does in Figure 6, but in view of Robertson, we clearly have elliptical menu teachings there, so that could be added to O’Neill to give it an elliptical design if one wants to contend that Figure 6 does not in fact show an elliptical design which I think it does.

Ex. 2007, 275:2–14. Dr. Wobbrock also clarified that he was answering two separate questions posed by Patent Owner’s counsel: (1) does O’Neill disclose a hierarchical menu; and (2) how would one combine O’Neill with Robertson. *See* Ex. 2007, 275:24–276:7. Dr. Wobbrock further clarified:

And so if you’re asking me again, how would O’Neill incorporate Robertson, Robertson teaches an elliptical - - rotating elliptical menu design and that could be incorporated in O’Neill by making O’Neill’s menu elliptical in shape and rotating, which I believe we already have in Figure 6 [of O’Neill].

Ex. 2007, 276:7–12. Lastly, Because Patent Owner does not address substantively Petitioner’s reasoning to combine the teachings of O’Neill and Robertson, and misapprehends Dr. Wobbrock’s cross-examination testimony, we cannot agree that Petitioner’s combination of the teachings of O’Neill and Robertson was a result of hindsight reconstruction.

On the foregoing bases, we determine that Petitioner has shown, with sufficient supporting evidence, that O’Neill and Robertson teach or suggest each of the limitations recited in claim 1. We further determine that Petitioner has provided sufficient reasoning, supported by sufficient evidence, to show that it would have been obvious to a person of ordinary skill in the art at the time of the invention to modify O’Neill’s menu to be an elliptical shape in view of Robertson’s elliptical shaped menu. *See KSR* at 418 (2007). Patent Owner does not present evidence of secondary considerations. Accordingly, after having analyzed the entirety of the record, we determine Petitioner has established by a preponderance of the evidence that the subject matter of claim 1 would have been obvious over O’Neill and Robertson.

3. Unpatentability over O'Neill and Freeman

a. Overview of Freeman (Ex. 1010)

Freeman discloses a document stream operating system and method.
Ex. 1010, Abstract, 2:12–19.

Figure 1 of Freeman is reproduced below:

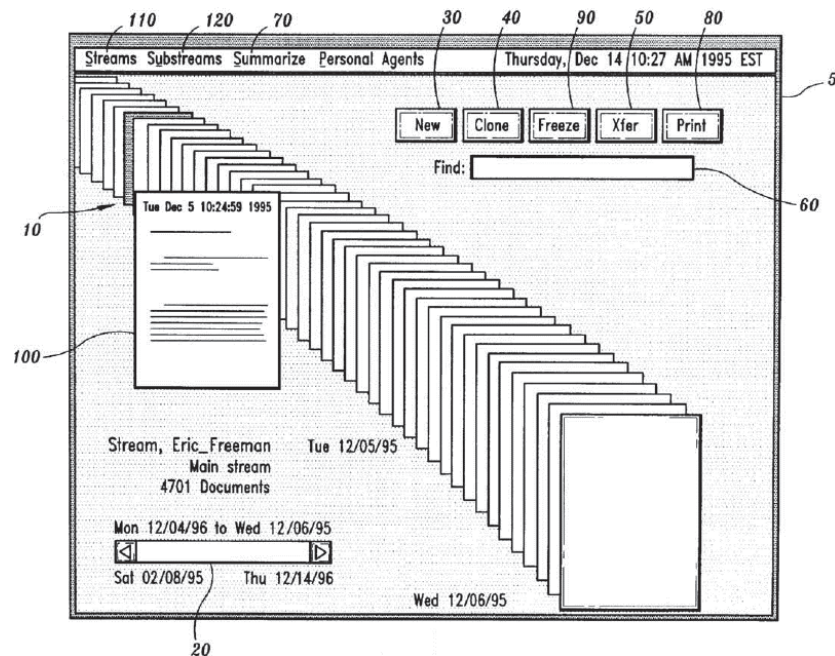


Figure 1 illustrates an X Windows client viewport. See Ex. 1010, 6:17–18, 30–31. External applications are used to view and edit documents that a user can select by clicking on documents in the graphical representation. See *id.* at 6:45–47. Xfer button 50 prompts the user for one or more addresses and then forwards the selected document. See *id.* at 6:53–56, 59–61. Print button 80 copies a selected document to a printer where documents can be printed conventionally or moved to a printer stream. See *id.* at 7:1–4. Browse cards 100 can be employed so that when a user touches a document in the stream display with the cursor, browse card 100 appears, which helps a user identify a document by providing an abbreviated version of the document. See *id.* at 7:64–8:5

b. Claim 1

Petitioner relies on the asserted teachings of O'Neill, discussed above in Section II.D.1.b., and asserts that Freeman teaches individual menu options can be selected in two different ways: (1) a user can slide the mouse pointer over the document representations to glance at each document causing a browse card to appear; and (2) a user can select a document to view in an external application by clicking on the document's graphical representation. *See* Pet. 44–46 (citing Ex. 1010, 6:45–48, 7:64–8:5, Fig. 1; Ex. 1005 ¶¶ 207–209). Petitioner contends:

to the extent that Patent Owner argues that Claim 1 of the '006 Patent requires a “selectable” menu or menu options, or even “selectable” options that trigger a subsequent action, and that this is not taught by O'Neill, Freeman expressly teaches that the menu and its options can be selected by either mousing-over or clicking on one of the boxes in the menu.

Pet. 46 (citing Ex. 1010, 6:45–48, 7:64–67; Ex. 1005 ¶¶ 208–209).

Petitioner asserts one with ordinary skill in the art would have been motivated to combine O'Neill and Freeman because they are analogous art offering solutions to the same problem. *See* Prelim. Resp. 46 (citing *KSR*, 550 U.S. at 420; *Nike, Inc. v. Adidas AG*, 812 F.3d 1326, 1337 (Fed. Cir. 2016); Ex. 1005 ¶ 217). More specifically, Petitioner contends: (1) both Freeman and O'Neill teach three-dimensional graphical user interfaces as alternatives to traditional hierarchical interfaces, where O'Neill discloses that users of prior art hierarchical interfaces were often unable to maintain awareness of their location, and Freeman discloses that conventional operating systems frequently confuse inexperienced users; and (2) both Freeman and O'Neill offer solutions to help users easily find information

among desktop clutter. *See id.* at 46–47 (citing Ex. 1007, 1:23–2:2, 5:1–2, Fig. 5; Ex. 1010, 1:36–40, 9:19–33, 14:42–49; Ex. 1005 ¶¶ 217–218).

Petitioner also contends a person of ordinary skill in the art would have been motivated to combine O’Neill and Freeman by adapting O’Neill’s teaching of a rotatable corridor of boxes to implement Freeman’s well-known concept of selecting one of the boxes by mousing-over or clicking it because Freeman and O’Neill are designed to operate in a windows based user interface and have similar solutions to the problem by organizing the traditional windows desktop into a co-planar row of boxes so that user could more easily view the information. *See Prelim. Resp.* 47–48 (citing Ex. 1005 ¶ 219). Petitioner asserts that a person of ordinary skill in the art would have been motivated to combine O’Neill and Freeman because it would have been a simple substitution of the selection methods of Freeman in place of panning or moving the mouse as provided in O’Neill, and it would have resulted in the same predictable result of displaying the information surface. *See id.* at 48 (citing Ex. 1005 ¶ 220). Petitioner further contends it would have been obvious to a person of ordinary skill in the art to combine the teachings of O’Neill and Freeman as it would have been obvious to try because there were a finite number of identified, predictable solutions, with a reasonable expectation of success. *See id.* at 48–49 (citing Ex. 1005 ¶ 221; *KSR*, 550 U.S. at 421).

On the foregoing bases, Petitioner has established, with sufficient supporting evidence, that O’Neill and Freeman teach or suggest all of the limitations of claim 1 and has set forth sufficient articulated reasoning with rational underpinning to establish that it would have been obvious to one of ordinary skill in the art at the time of the invention to modify O’Neill’s

menu to include Freeman’s selection methods. *See* Pet. 44–47; *KSR*, 550 U.S. at 418 (quoting *Kahn*, 441 F.3d at 988).

Patent Owner argues that a person of ordinary skill in the art would have had no reason to modify O’Neill, which criticizes card file GUIs where a user needs to click on a card to interact with it, based on Freeman, which requires the user to slide the mouse pointer over a document representation to glance at each document or click on the document representation for a full view. *See* PO Resp. 39 (citing Ex. 1007, 1:40–50, 2:17–26; Ex. 1010, 6:45–47; Ex. 2005 ¶ 141; Ex. 2007, 236:20–237:18). Patent Owner asserts that a person of ordinary skill in the art “would have had no reason to incorporate Freeman’s ‘clicking’ into O’Neill’s Fig. 6, inasmuch as O’Neill’s stated purpose was to avoid clicking wherever possible.” *Id.* at 41 (citing Ex. 2005 ¶¶ 146–151). Patent Owner points out that Freeman’s design is similar to the prior art example O’Neill sought to overcome. *See id.* at 41 (reproducing Ex. 1007, Fig. 2, Ex. 1010, Fig. 1; citing Ex. 2005 ¶ 152; Ex. 2007, 239:7–12). Patent Owner contends that a person of ordinary skill in the art “would not have used such selection features from Freeman with O’Neill[’s] Fig. 6 inasmuch as the Fig. 6 construction was intended to avoid the design in Fig. 2—and hence the operation of Freeman.” *Id.* (citing Ex. 2005 ¶¶ 146–151).

In response to Patent Owner’s arguments, Petitioner asserts that O’Neill does not teach against clicking to select a menu option, but explicitly teaches that clicking is an acceptable and expected method for selecting options. *See* Reply 22 (citing Ex. 1007, 3:27–30, 4:30–33; Ex. 1005 ¶¶ 208, 216–219; Ex. 1016 ¶ 31). Petitioner points out that O’Neill discloses clicking on a directional button, and Freeman discloses clicking on the document’s graphical representation for selection. *See* Reply 22–23

(citing Ex. 1010, 6:45–48); *see also* Ex. 1007, 4:11–13 (disclosing a user clicking on dolly and pan buttons). Petitioner asserts that the proposed combination “would not add any amount of clicking that isn’t already expected.” *Id.* at 22 (citing Ex. 1016 ¶¶ 31–33).

We do not agree with Patent Owner’s arguments. “Under the proper legal standard, a reference will teach away when it suggests that the developments flowing from its disclosures are unlikely to produce the objective of the applicant’s invention.” *Syntex (U.S.A.) v. Apotex, Inc.*, 407 F.3d 1371, 1380 (Fed. Cir. 2005) (citing *In re Gurley*, 27 F.3d 551, 553 (Fed. Cir. 1994)). Contrary to Patent Owner’s suggestion, O’Neill does not teach avoiding clicking altogether, or avoiding clicking whenever possible. O’Neill discusses problems encountered with prior art systems and discloses an object of the invention is to provide a graphical user interface that does not *require repetitive pressures* on a keyboard or mouse or require the user to type commands on the keyboard. *See* Ex. 1007, 1:40–54, 2:17–26. Yet O’Neill does not suggest eliminating the use of a mouse or keyboard to make selections in favor of dolly and pan buttons—O’Neill teaches an alternative to minimize repetitive pressures on a keyboard or mouse. As pointed out by Petitioner, O’Neill teaches clicking on dolly and pan buttons. *See* Reply 22–23; Ex. 1007, 3:27–30, 4:30–33. And O’Neill teaches using a mouse is an alternative to clicking dolly and pan buttons. *See* Ex. 1007, 3:27–29 (“In order to access a surface, e.g., the May 5 surface in Fig. 4, the user would click on the appropriate directional button or just move the mouse 10.”).

Patent Owner further argues that even the option of ‘mousing over’ a card to display the card as taught by Freeman would not have been

incorporated into O'Neill. PO Resp. 42. Patent Owner contends that O'Neill intended to overcome the card displays of the type shown in Fig. 2 where the cards are stacked in a linear manner such that the surfaces cannot be seen by providing the curved display in Fig. 6, which allows for the individual card surfaces to be visible as the dollying brings the information into view. *See id.* at 42–43 (citing Ex. 1007, 2:11–13; Ex. 2005 ¶ 154.) Patent Owner contends that Freeman stacks cards in the same manner as O'Neill's Fig. 2 and requires that a user individually select one card at a time to be previewed using the “mousing over” option because the linear stacking does not allow for viewing of individual surfaces. *See id.* at 42–43 (citing Ex. 2005 ¶¶ 138–141, 153; Ex. 2007, 238:21–239:6). Patent Owner argues that the suggested combination would serve no purpose because O'Neill already solved the problem of the linear stacking not allowing viewing of individual surfaces by providing the curvature and spacing of the cards such that they are viewable during dollying. *See id.* at 43 (citing Ex. 2005 ¶ 155). In response to Patent Owner's arguments, Petitioner argues that Patent Owner's arguments are inapplicable because Petitioner does not seek to combine the preview feature of Freeman with O'Neill. *See Reply 23–24.*

Patent Owner's arguments are misplaced. Contrary to Patent Owner's arguments, Petitioner does not propose incorporating Freeman's disclosure of “mousing over” a single card in Figure 1 to display a preview of a single card. Instead, as pointed out by Petitioner, the proposed combination includes modifying the teachings of O'Neill to include Freeman's “mousing over” or “clicking” for selecting O'Neill's disclosed menu options (i.e., mastheads and information surfaces). *See Pet. 48* (citing Ex. 1005 ¶ 219). Moreover, the intended use of Freeman's “mousing over” for previewing a

single card from a plurality of cards stacked in a linear manner such that the surfaces cannot be seen, need not be preserved as Patent Owner suggests.

The use of patents as references is not limited to what the patentees describe as their own inventions or to the problems with which they are concerned, as they are a part of the literature and are relevant for all they contain. *See In re Heck*, 699 F.2d 1331, 1333 (Fed. Cir. 1983) (citing *In re Lemelson*, 397 F.2d 1006, 1009 (CCPA 1968)).

Patent Owner further contends that Petitioner does not explain how substituting one of the selection methods from Freeman in place of panning or moving the mouse as provided in O'Neill would be accomplished. PO Resp. 45–46. Patent Owner argues that Petitioner suggests that a person of ordinary skill in the art would replace O'Neill's dollying and panning with Freeman's touching/clicking on each document, but this combination “does not make any sense because it would remove from O'Neill features that O'Neill contends overcomes problems with conventional cardfiles.” *Id.* at 39 (citing Pet. 47, 7–12; Ex. 1005 ¶ 219; Ex. 2005 ¶¶ 146–151, 156, 157; Ex. 2007, 230:25–231:19).

We do not agree with Patent Owner's arguments. Although Petitioner contends that one with ordinary skill in the art “would have known that you could substitute one of the selection methods from Freeman in place of panning or moving the mouse as provided in O'Neill” (Pet. 48), we do not understand Petitioner's arguments to suggest that, in substituting the use of one of Freeman's selection methods in place of O'Neill's panning or moving the mouse, O'Neill's functionality of dollying, panning, and moving the mouse would be eliminated. *See* Pet. 46–49.

Related to the previous argument, Patent Owner argues that Freeman strives to display all of its cards on the screen at once, and, therefore, does not describe scrolling cards on and off the screen. *See* PO Resp. 44 (quoting Ex. 1010, 6:32–36, 7:56–57, 10:8–15; citing Ex. 2005 ¶¶ 133–137, 158–159). Patent Owner contends that Freeman does not suggest scrolling cards on and off the screen because Freeman provides controls for when all the cards cannot be displayed at once, where cursors are used to allow the user to view segments of the document collection and load more segments as needed. *See id.* at 45 (quoting Ex. 1010, 14:11–16; Ex. 2007, 210:1–211:20, 211:15–16; citing Ex. 2005 ¶¶ 134–135). Patent Owner argues:

the very purpose of O’Neill’s design is to be able to dolly through the information surfaces, many of which are undisplayed. However, as discussed above, in Freeman, scroll bar 20 merely changes which browse card 100 is displayed. Exchanging that functionality for the dolly button in O’Neill would take away the ability to dolly without replacing it with any control that would allow additional surfaces to be rotated into view.

PO Resp. 46. Patent Owner further contends:

while Freeman prefers to display all cards simultaneously, the functionality that Freeman offers to see additional cards requires using “cursors” to change which grouping of cards (“segments”) is displayed (a functionality that Dr. Wobbrock admitted he did not understand). Simply changing grouping of cards suggests changing entire groups at once, such as paging through search results. This would not result in items rotating on or off the display. (Ex. 2005, p. 44, ¶¶136-137.)

PO Resp. 46.

We do not agree with Patent Owner’s arguments because they are misplaced. Petitioner does not propose eliminating O’Neill’s dolly functionality for rotating additional surfaces into view, and replacing it with

Freeman's scroll bar functionality. *See* Pet. 46–49. Petitioner also does not propose modifying the teachings of O'Neill in view of Freeman's teaching of using cursors to change which grouping of cards are displayed in order to see additional cards. *See id.*

Lastly, Patent Owner contends that Petitioner: (1) “offer[s] only conclusory reasoning” (PO Resp. 36); (2) “never actually explain[s] how the proposed combination would be implemented, particularly as compared to alternative manners of combining that would not achieve the claimed invention” (PO Resp. 40); (3) “ha[s] not given a reason for (or the details of) a specific combination that would result in the claimed design” (PO Resp. 43–44); and (4) “ha[s] not met their burden with respect to establishing such a combination” (PO Resp. 46).

In particular, Patent Owner takes issue with Dr. Wobbrock's cross-examination testimony, asserting that Dr. Wobbrock had not considered how the combination would be achieved, and could not give a ballpark estimate of the number of permutations of potential combinations of features from Freeman and O'Neill. *See* PO Resp. 40–41 (citing Ex. 2007, 223:1–233:2, 223:15–23, 224:1–225:4, 225:14–226:3, 226:11–13, 228:7–16, 227:10–14, 232:12–233:2); PO Resp. 43 (citing Ex. 2007, 232:2–233:1).

In response to Patent Owner's arguments, Petitioner asserts that Patent Owner does not address Petitioner's reasoning to combine provided in the Petition other than to say it is conclusory. *See* Reply 25 (citing PO Resp. 14; Dec. 23). Petitioner asserts that it has explained how a person of ordinary skill in the art would modify O'Neill to allow mousing-over or clicking on the menu options as taught by Freeman. *See id.* at 24 (citing Pet. 46–49; Ex. 1005 ¶¶ 216–233). Petitioner further contends that Patent Owner does not

argue that a person of ordinary skill in the art would not have known how, or been able to, or been motivated to combine these teachings. *See id.*

We do not agree with Patent Owner's arguments that Petitioner's reasoning to combine the teachings of O'Neill and Freeman is conclusory. As pointed out by Petitioner, Patent Owner does not substantively address Petitioner's asserted combination of the teachings of the references and reasons to combine the teachings, as set forth in the Petition. *See* Pet. 46–49; PO Resp. 36–47. For example, Patent Owner does not explain sufficiently why it deems conclusory Petitioner's assertions that a person with ordinary skill in the art would have been motivated to combine O'Neill and Freeman because (1) both Freeman and O'Neill teach three-dimensional graphical user interfaces as alternatives to traditional hierarchical interfaces, which can confuse inexperienced users and cause users to be unable to maintain awareness of their location; and (2) both Freeman and O'Neill offer solutions to help users easily find information among desktop clutter. *See* Pet. 46–47; PO Resp. 36–47. As highlighted in the preceding paragraphs, Patent Owner instead argues that O'Neill teaches away from the combination with Freeman, and proposes several alternative combinations of the teachings of the references, not asserted by Petitioner, while arguing that these newly proposed combinations would not result in the claimed invention. *See* PO Resp. 36–47. We also do not agree that Dr. Wobbrock's testimony undercuts Petitioner's asserted reasons to combine the teachings of O'Neill and Freeman. Dr. Wobbrock's testimony, cited by Patent Owner, is responsive to Patent Owner's counsel's inquiry about how one with ordinary skill in the art would bodily incorporate features of Freeman into O'Neill's Figure 6, and asking about other possible combinations of O'Neill

and Freeman. *See* Ex. 2007, 223:11–14, 227:10–14, 227:25–228:4, 228:22–229:2, 230:21–24, 231:21–22, 232:2–5, 232:12–15.

On the foregoing bases, we determine that Petitioner has shown, with sufficient supporting evidence, that O’Neill and Freeman teach or suggest each of the limitations recited in claim 1. We further determine that Petitioner has provided sufficient articulated reasoning with rational underpinning, and supported by sufficient evidence, to show that it would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the teachings of O’Neill to include Freeman’s selection methods of “mousing over” or clicking. *See KSR* at 418. Patent Owner does not present evidence of secondary considerations. Accordingly, after having analyzed the entirety of the record, we determine Petitioner has established by a preponderance of the evidence that the subject matter of claim 1 would have been obvious over O’Neill and Freeman.

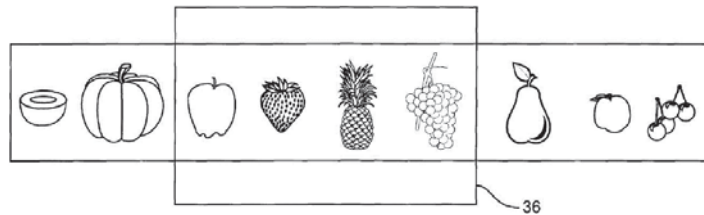
4. *Unpatentability over Naughton and O’Neill*

Initially, we did not institute review of claim 1 on this ground of unpatentability based on Naughton and O’Neill. Dec. 27–29. Following the Supreme Court’s decision *SAS Institute, Inc. v. Iancu*, 138 S. Ct. 1351 (2018), on May 2, 2018, we instituted review of claim 1 on the ground of unpatentability based on Naughton and O’Neill. Paper 23, 2. Neither party requested additional briefing to address this ground of unpatentability. Thus, aside from the Petition and Patent Owner’s Preliminary Response, neither party advances additional positions with respect to this ground of unpatentability.

a. Overview of Naughton (Ex. 1008)

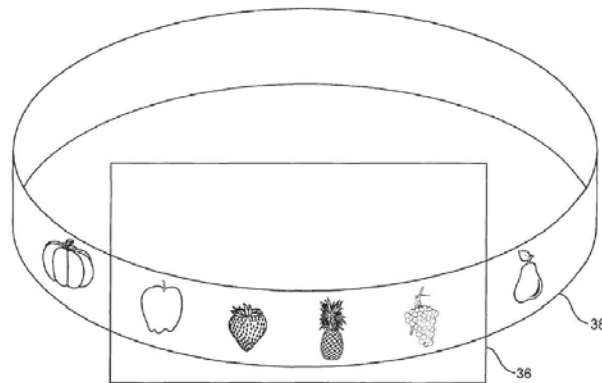
Naughton discloses an interactive graphical user interface. See Ex. 1008, Abstract, Title. The user interface introduces an “object wheel” to allow a user to choose from a large group of objects. See *id.* at 15:3–5.

Figure 12 of Naughton is reproduced below:



“Figure 12 illustrates a view of a plurality of objects which do not fit on a single screen display.” Ex. 1008, 4:61–62. “A large number of fruit objects are available for a user to choose from, yet only four fruit objects fit horizontally on the display screen [36] at once.” *Id.* at 15:12–14. To provide the user with access to all of the available fruit objects, the strip of fruit objects are put onto an object wheel as displayed in Figure 13. See *id.* at 15:14–17.

Figure 13 of Naughton is reproduced below:



“Figure 13 illustrates a conceptual view of the plurality of objects placed on an object wheel.” Ex. 1008, 4:63–64. Only “[a] few of the objects on the object wheel 38 are accessible to a user on a display screen

[36]. To access the objects that are not displayed on display screen [36], the user rotates the object wheel 38.” *Id.* at 15:18–21.

b. Claim 1

Petitioner contends, “wherein the menu is displayed with a perspective in which all of the menu options that are displayed appear to lie substantially in an elliptical arrangement located on a single apparent plane disposed about a menu center,” as recited in claim 1 is taught by Naughton’s Figures 13 and 14. *See* Pet. 55–56. Specifically, Petitioner asserts, “Naughton discloses a menu (‘object wheel’) that is displayed with a perspective in which all of the menu options that are displayed appear to lie substantially in an elliptical arrangement. Its figures 13 and 14 depict the menu as circular or elliptical shaped.” *Id.* (reproducing Ex. 1008, Figs. 13–14). Petitioner further contends, “as shown [] in Figs. 13 and 14, the menu objects lie on a single apparent plane that is disposed about a menu center (i.e., the center of the circular menu).” *Id.* at 56 (citing Ex. 1005 ¶¶ 183–184). Petitioner does not rely on O’Neill for teaching or suggesting this same limitation. *See id.* at 58–62.

In its Preliminary Response, Patent Owner argues that Naughton does not disclose the required rotating elliptical menu because Figure 13 is merely a conceptual rendering of how the material to be displayed is processed, not what it actually looks like when displayed. *See* Prelim. Resp. 27 (citing Ex. 1008, 4:60–64). Patent Owner contends, “[w]hat is actually displayed in Naughton is only what is contained in display box 36 (referred to as 37 in text).” *Id.* at 28. Patent Owner asserts that Figure 12 shows that the images in the display may be scrolled left to right along a conceptual object wheel, but the objects actually displayed are not arranged in an elliptical manner.

See id. at 28, 30. Patent Owner contends, “[a]s can be seen from Fig. 12, the objects on display 36 appear in a straight line.” *Id.* at 30; *see id.* at 28–29.

We agree with Patent Owner. Naughton does not teach “a rotating elliptical menu comprising a plurality of menu options, wherein the menu is displayed with a perspective in which all the menu options that are displayed appear to lie substantially in an elliptical arrangement located on a single apparent plane disposed about a menu center,” as recited in claim 1. As correctly pointed out by Patent Owner, Naughton teaches displaying menu options (i.e., fruit icons) in a straight line on a display screen 36, as shown in Figure 12, and Naughton’s Figures 13 and 14 do not disclose, teach, or suggest display of the object wheel.

For all of the foregoing reasons, we determine that Petitioner has not shown, with sufficient supporting evidence, that Naughton and O’Neill teach or suggest each of the limitations recited in claim 1. After having analyzed the entirety of the record, we determine that Petitioner has not shown by a preponderance of the evidence that the subject matter of claim 1 would have been obvious over Naughton and O’Neill.

III. MOTION FOR OBSERVATIONS

Patent Owner filed a Motion for Observations Regarding Cross-Examination Testimony of Jacob O. Wobbrock, and Petitioner filed a Response. Papers 25, 28. To the extent Patent Owner’s Observations pertain to testimony purportedly impacting Dr. Wobbrock’s credibility, we have considered Patent Owner’s observations and Petitioner’s responses in rendering this Final Written Decision, and accorded Dr. Wobbrock’s testimony appropriate weight in view of Patent Owner’s observations and Petitioner’s response to those observations.

IV. CONCLUSION

Petitioner has shown by a preponderance of the evidence that claim 1 is unpatentable under 35 U.S.C. § 103 as obvious over O'Neill, over O'Neill and Robertson, and over O'Neill and Freeman. Petitioner has not shown by a preponderance of the evidence that claim 1 is unpatentable under 35 U.S.C. § 103 as obvious over Naughton and O'Neill.

IV. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that claim 1 has been shown to be unpatentable under 35 U.S.C. § 103 as obvious over O'Neill;

ORDERED that claim 1 has been shown to be unpatentable under 35 U.S.C. § 103 as obvious over O'Neill and Robertson;

ORDERED that claim 1 has been shown to be unpatentable under 35 U.S.C. § 103 as obvious over O'Neill and Freeman;

ORDERED that claim 1 has not been shown to be unpatentable under 35 U.S.C. § 103 as obvious over Naughton and O'Neill; and

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

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Reissued Patent RE44,006 E

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