

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

M & K HOLDINGS, INC.,
Appellant

v.

SAMSUNG ELECTRONICS CO., LTD.,
Appellee

2020-1160

Appeal from the United States Patent and Trademark Office, Patent Trial and Appeal Board in No. IPR2018-00696.

Decided: February 1, 2021

JOHN BAUER, Nelson Mullins Riley & Scarborough, LLP, New York, NY, argued for appellant. Also represented by KONGSIK KIM, Boston, MA.

IGOR VICTOR TIMOFEYEV, Paul Hastings LLP, Washington, DC, argued for appellee. Also represented by QUADEER AHMED, STEPHEN BLAKE KINNAIRD, NAVEEN MODI, JOSEPH PALYS.

Before MOORE, BRYSON, and CHEN, *Circuit Judges*.

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BRYSON, *Circuit Judge*.

Appellant M & K Holdings, Inc., appeals from a decision of the Patent Trial and Appeal Board in an *inter partes* review proceeding in which the Board held all claims of U.S. Patent No. 9,113,163 (“the ’163 patent”) unpatentable. M&K argues that the Board erred by relying on references that do not qualify as prior art printed publications under 35 U.S.C. § 102. In addition, M&K argues that the Board erred by finding claim 3 anticipated when the petition for *inter partes* review asserted only obviousness as to that claim. We affirm the Board’s decision with respect to the printed-publication issue, but we vacate the Board’s decision with respect to claim 3.

I

The ’163 patent is directed to an efficient method for compressing video files. The claims of the ’163 patent generally concern “a method of decoding a moving picture in inter prediction mode,” in which “one or more reference pictures are used to estimate motion of a current block” over the time of the video. ’163 patent, col. 1, ll. 15–16 and ll. 32–33. That estimated motion is quantified by a “motion vector,” which is “needed to correctly decode the inter-coding block” when reversing the video compression. *Id.* at col. 1, ll. 41–44. More specifically, the claims cover methods for constructing a “motion vector candidate list,” selecting a candidate from that list, and making an optimal motion prediction for a current block. *See id.* at col. 4, ll. 33–37; column 17, line 37, through column 18, line 46.

In 2018, appellee Samsung Electronics Co., Ltd., filed a petition for *inter partes* review requesting that the Patent Trial and Appeal Board find unpatentable all claims of the ’163 patent. Samsung asserted that claims 1, 5, and 6 were

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anticipated by a reference known as “WD4-v3.”¹ Claim 2, according to Samsung, was both anticipated by WD4-v3 and rendered obvious by the combination of WD4-v3 and a paper by Park et al.² Claims 3 and 4, Samsung asserted, were rendered obvious by the combination of WD4-v3, Park, and a paper by Minhua Zhou.³ The Board instituted *inter partes* review on each of those grounds.

The references relied upon in Samsung’s petition—WD4-v3, Park, and Zhou—were generated in connection with the work of a joint task force to establish industry standards for high-efficiency video coding (“HEVC”). The task force, known as the Joint Collaborative Team on Video Coding (“JCT-VC”), consists of representatives from technology companies, universities, and research institutions. JCT-VC holds quarterly meetings at which members submit and discuss input documents that propose changes to the HEVC standards. If the JCT-VC members agree to the proposed changes, those changes are incorporated into a working-draft document. WD4-v3 is a working-draft document, while Park and Zhou are input documents. All three references were uploaded to JCT-VC’s website before the December 13, 2011, priority date of the ’163 patent.

In its response to Samsung’s petition, M&K did not take issue with the substance of Samsung’s unpatentability contentions. Rather, M&K challenged whether WD4-

¹ Bross et al., *WD4: Working Draft 4 of High-Efficiency Video Coding*, JCTVC-F803 (version 3) (uploaded Sept. 8, 2011). J.A. 1471–1692.

² Park et al., *Modifications of Temporal MV Memory Compression and Temporal MV Predictor*, JCTVC-E059 (version 4) (uploaded Mar. 19, 2011). J.A. 1693–1717.

³ Minhua Zhou, *Non-CEP9: Modified H Position for Memory Bandwidth Reduction in TMVP Derivation*, JCTVC-G082 (version 1) (uploaded Nov. 9, 2011). J.A. 1728–33.

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v3, Park, and Zhou constituted printed publications under 35 U.S.C. § 102. M&K contended that none of the three references were publicly accessible, i.e., that interested persons of ordinary skill could not have accessed any of those references by exercising reasonable diligence.

The Board disagreed with M&K, concluding that WD4-v3, Park, and Zhou were all publicly accessible before December 13, 2011. *Samsung Elecs. Co. v. M & K Holdings Inc.*, No. IPR2018-00696, 2019 WL 4196594, at *30 (P.T.A.B. Sept. 4, 2019). The Board found that those references were discussed at JCT-VC meetings and were posted on the organization's public website. The Board found that JCT-VC was a prominent standards-setting organization whose purpose was "to promulgate new HEVC standards and update the previous standards, making documents about the standards public, with updated video standards fostering world-wide trade." *Id.* at *28.

Based on those findings, the Board ruled that all six claims of the '163 patent were unpatentable. *Id.* at *42. The Board held that claims 1, 2, 5, and 6 were anticipated by WD4-v3, *id.* at *31–36, and that claim 4 was rendered obvious by the combination of WD4-v3, Park, and Zhou, as alleged in Samsung's petition, *id.* at *37–38. The Board held that claim 3 was anticipated by WD4-v3, although Samsung's petition had asserted only obviousness as to that claim. *Id.* at *4, *36.

II

On appeal, M&K does not dispute that WD4-v3 was publicly accessible before the priority date of the '163 patent. M&K contends, however, that the Board erred by concluding that Park and Zhou qualify as printed publications. Specifically, M&K argues that a person of ordinary skill could not have located the Park and Zhou references by exercising reasonable diligence, and thus the Board erred by holding those references to be publicly accessible.

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Whether a reference qualifies as a “printed publication” under section 102 is a legal conclusion based on underlying factual findings. *Jazz Pharms., Inc. v. Amneal Pharms., Inc.*, 895 F.3d 1347, 1356 (Fed. Cir. 2018). We review the Board’s findings on public accessibility for substantial evidence. *GoPro, Inc. v. Contour IP Holding LLC*, 908 F.3d 690, 693 (Fed. Cir. 2018).

Determining whether a reference is a “printed publication” under section 102 involves a case-by-case inquiry into the circumstances under which the reference was disclosed to the public. *In re Klopfenstein*, 380 F.3d 1345, 1350 (Fed. Cir. 2004). “[T]he key inquiry is whether or not a reference has been made ‘publicly accessible.’” *Id.* at 1348; *Acceleration Bay, LLC v. Activision Blizzard Inc.*, 908 F.3d 765, 772 (Fed. Cir. 2018) (public accessibility “has been called the touch-stone” in determining whether a reference qualifies as a printed publication). “A reference will be 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.’” *Blue Calypso, LLC v. Groupon, Inc.*, 815 F.3d 1331, 1348 (Fed. Cir. 2016) (quoting *Kyocera Wireless Corp. v. Int’l Trade Comm’n*, 545 F.3d 1340, 1350 (Fed. Cir. 2008)).

One line of cases on public accessibility relates to the presentation of documents at a conference, trade show, or group meeting. *See, e.g., Klopfenstein*, 380 F.3d at 1347–52; *Ecolochem, Inc. v. S. Cal. Edison Co.*, 227 F.3d 1361, 1369–70 (Fed. Cir. 2000). Another line of cases relates to documents that are available in a repository, whether on the Internet or at a brick-and-mortar location such as a library. *See, e.g., SRI Int’l, Inc. v. Internet Sec. Sys., Inc.*, 511 F.3d 1186, 1194 (Fed. Cir. 2008); *In re Wyer*, 655 F.2d 221, 223 (CCPA 1981); *In re Bayer*, 568 F.2d 1357, 1357–62 (CCPA 1978).

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Occasionally, those two lines of cases overlap. *See, e.g., Mass. Inst. of Tech. v. AB Fortia*, 774 F.2d 1104 (Fed. Cir. 1985) (“*MIT*”). In the *MIT* case, the reference at issue was presented orally at a conference to between 50 and 500 attendees. *Id.* at 1108. Afterward, copies of the reference were made available to interested persons without restrictions as to confidentiality. *Id.* at 1108–09. This case, like *MIT*, concerns both oral presentations and publicly available documents.

The pertinent references in this case, Park and Zhou, were presented at JCT-VC development meetings. The Board found that those meetings were attended by between 200 and 300 interested persons and that the conferees had discussed Park and Zhou at the meetings. The Board also noted that JCT-VC meeting reports summarized the Park and Zhou discussions. Those discussions, the Board found, were conducted without any expectation of confidentiality, a factor that is relevant to the issue of public accessibility. *See Klopfenstein*, 380 F.3d at 1350–51.

As in *MIT*, full copies of the Park and Zhou references were made available to interested persons by no later than the time of the development meetings. The Board found that distribution was accomplished through the public JCT-VC website, which hosted downloadable copies of the Park and Zhou references. The Board cited JCT-VC’s policy that input documents should be uploaded before development meetings “to ensure that [they are] available for review by other participants.” *M & K Holdings*, 2019 WL 4196594, at *23. The Board also noted that the JCT-VC meeting reports directed readers to the JCT-VC website. The Board found that the JCT-VC website had title-search functionality and that the Park and Zhou references had descriptive titles, thus enabling routine searching of those references by subject matter.

More generally, the Board found that JCT-VC was prominent in the community of those skilled in video-

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coding technology. When JCT-VC was formed, it issued a public call for proposals regarding the new HEVC standards. A highly influential trade journal amplified that call and cited the report from the first JCT-VC development meeting. The first meeting report, in turn, directed readers to the JCT-VC email reflector, which kept subscribers abreast of JCT-VC activity.

In addition, the Board found that skilled artisans would have learned of the JCT-VC website, whether by word of mouth or upon the endorsement of other prominent organizations, and would have been motivated to track the JCT-VC website to ensure that their products and services were consistent with the developing HEVC standards. *M & K Holdings*, 2019 WL 4196594, at *17–19 (detailing the evidence supporting that finding). In addition to the evidence of JCT-VC’s prominence, the Board relied on testimony from Samsung’s expert witnesses in finding that Park and Zhou were publicly accessible through the combination of the oral presentations at JCT-VC meetings and the hosting of documents on the JCT-VC website.

M&K makes a number of arguments in support of its contention that skilled artisans could not have accessed Park and Zhou with reasonable diligence. Those arguments fall flat against the wealth of evidence outlined above.

First, M&K argues that although the record established the prominence of JCT-VC’s working-draft documents, it did not show that input documents such as Park and Zhou were equally prominent. That argument misunderstands the Board’s finding of prominence. While a showing that the references themselves were prominent would likely establish public accessibility *per se*, such a showing is not required. The relevant inquiry is whether the channel through which the references were publicized is prominent or well-known among persons of ordinary skill in the art. *See Samsung Elecs. Co. v. Infobridge Pte.*

Ltd., 929 F.3d 1363, 1372 (Fed. Cir. 2019); *Voter Verified, Inc. v. Premier Election Sols., Inc.*, 698 F.3d 1374, 1381 (Fed. Cir. 2012) (upholding district court finding that an interested person of ordinary skill “would have been independently aware of the Risks Digest as a prominent forum And upon accessing the Risks Digest website, such an interested researcher would have found the Benson article using that website’s own search functions and applying reasonable diligence”). Contrary to M&K’s suggestion, the Board found that the JCT-VC organization as a whole was prominent among the community of skilled artisans. *See M & K Holdings*, 2019 WL 4196594, at *15–16, *21–22. That finding is supported by substantial evidence and bolsters the Board’s ultimate finding that the Park and Zhou references were publicly accessible.

M&K argues that the structure and search capabilities of the JCT-VC website cut against a finding of public accessibility. M&K points out that, after navigating to the JCT-VC landing page, users must click on the “All meetings” link and select a particular meeting in order to access JCT-VC documents. According to M&K, the “All meetings” label does not describe a document repository, the website does not explain which link provides access to JCT-VC documents, and neither the landing page nor the “All meetings” page provides search functionality. Even if a user happened to navigate to a meeting page, M&K argues, the user could not search documents by content, but could search only by date, title, and number. M&K contends that those factors show that Park and Zhou were not publicly accessible.

The law regarding public accessibility is not as restrictive as M&K suggests—a website’s landing page is not required to have search functionality. Instead, given the prominence of JCT-VC, the dispositive question is whether interested users of the JCT-VC website could have located Park and Zhou through reasonable diligence. *See Info-bridge*, 929 F.3d at 1369; *Voter Verified*, 698 F.3d at 1381.

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The Board found that they could have, and that conclusion is supported by substantial evidence.

It is also not dispositive that the “All meetings” label does not explicitly describe a document repository. A skilled artisan browsing the JCT-VC website would understand that the website is structured to serve the purpose of the JCT-VC organization, i.e., to develop HEVC standards through member meetings and communications, not to function as a passive digital library. Hence, a skilled artisan browsing the JCT-VC website would realize that documents are hosted under the meeting pages. The Board found that a skilled artisan browsing the JCT-VC website would have known to navigate to the page of the most recent meeting, to search documents on that page, and to continue navigating backward in time until the user’s search was satisfied. *M & K Holdings*, 2019 WL 4196594, at *25.

M&K’s argument emphasizing the lack of full-content-search capability on the JCT-VC website also misses the mark. A factor relevant to public accessibility is whether a repository indexes its documents or otherwise categorizes them by subject matter. *See Blue Calypso*, 815 F.3d at 1349. The Board found that the documents in question on the meeting pages of the JCT-VC website were effectively indexed by subject matter in light of the title-search functionality and the fact that Park and Zhou featured descriptive titles. That finding supports the Board’s conclusion that Park and Zhou were publicly accessible. *See In re Lister*, 583 F.3d 1307, 1314–17 (Fed. Cir. 2009) (concluding that a reference with a descriptive title was publicly accessible as of the date it was posted to an Internet database on which users “could perform keyword searches of the titles, but not the full texts, of the works”).

Even if a skilled artisan could have navigated to the meeting pages using reasonable diligence, M&K contends that Samsung presented no evidence that Park or Zhou could be identified by entering title-search queries. M&K

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argues that the Board's finding as to that fact rested solely on attorney argument, not on evidence in the record.

We disagree. The Board relied on testimony from Samsung's expert that the meeting pages on the JCT-VC website allowed searches of the hosted documents by title and author. *M & K Holdings*, 2019 WL 4196594, at *10, *24. The Board also relied on evidence demonstrating the title-search functionality with keywords relating to the WD4-v3 reference. *Id.* at *24. And the Board cited exhibits showing the metadata fields of the Park and Zhou references on the JCT-VC website, including their "Title" headers. *Id.* at *10, *24.⁴

M&K makes a separate set of arguments concerning the extent to which Park and Zhou were discussed at JCT-VC meetings and accessed on the JCT-VC website. First, M&K argues that interested artisans' access to Park was

⁴ As to whether the availability of a title search was sufficient to demonstrate public accessibility, M&K relies on this court's decision in *Infobridge*, which involved a similar "printed publication" issue in the same field of technology. In that case, however, the Board found that the evidence did not show that the reference in question was publicly accessible through a title search, and this court sustained that aspect of the Board's decision as supported by substantial evidence. 929 F.3d at 1373. In this case, unlike in *Infobridge*, the Board found that the disputed references were publicly accessible through a title search. As the Board explained, the record regarding the title-search issue was more developed in this case. *M & K Holdings*, 2019 WL 4196594, at *7. For that reason, and because we review the Board's findings on factual issues for substantial evidence, our decision in *Infobridge*, in which we sustained the Board's finding of no public accessibility, does not warrant our overturning the Board's finding of public accessibility in this case.

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impaired by the fact that Park was uploaded to the JCT-VC website *after* it was discussed at the development meeting. Second, M&K notes that Samsung introduced no evidence regarding the extent to which interested artisans accessed Park and Zhou on the JCT-VC website. Third, M&K argues that the evidence does not show that the presentations of Park and Zhou at the JCT-VC meetings disclosed the substantive material that is relevant to the obviousness issues in this case. In support of that contention, M&K points out that the oral presentations relating to each input document were restricted to a maximum of five minutes, and the presenters were limited to two slides.

Contrary to M&K's suggestion, Samsung was not required to show that interested artisans actually accessed Park and Zhou on the JCT-VC website. *See Infobridge*, 929 F.3d at 1374; *Jazz*, 895 F.3d at 1356 (“[T]here is no requirement to show that particular members of the public actually received the information.” (quoting *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1569 (Fed. Cir. 1988))). Nor was Samsung required to show that Park was uploaded to the website before the development meeting. *See MIT*, 774 F.2d at 1108 (“The Birmingham paper was orally presented *Afterward*, copies were distributed on request, without any restrictions.” (emphasis added)).

Samsung was also not required to prove that the oral presentations of Park and Zhou disclosed the exact material relating to Samsung's obviousness theories in the circumstances of this case. The Board found that the conferees' discussions of Park and Zhou were of sufficient depth and duration to resolve the specific technical issues associated with those references. *M & K Holdings*, 2019 WL 4196594, at *22–23. Yet, even if the presentations did not disclose the exact material relating to Samsung's obviousness theories, that would not be fatal to the public accessibility of Park and Zhou, because the oral presentations were supplemented by JCT-VC's publishing Park and Zhou

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in its document repository. The Board found that skilled artisans attending the presentations would have been motivated to browse the JCT-VC website to obtain more complete disclosures of the Park and Zhou references. *Id.* at *23. The Board’s finding correctly acknowledges that the public accessibility of Park and Zhou does not depend solely on the comprehensiveness of the oral presentations.

In sum, we hold that substantial evidence supports the Board’s finding that persons of ordinary skill in video-coding technology could have accessed Park and Zhou with reasonable diligence through the JCT-VC organization. None of M&K’s arguments undermine the Board’s finding that Park and Zhou were publicly accessible and its conclusion that those references constitute printed publications within the meaning of 35 U.S.C. § 102.

III

M&K’s second contention on appeal is that the Board committed procedural error when it held claim 3 unpatentable based on anticipation. Because Samsung’s petition challenged claim 3 only on a theory of obviousness, M&K argues that the Board’s reliance on anticipation deprived M&K of the notice it was due with respect to the ground on which the Board held claim 3 unpatentable.

In a formal adjudication, such as an *inter partes* review, the Administrative Procedure Act (“APA”) imposes particular procedural requirements on the Board. The Board must “timely inform the patent owner of ‘the matters of fact and law asserted’” and “give all interested parties the opportunity to submit and consider facts and arguments,” among other requirements. *EmeraChem Holdings, LLC v. Volkswagen Grp. of Am., Inc.*, 859 F.3d 1341, 1348 (Fed. Cir. 2017) (quoting 5 U.S.C. § 554(b)(3) and (c)(1)). In prior cases, we have addressed the issue of notice by asking whether “the Board departed markedly from the evidence and theories presented by the petition or institution

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decision, creating unfair surprise.” *Arthrex, Inc. v. Smith & Nephew, Inc.*, 935 F.3d 1319, 1328 (Fed. Cir. 2019).

The final limitation of claim 1 of the ’163 patent reads as follows:

wherein the temporal motion vector candidate is a first available motion vector encountered when retrieving two blocks corresponding to the current prediction unit or a motion vector of a predetermined block.

The parties refer to that limitation as “element 1(j).” Neither party disputes that there are two alternative ways of satisfying element 1(j). The antecedent “temporal motion vector candidate” must be either “a first available motion vector encountered when retrieving two blocks corresponding to the current prediction unit” or “a motion vector of a predetermined block.”

Claim 2 contains a further limitation of the “two blocks” term from the first alternative in element 1(j):

2. The method of claim 1, wherein the two blocks comprises [sic] a first candidate block and a second candidate block,

Claim 3 further limits the “predetermined block” term from the second alternative in element 1(j) by equating that term to the “second candidate block” from claim 2:

3. The method of claim 2, wherein the predetermined block is the second candidate block.

In its petition for *inter partes* review, Samsung asserted that the WD4-v3 reference anticipated claims 1 and 2. As to claim 3, Samsung asserted that it was rendered obvious by the combination of WD4-v3, Park, and Zhou. Samsung did not, however, assert anticipation of claim 3 at any point during the *inter partes* review proceeding. Notably, Samsung acknowledged in its petition that WD4-v3 did not disclose the second alternative in element 1(j), i.e., the

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“predetermined block” referenced in claim 3: “*WD4-v3* does not disclose that the temporal motion vector predictor *mvLXCol* is a motion vector of a predetermined block, as set forth in the second alternative of claim element 1(j)” J.A. 194.

The Board held that claims 1 and 2 were anticipated by *WD4-v3*. *M & K Holdings*, 2019 WL 4196594, at *31–36. As to claim 3, the Board stated that it was holding that claim to be “obvious over *WD4-v3*, Park, and Zhou.” *Id.* at *38, *42. However, the Board’s analysis of the patentability of claim 3 was based on anticipation, not obviousness.

In addressing claim 3, the Board began by noting the alternative format of element 1(j). *Id.* at *37. The Board reasoned that although claim 3 relates to the second alternative of element 1(j), i.e., the motion vector of a predetermined block, an analysis invalidating claim 3 would not require a disclosure of the second alternative. “Rather, [element 1(j)] of claim 3 (inherited through its dependency from claim 1) may still be met under the first alternative” *Id.* And because Samsung had already established anticipation of the first alternative and the further limitations in claim 2, the Board concluded that “[Samsung] establishes that *WD4-v3* anticipates claim 3.”⁵ *Id.* Regarding Samsung’s obviousness theory, the Board explained that a disclosure anticipating a claim also renders that claim obvious because “anticipation is the epitome of

⁵ The Board also stated that Samsung showed “that *WD4-v3* discloses the second candidate block [limitations in claim 2], and shows that *WD4-v3* discloses using [those limitations] as the temporal motion vector predictor, thereby meeting the predetermined block limitation of claim 3.” *M & K Holdings*, 2019 WL 4196594, at *31 (citing Samsung’s petition, pp. 53–54). That statement, however, is not supported by the citation to Samsung’s petition.

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obviousness.” *Id.* at *37 n.32 (quoting *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 1548 (Fed. Cir. 1983)).

M&K argues that it was deprived of notice as to the Board’s adjudication of claim 3, which was based on a claim interpretation that was not offered by either party and was not disclosed until the Board’s decision. Samsung responds by framing the Board’s analysis as a simpler path to invalidating claim 3. That path, according to Samsung, was inherent in Samsung’s obviousness theory because a reference that anticipates a claim also renders that claim obvious. Samsung contends that M&K was on notice of the prior art the Board used to invalidate claim 3, i.e., WD4-v3, and therefore was not denied notice of the ground on which the Board held that claim unpatentable.

We agree with M&K that the Board deviated impermissibly from the invalidity theory set forth in Samsung’s petition when it held that claim 3 was anticipated by WD4-v3. Although M&K was aware of the prior art used to invalidate claim 3 given the obviousness combination asserted against that claim, M&K was not put on notice that the Board might find that WD4-v3 disclosed all of the limitations in claim 3 and might invalidate claim 3 based on anticipation.⁶ That amounts to a marked deviation. *See EmeraChem*, 859 F.3d at 1348–51 (finding a violation of the APA when the Board invalidated a claim based on a reference that the petitioner did not substantively rely

⁶ To be sure, Samsung’s petition makes WD4-v3 relevant to claim 3, but only by disclosing the limitations inherited through claims 1 and 2, not by disclosing the further limitations recited in claim 3 itself. *See* Samsung’s petition, pp. 58–64 (recounting WD4-v3’s disclosure of the limitations in claims 1 and 2 but, for claim 3’s “predetermined block,” asserting that a person of ordinary skill would have “modified the combined WD4-v3 and Park process in such way based on . . . the disclosure of Zhou”).

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upon, but only broadly alleged as relevant, with respect to that particular claim).

The Board's anticipation finding was not inherent in Samsung's obviousness theory; to the contrary, Samsung's position before the Board contradicted such a conclusion. Samsung expressly stated in its petition that WD4-v3 did not disclose the "predetermined block" limitation in claim 3, *see* J.A. 194; Samsung argued obviousness as a substitute for that lack of disclosure, *see id.*; and Samsung did not assert or otherwise disclose the particular claim interpretation and anticipation theory adopted by the Board.

If M&K had been given notice of the anticipation theory, it could have challenged the Board's interpretation of claim 3, which was based on the alternative format of element 1(j). The Board deprived M&K of that opportunity, and we have held similar deprivations of notice regarding non-prior-art issues to be violations of the APA. *See, e.g., SAS Inst., Inc. v. ComplementSoft, LLC.*, 825 F.3d 1341, 1351 (Fed. Cir. 2016) (APA violation when the Board modified its prior, undisputed claim construction), *rev'd and remanded on other grounds sub nom. SAS Inst., Inc. v. Iancu*, 138 S. Ct. 1348 (2018).

Samsung analogizes this case to *Wasica Finance GmbH v. Continental Automotive Systems, Inc.*, 853 F.3d 1272 (Fed. Cir. 2017). In that case, however, the petitioner challenged the claims at issue as being both anticipated and obvious over the same reference. *See* Corrected Petition for Inter Partes Review, *Cont'l Auto. Sys., Inc., v. Wasica Fin. GmbH*, 2014 WL 4339034, at *2 (P.T.A.B. Jan. 16, 2014) (No. IPR2014-00295) (asserting that a prior art reference anticipated and rendered obvious claims 1, 2, 5, 10, 13, 15, 18, 19, and 21). Here, unlike in *Wasica*, Samsung asserted obviousness as to claim 3, but did not include anticipation as an alternative theory of unpatentability. We therefore vacate the Board's decision as to claim 3.

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IV

We affirm the Board's holding that Park and Zhou are printed publications. We vacate the Board's holding that claim 3 is unpatentable, and we remand for the Board to further analyze the patentability of claim 3 consistent with this opinion.

No costs.

**AFFIRMED IN PART, VACATED IN PART, AND
REMANDED**