

NOTE: This disposition is nonprecedential.

**United States Court of Appeals  
for the Federal Circuit**

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**B/E AEROSPACE, INC.,**  
*Appellant*

v.

**C&D ZODIAC, INC.,**  
*Cross-Appellant*

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2016-1496, 2016-1497

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Appeals from the United States Patent and Trade-  
mark Office, Patent Trial and Appeal Board in No.  
IPR2014-00727.

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Decided: October 3, 2017

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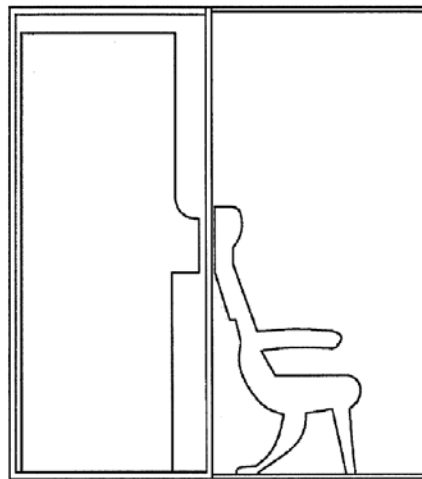
Before WALLACH, CHEN, and STOLL, *Circuit Judges*.

STOLL, *Circuit Judge*.

The present appeal and cross-appeal stem from the Patent Trial and Appeal Board's invalidation of some, but not all, of the challenged claims of B/E Aerospace, Inc.'s U.S. Patent No. 8,590,838 as obvious in an inter partes review proceeding filed by C&D Zodiac, Inc. On appeal, B/E challenges the Board's conclusion that claims 1, 3–7, 9, 10, 12–14, 16–19, 21, 22, 24–29, 31, and 33–37 would have been obvious, and Zodiac cross-appeals the Board's determination that claims 8, 20, 30, and 38 were patentable. We affirm the Board's Final Written Decision in its entirety.

#### BACKGROUND

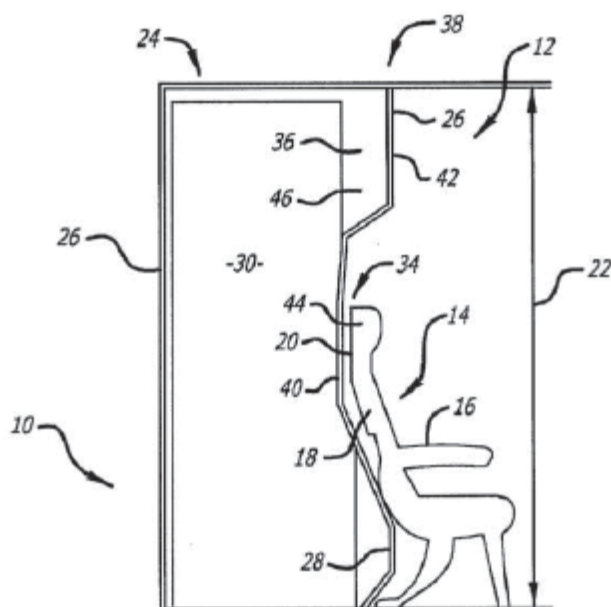
The '838 patent relates to a space-saving design for aircraft enclosures—including lavatories, closets, and galleys—that increases the value of an aircraft by “allow[ing] the installation of an increased number of passenger seats.” '838 patent col. 2 ll. 6–7, 13–22. In the prior art, an aircraft enclosure's forward wall was typically flat. This configuration is shown in Figure 1, with the lavatory's flat forward wall touching the back of the passenger seat:



**FIG. 1**  
(Prior Art)

The back of the passenger seat abutting the flat forward wall, however, was often not flat, which created a “significant volume[]” of unusable space on the aircraft between the wall and the seat. *Id.* at col. 1 ll. 22–28.

The '838 patent sought to reduce the unusable space by altering the shape of the enclosure's forward wall without meaningfully shrinking the size of the enclosure. This new design is depicted below in Figure 2:



**FIG. 2**

As can be seen from Figure 2, “[t]he forward wall portion [of enclosure 10] has a shape that is substantially not flat in the vertical plane, and preferably is shaped to include a recess 34 such that the forward wall portion substantially conforms to the shape of the exterior aft surface of the aircraft cabin structure [passenger seat 16].” *Id.* at col. 4 ll. 25–29. The back of the passenger seat can nestle into the recess created by the non-flat wall, thereby permitting

the seat to be moved backwards. Airlines can then use the space created by shifting the seat to provide more spacious seating or to increase the number of seats on the plane. J.A. 3630–31 ¶¶ 77–78.

Independent claim 1 and dependent claim 8 recite these improvements:

1. A lavatory for a cabin of an aircraft, the cabin including a passenger seat having an aft portion that is substantially not flat in a vertical plane, the lavatory comprising:

a lavatory stall unit having at least one wall having a forward wall portion, said at least one wall defining an interior lavatory space, and said forward wall portion being configured to be disposed immediately aft of and adjacent to an aircraft cabin passenger seat having an aft portion with an exterior aft surface having a shape that is substantially not flat in a vertical plane; and

wherein said forward wall portion is shaped to substantially conform to the shape of the exterior aft surface of the aft portion of the aircraft cabin passenger seat, and said forward wall portion includes an aft-extending recess in said forward wall portion configured to receive the aft portion of the aircraft cabin passenger seat therein.

....

8. The lavatory of claim 1, wherein said lavatory stall unit has a top, a bottom, a height therebetween, and a middle therebetween, said lavatory stall unit has varying lengths along the height of the lavatory stall unit, and said lavatory

stall unit is longer at the top of the lavatory stall unit than at the bottom of the lavatory stall unit.

*Id.* at col. 4 l. 54 – col. 5 l. 3, col. 5 ll. 31–36.

Zodiac petitioned for IPR of claims 1, 3–10, 12–14, 16–22, 24–31, and 33–38. The Board instituted review for all challenged claims but divided them into two groups: 1) obviousness of claims 1, 3–7, 9, 10, 12–14, 16–19, 21, 22, 24–29, 31, and 33–37 in view of U.S. Patent No. 3,738,497 (“Betts”); and 2) obviousness of claims 8, 20, 30, and 38 in view of Betts and the McDonnell Douglas DC-10 Customer Configuration Summary (“Orange Book”). See *C & D Zodiac, Inc. v. B/E Aerospace, Inc.*, IPR2014-727, 2015 WL 6470951, at \*1 (PTAB Oct. 26, 2015) (“*Board Decision*”). Claim 1 is representative of the first group of claims, and claim 8 is representative of the second group. In its Final Written Decision, the Board determined that B/E’s evidence of secondary considerations was insufficient to overcome Zodiac’s prima facie case of obviousness in view of Betts and that the first group of claims would have been obvious in view of Betts. The Board concluded that the second group of claims was not unpatentable in view of Betts and the Orange Book because Zodiac failed to establish that the Orange Book was a printed publication.

B/E appeals from the Board’s Final Written Decision invalidating the claims in the first group as obvious. Zodiac cross-appeals from the Board’s conclusion that the Orange Book did not qualify as a printed publication. We have jurisdiction pursuant to 35 U.S.C. § 141(c) and 28 U.S.C. § 1295(a)(4)(A).

#### DISCUSSION

On appeal, the parties present four main arguments for our review. B/E’s appeal alleges three errors by the Board in its decision invalidating claims 1, 3–7, 9, 10, 12–14, 16–19, 21, 22, 24–29, 31, and 33–37 in view of Betts.

Zodiac’s cross-appeal argues that the Board erred in concluding that the Orange Book was not a printed publication. We address each argument in turn.

### I.

B/E first alleges that the Board erred in its constructions of “substantially not flat in a vertical plane,” “enclosure unit,” and “lavatory stall unit.” Second, B/E contends that the Board was incorrect in finding claims 1, 3–7, 9, 10, 12–14, 16–19, 21, 22, 24–29, 31, and 33–37 obvious over Betts. Third, B/E claims that the Board failed to appropriately consider its evidence of secondary considerations.

### A.

When construing claims, the Board must apply the broadest reasonable construction in light of the patent’s specification. *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2142 (2016). “We review intrinsic evidence and the ultimate construction of the claim de novo.” *SightSound Techs., LLC v. Apple Inc.*, 809 F.3d 1307, 1316 (Fed. Cir. 2015).

Zodiac’s petition did not provide constructions for “substantially not flat in a vertical plane,” “enclosure unit,” or “lavatory stall unit.” Nonetheless, the Board rejected B/E’s proposed constructions for these three terms in its Final Written Decision, which B/E challenges on appeal.

The Board concluded that the broadest reasonable construction of “a passenger seat having an aft portion that is substantially not flat in a vertical plane” included an aft portion of a passenger seat “that has a flat shape but which is not within a vertical plane.” *Board Decision*, 2015 WL 6470951, at \*3–4. B/E contends instead that the term should be construed to mean “a back side shape with a back exterior surface that is contoured or substantially non planar in an upright position.” Appellant Br. 19.

According to B/E, the Board disregarded the term’s requirement that the shape is “not flat” and only applied the descriptor “not” to the phrase “in a vertical plane.” We disagree. Under the broadest reasonable construction, “not” modifies the entire phrase “flat in a vertical plane.” Thus, the seat’s aft portion must be substantially not flat *in a vertical plane*, as the rest of the claim term instructs. *See, e.g.*, ’838 patent col. 4 ll. 54–56. Accordingly, the Board correctly concluded that the aft portion of the seat can have a flat shape so long as it is substantially not flat in a vertical plane. We see no error in the Board’s construction.

Next, the Board determined that the terms “enclosure unit” and “enclosure” encompass “lavatories, aircraft closets, and aircraft galleys” and declined to construe “enclosure unit” further. *Board Decision*, 2015 WL 6470951, at \*3. According to B/E, attributing the same meaning to both “enclosure” and “enclosure unit” renders the word “unit” superfluous. To give meaning to the word “unit,” B/E urges us to construe “enclosure unit” as a “single functional space, enclosed on all sides.” Appellant Br. 24.

We decline B/E’s invitation. The Summary of the Invention section explains that the “enclosure unit” can be “a lavatory, an aircraft closet, or an aircraft galley.” ’838 patent col. 2 ll. 27–28. As the Board noted, aircraft galleys can serve multiple functions and are not necessarily enclosed on all sides. *Board Decision*, 2015 WL 6470951, at \*3 (citing U.S. Patent Application Publication No. 2007/0228216). Nothing else in the claims or the specification supports limiting the “enclosure unit” to a single function or requiring that it be enclosed on all sides. The Board did not err in its construction.

Finally, the Board rejected B/E’s claim construction arguments for “lavatory stall unit,” but declined to provide an express construction in light of the invalidity

grounds Zodiac raised in its IPR petition. For reasons similar to those discussed for the “enclosure unit” term, B/E argues that “lavatory stall unit” should be construed as “a single room, enclosed on all sides, having a toilet and washbasin and large enough to fit a person inside.” Appellant Br. 30. Moreover, B/E claims there is a fundamental dispute between the parties regarding the scope of the term and argues that it was error for the Board not to provide an express construction.

We agree with the Board that the plain and ordinary meaning is sufficient here. The ’838 patent does not ascribe a special definition to a “lavatory stall unit” other than the plain and ordinary meaning. And, although the parties certainly dispute the scope of the claims, Zodiac does not rely on any lavatory prior art. Instead, its obviousness position is based on applying the concepts taught by Betts to a lavatory stall unit, not modifying the lavatory stall unit in a certain way. Therefore, the Board did not err in ascribing the plain and ordinary meaning to “lavatory stall unit.”

## B.

A claim is unpatentable as obvious “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.” 35 U.S.C. § 103.<sup>1</sup> We review the Board’s ultimate obviousness determination de novo and underlying factual findings for substantial evidence. *Harmonic Inc. v. Avid*

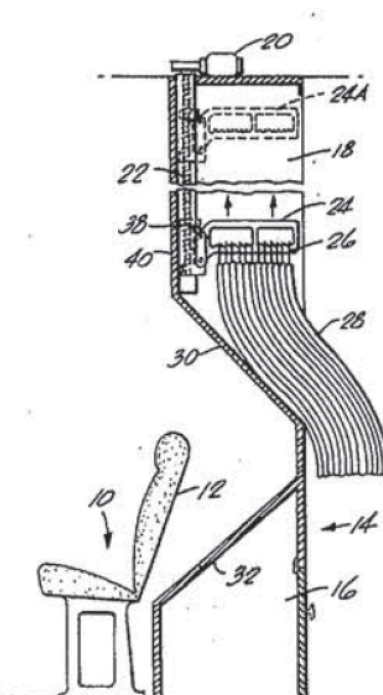
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<sup>1</sup> Given the effective filing date of the claims of the ’838 patent, the version of 35 U.S.C. § 103 that applies here is that in force preceding the changes made by the America Invents Act. See Leahy–Smith America Invents Act, Pub. L. No. 112-29, § 3(n), 125 Stat. 284, 293 (2011).



*Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016). Substantial evidence “means such relevant evidence as a reasonable mind might accept as adequate to support a conclusion.” *Consol. Edison Co. v. NLRB*, 305 U.S. 197, 229 (1938). Factual findings underlying the obviousness inquiry include the scope and content of the prior art, the differences between the prior art and the claimed invention, whether there is a motivation to combine prior art references, the level of ordinary skill in the art, and relevant secondary considerations. *Merck & Cie v. Gnosis S.P.A.*, 808 F.3d 829, 833 (Fed. Cir. 2015), *cert. denied*, 137 S. Ct. 297 (2016).

The Board held each of claims 1, 3–7, 9, 10, 12–14, 16–19, 21, 22, 24–29, 31, and 33–37 unpatentable in light of Betts, which discloses an elevated coat closet having a recessed forward wall that does not interfere with the tiltable passenger seat positioned in front of it. Figure 1 of Betts is shown below:



Betts's coat closet purports to use space in the aircraft more efficiently by elevating the garments 28 for storage after they have been hung on coat rack 24. Betts col. 1 ll. 5–7, col. 2 ll. 7–32. The coat closet 14 contains a luggage storage space 16 and an overhead coat compartment 18. *Id.* at col. 2 ll. 11–14. Walls 30 and 32 slant rearwardly to allow the occupant to recline seatback 12 of passenger seat 10. *Id.* at col. 2 ll. 7–24.

The Board found that Betts taught every feature of claim 1 except the “lavatory-specific limitations.” *Board Decision*, 2015 WL 6470951, at \*6. To fill this gap, the Board relied on the testimony of Zodiac’s expert, Alan Anderson, to establish that a person of ordinary skill at the time of the invention would have considered it obvious “to apply the recessed design of the forward wall of Betts to other aircraft enclosures, including lavatories.” *Id.* (citing J.A. 1500–01 ¶¶ 65–68). The Board credited Mr. Anderson’s testimony that Betts would have motivated an ordinarily skilled artisan to use space on an aircraft efficiently and that Betts teaches the space efficiency that can be gained by using a recessed forward wall configuration instead of a flat forward wall configuration. *Id.* For support, Mr. Anderson cited the Betts patent, which states that it elevated the coat rack “so that it will be out of the way and provide more room for passengers in an aircraft.” J.A. 1500 ¶ 65 (citing Betts col. 1 ll. 6–7). Based on this understanding, the Board agreed with Mr. Anderson that a person of ordinary skill would have been motivated to apply the recessed forward wall configuration of Betts to lavatories and other aircraft enclosures.

B/E raises two main arguments on appeal. First, B/E argues that Betts teaches only a flat, tiltable seatback and not a contoured forward wall that is shaped to receive a contoured seatback. As explained above, although Betts’s seatback is flat, it is not flat in a vertical plane. Therefore, it falls within the broadest reasonable con-

struction of “substantially not flat in a vertical plane.” And B/E’s argument that the ’838 patent requires a contoured forward wall and seatback finds no support in the claims. Claim 1, for example, requires a seatback “having a shape that is substantially not flat in a vertical plane” and a forward wall that is “shaped to substantially conform to the shape of the exterior aft surface of the aft portion of the aircraft cabin passenger seat.” ’838 patent col. 4 ll. 62–66. The word “contoured” is not mentioned in the claims. In fact, it only appears in the Background of the Invention section of the ’838 patent. *See id.* at col. 1 ll. 24–35.

Second, B/E argues that Betts discloses neither an enclosure *unit* nor a lavatory stall *unit* because it contains two separate storage compartments—luggage storage space 16 and overhead coat compartment 18—divided by the tilting seatback 12. B/E claims that an enclosure unit cannot be subdivided, and a lavatory stall unit must contain all of the numerous complex systems required for a functioning lavatory, i.e., plumbing, faucets, electricity, etc.

The Board previously rejected these arguments, and its conclusion is supported by substantial evidence. As the Board explained, B/E’s arguments miss the thrust of Zodiac’s obviousness position. Zodiac contends that applying the recessed forward wall of Betts to lavatories and other aircraft enclosures would have been obvious based on Betts’s teachings and the knowledge of an ordinarily skilled artisan. Zodiac never asserted that Betts’s coat closet could be modified to obtain a functioning lavatory, so the fact that Betts has divided compartments and lacks the complex lavatory systems is irrelevant. *Board Decision*, 2015 WL 6470951, at \*7. Instead, Zodiac relies on Betts’s recessed forward wall and desire for increased efficiency in the use of space on an aircraft to motivate one of ordinary skill in the art to modify an existing lavatory (or other enclosure) by applying Betts’s

recessed forward wall to that conventional lavatory.<sup>2</sup> This obviousness argument is independent of whether the Betts closet contains one or two storage compartments, and B/E's contrary contentions do not undermine the substantial evidence on which the Board's conclusion rests.

### C.

B/E also insists that the Board erred in finding its evidence of secondary considerations insufficient to overcome Zodiac's prima facie case of obviousness. Secondary considerations are an important part of the obviousness analysis and must, when present, be considered. *See Transocean Offshore Deepwater Drilling, Inc. v. Maersk Drilling USA, Inc.*, 699 F.3d 1340, 1349 (Fed. Cir. 2012). The Board considered and weighed B/E's evidence of industry praise, commercial success, and copying. Substantial evidence supports the Board's conclusions on each of these secondary considerations.

At the outset, we note that the Board did not address the nexus between B/E's secondary considerations evidence and the claimed features of the '838 patent. "For objective [evidence of secondary considerations] to be accorded substantial weight, its proponent must establish a nexus between the evidence and the merits of the *claimed invention*." *Wyers v. Master Lock Co.*, 616 F.3d 1231, 1246 (Fed. Cir. 2010) (alteration and emphasis in

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<sup>2</sup> Although it was not relied on by the Board, Betts defines its coat closet 14 to include both the storage space 16 and the coat compartment 18. *See* Betts col. 2 ll. 11–14; *see also* J.A. 3373–74 (explaining that, according to Zodiac's expert, Mr. Anderson, "the enclosure [in Betts] is the sum of the pieces located behind the seat," and that Betts's upper enclosure and lower enclosure, taken together, "form an enclosure unit").

original) (quoting *In re GPAC Inc.*, 57 F.3d 1573, 1580 (Fed. Cir. 1995)). For purposes of our analysis on appeal, we assume that a nexus exists, although it is not without some reservation. For example, one of the articles proffered by B/E to demonstrate industry praise highlights the “[a]ntimicrobial coatings on the interior surfaces” of B/E’s new lavatory, which provides a cleaner, more hygienic lavatory, as well the fact that the “toilet even uses less water when flushing.” J.A. 3195; *see also* J.A. 3183 (noting that B/E’s lavatory will “integrate B/E’s ‘Aircraft Ecosystems’ vacuum toilet, LED lighting and B/E Aerospace tamper proof, lavatory oxygen system”). The cleaner surfaces, new lighting, and improved toilet could have played some role in the commercial success of, and industry praise for, B/E’s new lavatory. This, however, is not for us to decide on appeal.

With respect to commercial success, the Board viewed B/E’s contract to be the exclusive manufacturer of modular lavatory systems for the next generation of Boeing’s 737 airplanes—valued at approximately \$800 million—as weak evidence. Although the contract’s *estimated* value is large, the Board found it lacked the requisite context to evaluate this evidence. The Board wanted to know, for example, the number of years over which the contract is spread; the amount that other competitors in the same market will make over this period; the global market sales revenue for aircraft lavatories; and the percentage of that market belonging to B/E. *Board Decision*, 2015 WL 6470951, at \*10. B/E is correct that our precedent does not require answers to each of these questions in every case. But we cannot say that the Board’s assessment of B/E’s evidence was legally erroneous or unsupported by substantial evidence. The Board did not wholly disregard the evidence of commercial success due to the lack of context. Instead, the Board found that B/E’s contract with Boeing should be afforded minimal weight because the bare dollar value did “not provide a frame of reference

against which [the Board could] make an informed judgment of the evidentiary value of the \$800 million figure” and left the Board with “many unanswered questions with respect to the dollar figure provided by [the] Patent Owner.” *Id.* Without the introduction of contextual evidence, substantial evidence supports the Board’s conclusion that the estimated value of the contract, in a vacuum, was weak evidence of commercial success.

The Board also found B/E’s evidence of copying to be weak because it was limited to mere allegations of copying by Zodiac without supporting evidence other than allegations of infringement. Because B/E had not proven that any Zodiac product infringes the ’838 patent, and because infringement alone cannot establish copying, the Board allocated little weight to this evidence. *Id.* at \*11; *Iron Grip Barbell Co. v. USA Sports, Inc.*, 392 F.3d 1317, 1325 (Fed. Cir. 2004) (“Not every competing product that arguably falls within the scope of a patent is evidence of copying. . . . Rather, copying requires the replication of a specific product.”). B/E argues on appeal that Zodiac produced only flat-walled lavatories until Boeing awarded a contract to B/E for its Spacewall product and that Zodiac’s expert, Mr. Anderson, admitted to being familiar with the Spacewall. Although Mr. Anderson said he was familiar with B/E’s Spacewall, he also explained that he had not worked on any lavatories for Zodiac. This falls short of the type of copying evidence we have found sufficient in the past: internal documents that indicate copying, “direct evidence such as disassembling a patented prototype, photographing its features, and using the photograph as a blueprint to build a virtually identical replica,” or “access to, and substantial similarity to, the patented product.” *Iron Grip*, 392 F.3d at 1325. The Board found that B/E had not offered any evidence of this sort here. *Board Decision*, 2015 WL 6470951, at \*11. Substantial evidence thus supports the Board’s decision to give this evidence minimal weight.

The Board also considered B/E's evidence of industry praise, including that B/E's Spacewall lavatory product won the Crystal Cabin Award. B/E claims its Spacewall product is a commercial embodiment of the '838 patent, and the Crystal Cabin Award is viewed in the industry as "a seal of quality, known and coveted around the world." J.A. 3201. B/E also provided several newspaper articles containing complimentary reviews of B/E's Spacewall. *See, e.g.*, J.A. 3192–97. The Board acknowledged B/E's evidence of industry praise and characterized it as "moderate." *Board Decision*, 2015 WL 6470951, at \*11. While a fact finder could have reasonably found receipt of the prestigious Crystal Cabin Award and the favorable media reviews more probative of nonobviousness than "moderate[ly]" probative, we cannot say that the Board's fact finding was unsupported by substantial evidence. The substantial evidence standard is a deferential one, requiring only "such relevant evidence as a reasonable mind might accept as adequate to support a conclusion." *Consol. Edison Co.*, 305 U.S. at 229. We have explained that it "is something less than the weight of the evidence but more than a mere scintilla of evidence." *In re Kahn*, 441 F.3d 977, 985 (Fed. Cir. 2006).

Finally, we see no error in the Board's ultimate determination of obviousness. The Board weighed the "strong evidence of obviousness" in view of Betts against the "moderate" evidence of industry praise and the "weak" evidence of copying and commercial success before concluding that the claims would have been obvious over Betts when combined with the knowledge of an ordinarily skilled artisan. *Board Decision*, 2015 WL 6470951, at \*11. We agree.

## II.

In its cross-appeal, Zodiac argues that the Board erred in concluding that the Orange Book was not a printed publication and therefore did not qualify as a

prior art reference for purposes of the IPR proceeding. According to Zodiac, the Orange Book discloses an elevated coarct that is longer at the top of the unit than at the bottom, as required by dependent claims 8, 20, 30, and 38.

Section 311(b) of the Patent Act confines the universe of prior art available for use in IPR proceedings to “patents or printed publications.” 35 U.S.C. § 311(b). Determining whether a reference constitutes a printed publication is a legal conclusion based on underlying factual determinations. *Cf. Cooper Cameron Corp. v. Kvaerner Oilfield Prods., Inc.*, 291 F.3d 1317, 1321 (Fed. Cir. 2002). We review the Board’s legal conclusions de novo and its factual determinations for substantial evidence. *In re Lister*, 583 F.3d 1307, 1311 (Fed. Cir. 2009).

Public accessibility is the “touchstone in determining whether a reference constitutes a ‘printed publication.’” *In re Hall*, 781 F.2d 897, 899 (Fed. Cir. 1986). “A reference is considered publicly accessible if it was ‘disseminated or otherwise made available to the extent that persons interested and ordinarily skilled in the subject matter or art exercising reasonable diligence, can locate it.’” *In re Lister*, 583 F.3d at 1311 (quoting *Kyocera Wireless Corp. v. Int’l Trade Comm’n*, 545 F.3d 1340, 1350 (Fed. Cir. 2008)); *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1569 (Fed. Cir. 1988) (“Accessibility goes to the issue of whether interested members of the relevant public could obtain the information if they wanted to.”). Public accessibility presents a case-by-case inquiry based on the “facts and circumstances surrounding the reference’s disclosure to members of the public.” *In re Lister*, 583 F.3d at 1311 (quoting *In re Klopfenstein*, 380 F.3d 1345, 1350 (Fed. Cir. 2004)).

McDonnell Douglas Corporation is a predecessor to Boeing, and it manufactured a passenger airplane called the DC-10. In connection with the DC-10, McDonnell



Douglas created a customer configuration summary called the Orange Book. The Orange Book contains floor plans and drawings of cabin interiors for the DC-10. McDonnell Douglas allegedly distributed the Orange Book to potential airline customers to provide them with customization options for the cabin interior.

The Orange Book is a three-ring binder of loose-leaf paper. Pages can be added or removed as updates or revisions are made to the Orange Book. The version in the record has pages indicating revision and issue dates ranging from 1975 to 1978. J.A. 1066, 1070, 1072, 1078, 1111. Of particular importance is page 5.3 of the version of the Orange Book in the record, dated October 1978, which shows an elevated coatrack purporting to meet the limitations of dependent claims 8, 20, 30, and 38. *See* J.A. 1191. The Orange Book's format highlights the crucial question: whether the version of the Orange Book with the specific schematic on which Zodiac relies was publically accessible before the critical date of the '838 patent—April 20, 2009—such that the Orange Book in the record constitutes a prior art printed publication.

To establish public accessibility, Zodiac offered declarations from Jarold Newkirk and John Schoenberg. In his declaration, Mr. Newkirk stated that he was a former McDonnell Douglas employee and had personal knowledge of McDonnell Douglas's publication and distribution of the Orange Book to its airline customers in 1978. But, as the Board recognized, Mr. Newkirk conceded during his deposition that he lacked personal knowledge regarding whether the version of the Orange Book in the record was identical to the version that was allegedly published and distributed in 1978. *See Board Decision*, 2015 WL 6470951, at \*12–13; J.A. 3479–80. Moreover, Mr. Newkirk's statement that the copy of the Orange Book he reviewed was identical to the versions allegedly published and distributed in 1978 was based on his belief that the copy he reviewed came from

Mr. Schoenberg, and Mr. Schoenberg said he was given that copy of the Orange Book by McDonnell Douglas. *Board Decision*, 2015 WL 6470951, at \*12–13 (citing J.A. 3479–80) (“[W]hether or not it was exactly that, I have no knowledge.” (emphasis omitted)). Mr. Newkirk also could not “unequivocally say” that he distributed the specific version of the Orange Book in evidence to customers in 1978. *See* J.A. 3478–79.

Mr. Schoenberg’s testimony was similarly vague. He explained in his declaration that he obtained the Orange Book “*possibly* from [his employer’s] marketing department in 1981 or *perhaps* later” when he was in charge of Zodiac’s efforts to develop ceiling panels for the DC-10 aircraft. J.A. 2138–39 ¶ 5 (emphasis added). As the Board pointed out, this testimony was “not definitive of what was published and by when.” *Board Decision*, 2015 WL 6470951, at \*13. Moreover, the Board was not convinced that Mr. Schoenberg’s testimony “relate[d] specifically to the version of the Orange Book on which [Zodiac] relies” because he was unable to confirm that the copy provided to him during his deposition was the same as the copy previously in his possession. *Id.* (citing J.A. 3542). And when asked by the Board how it could be sure “that the specific page that [Zodiac is] relying on was part of the Orange Book back in that relevant time frame,” Zodiac’s counsel admitted that Zodiac did not “have testimony that that specific page was in that specific Orange Book.” *Id.* (citing J.A. 700).

Based on this record, we conclude that substantial evidence supports the Board’s determination that Zodiac did not satisfy its burden of establishing that the version of the Orange Book in the record was publically accessible. The nature of the Orange Book focuses our inquiry on whether the version of the Orange Book containing the relevant schematic was publically accessible. The Board found the testimony of Messrs. Newkirk and Schoenberg deficient in this regard. Specifically, the Board discount-

ed the testimony of Mr. Newkirk because he demonstrated a lack of personal knowledge regarding whether the Orange Book version in evidence was published and distributed during the relevant time period. Mr. Schoenberg's deposition exposed similar inadequacies; the Board found his testimony about the Orange Book might not even relate to the version in evidence. This is substantial evidence to support the Board's conclusion that Zodiac did not establish public accessibility of the Orange Book containing the pertinent schematic. In short, nothing in the record demonstrates that "persons interested and ordinarily skilled in the subject matter or art exercising reasonable diligence" could have located the relevant version of the Orange Book before the priority date. *See In re Lister*, 583 F.3d at 1311.

#### CONCLUSION

We have considered the parties' remaining arguments and find them unpersuasive. For the reasons stated above, neither the Board's claim constructions nor its obviousness determination was erroneous. We also detect no error in the Board's fact findings and legal conclusions regarding public accessibility of the Orange Book. Accordingly, we affirm.

#### **AFFIRMED**

#### COSTS

No costs.