

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

JOHNS MANVILLE CORPORATION and JOHNS MANVILLE, INC.,
Petitioners,

v.

KNAUF INSULATION, INC. and KNAUF INSULATION SPRL,
Patent Owners.

Case IPR2016-00130
Patent D631,670 S

Before SCOTT A. DANIELS, KRISTINA M. KALAN, and
JAMES A. WORTH, *Administrative Patent Judges*.

DANIELS, *Administrative Patent Judge*.

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

I. INTRODUCTION

Petitioners, Johns Manville Corporation and Johns Manville, Inc. (“Johns Manville”) filed a Petition to institute an *inter partes* review of the sole claim of U.S. Patent No. D631,670 S (Ex. 1001, “the ’670 patent”). Paper 1 (“Pet.”). We instituted trial for the sole claim of the ’670 patent on certain grounds of unpatentability alleged in the Petition. Paper 7 (“Decision to Institute” or “Inst. Dec.”).

After institution of trial, Patent Owner Knauf Insulation, Inc. (the assignee of record) and Knauf Insulation SPRL (collectively, “Knauf”), responded to Johns Manville’s challenges including filing a Patent Owner Response, along with declarations by Knauf’s Declarants, James Worden (Ex. 2008), Professor Karen B. Schloss (Ex. 2010), Professor Lance Rake (Ex. 2012) and Greg Freemyer (Ex. 2013). Paper 14 (“PO Resp.”). Johns Manville timely filed a Reply. Paper 18 (“Reply”).

A hearing for IPR2016-00130 was held on February 2, 2017. We have jurisdiction under 35 U.S.C. § 6. This final written decision is issued pursuant to 35 U.S.C. § 318(a).

Based on the complete record now before us, we determine that Johns Manville has not shown by a preponderance of the evidence that the sole claim of the ’670 patent is unpatentable.

A. *Additional Proceedings*

In addition to this Petition, Johns Manville indicates that the ’670 patent has been asserted against them by Knauf in the U.S. District Court for the Southern District of Indiana, in *Knauf Insulation, LLC v. Johns Manville Corp.*, 1:15-cv-00111-WTL-MJD. Pet. 1–2. The ’670 patent was also challenged by Johns Manville in IPR2015-01453. In that proceeding, on

January 11, 2017, the Board entered a final written decision upholding the patentability of the sole claim. On March 10, 2017, Johns Manville filed a Notice of Appeal of the Board's decision in that proceeding under 35 U.S.C. § 141(c) to the United States Court of Appeals for the Federal Circuit.

B. The '670 Patent

The '670 patent (Ex. 1001), titled "Insulation Material," relates to a design for mineral fiber insulation, for example, glass mineral wool insulation, used in commercial and residential construction applications. Ex. 1001, 1. The sole drawing illustrating "[t]he ornamental design for insulation material," as recited in the '670 patent claim is reproduced below, as a black and white photocopy reproduction on the left, and as a color image on the right. Exs. 1001, 3001.¹



This figure, on the left, is the claimed design as it appears on the front page of the '670 patent as a photocopy of the color photograph

This figure, on the right, is an image of the actual color photograph depicting the claimed design, as filed during prosecution of the '670 patent.² Ex.

¹ For efficiency in the record of this proceeding, we enter certain documents from the prosecution history of the '670 patent as Exhibits 3001 et seq.

² The color photograph was accepted by the Examiner pursuant to a Petition under 37 C.F.R. 1.84(a)(2). See Ex. 1002, 10–11 (Notice of Allowance,

filed during prosecution. Ex. 1001, 1002 (Reply to Off. Act. Aug. 6, 2010, 1. 4).

C. The Instituted Grounds of Unpatentability

We instituted a trial on the following specific grounds:

Reference	Basis
JM 1997 Brochure and either Soundproofing or OC 2006 Report.	§ 103
JM 2000 Brochure and either Soundproofing or OC 2006 Report.	§ 103
JM 1997 Brochure.	§ 102
JM 2000 Brochure.	§ 102

Johns Manville supports its challenges with the Declarations of Mr. Martin J. Bide (Ex. 1013) (“Bide Declaration”), Mr. Mark A. Granger (Ex. 1015) (“Granger Declaration”), Ms. Teresa K. O’Brien (Ex. 1016) (“O’Brien Declaration”), Mr. Joe Mota (Ex. 1017) (“Mota Declaration”), Ms. Anne N. Barker (Ex. 1018) (“Barker Declaration”), and Mr. Michael Fay (Ex. 1019) (“Fay Declaration”). Pet. 19, 29, 33, 35 and Appendix – List of Exhibits.

II. MOTION TO TERMINATE UNDER SECTION 315(e)(1)

Based on the Board’s authorization, Knauf filed a Motion to Terminate (Paper 30, “Mot. to Terminate”) this proceeding, arguing that because a final written decision was entered in IPR2015-01453, Johns

mailed Dec. 10, 2010, 1–2). The color photograph is part of the prosecution history of the ’670 patent and may be accessed via the USPTO’s Patent Application Information Retrieval (PAIR) system. *See* Ex. 1001, Description.

Manville is estopped from maintaining this proceeding. Mot. to Terminate, 1; 35 U.S.C. § 315(e)(1). Knauf’s contention is that the current grounds each rely on either Exhibit 1004 (JM 1997 Brochure) or Exhibit 1005 (JM 2000 Brochure), documents Johns Manville “reasonably could have raised” in the previous proceeding. *Id.* Johns Manville filed an Opposition to Patent Owner’s Motion to Terminate (Paper 31, “Opp. Mot. to Terminate”). Johns Manville disputes that Exhibits 1004 and 1005 are documents that a skilled researcher reasonably could have been expected to discover prior to filing its first petition in IPR2015-01453. Opp. Mot. to Terminate, 2.

A. Patent Owner’s Argument

In their Motion to Terminate, Knauf asserts specifically that “JM ‘reasonably could have raised’ these grounds in its original petition in IPR2015-01453” because Exhibits 1004 and 1005 were in Johns Manville’s possession, and also notes that Johns Manville did not request joinder of this proceeding with IPR2015-01453. Mot. to Terminate, 1–2.

Knauf argues initially that Johns Manville “did have knowledge of Exhibits 1004 and 1005 at the time of filing IPR2015-01453 because its employee, Mr. Joe Mota, possessed that knowledge as a result of his work for JM.” *Id.* at 2–3 (citing *Kellogg Brown & Root Servs., Inc. v. U.S.*, 728 F.3d 1348, 1369 (Fed. Cir. 2013)). Knauf insists, therefore, that section 315 (e)(1) estoppel extends “to the references of which a petitioner *reasonably should have known.*” *Id.* at 3. Knauf argues that because Mr. Mota, and hence Johns Manville, had these exhibits in their possession, Johns Manville and Mr. Mota had knowledge of these advertising brochures and that “[a]ny reasonably diligent search by JM would have uncovered Exhibits 1004 and 1005 prior to the filing IPR2015-01453 on June 19,

2015.” *Id.* Knauf contends further that any reasonably diligent search conducted prior to the filing of IPR2015-01453 would have included “discussions with Mr. Mota and a review of his product literature collection.” *Id.* at 4 (citing Ex. 1017 ¶¶ 1–3; Ex. 1030 ¶¶ 1–3; Ex. 2019 at 8:2–21, 10:5–17, 15:17–16:13, 30:18–31:18). Also, Knauf argues that if Exhibits 1004 and 1005 are in fact printed publications and were “distributed by the thousands” as Mr. Mota apparently testified, these brochures would have been easily discovered in a search because they were “widely known to many other JM employees and numerous third parties.” *Id.* (citing Ex. 2019 75:3–8, 21–24).

Further, Knauf contends that Johns Manville is estopped because it did not raise the grounds including Exhibits 1004 and 1005 in IPR2015-01453 by filing a request for joinder of these proceedings. *Id.* at 5. In other words, Knauf is arguing that Johns Manville reasonably could have raised the grounds in this proceeding, in the earlier IPR2015-01453 case by filing a request for joinder. *Id.*

B. Petitioner’s Argument

Johns Manville counters that “Exhibits 1004 and 1005 are not publications ‘a skilled researcher conducting a diligent search reasonably could have been expected to discover’ prior to filing IPR2015-01453.” Opp. Mot. to Terminate, 2. Johns Manville alleges that prior to filing the first *inter partes* review case, IPR2015-01453, both in-house and outside counsel conducted nearly thirty employee interviews in the Building Insulation and Performance Materials Divisions of Johns Manville. *Id.* (citing Ex. 1003 ¶ 3; Ex. 2019, 9–10; 60:22–61:4. Johns Manville states that none of the initially interviewed employees possessed the brochures now introduced in

this second proceeding as Exhibits 1004 and 1005. *Id.* (citing Ex. 2019, 20:6–10; Ex. 2020, 29:18–22). Johns Manville explains that a professional research analyst conducted a search of the Internet Archives for relevant prior art and did not find these brochures, apparently because the brochures were never posted on-line or maintained in electronic form. *Id.* at 2–3 (citing Ex. 1018 ¶¶ 2–6; Ex. 2006, 6:21–7:6, 7:23–8:1, 8:8–18, 9:18–10:8; Ex. 2019, 43:15–23). Johns Manville points out that a different brochure (Ex. 2022) including an image of the same Spin-Glas product disclosed in Exhibits 1004 and 1005 was discovered in the initial search. Also, according to Johns Manville the company has a 7 year document retention policy. *Id.* at 2 (citing Ex. 2020, 29:18–22).

Subsequent to the searches noted above, Johns Manville filed IPR2015-01453 on June 19, 2015, within the one year statutory time allotted for filing an *inter partes* review in light of district court litigation between the parties. *See* 35 U.S.C. § 315(b).

In August 2015, according to Johns Manville, a Johns Manville employee, Joe Mota, became the Director of Supply Chain and Customer Service. *Opp. Mot. to Terminate*, 3. According to Johns Manville, “this personnel change triggered a custodian interview with him on August 31, 2015, from which counsel discovered Exhibits 1004 and 1005 among his personal hard-copy files.” *Id.* (citing Ex. 1003 ¶¶ 5–6). The brochures asserted in this proceeding as Exhibits 1004 and 1005 were apparently discovered in hard copy binders in Mr. Mota’s possession. *Id.* (citing Exhibit 2019 at 31:19–34:18). Johns Manville argues that where Mr. Mota maintained hard copies in “a ‘somewhat random’ and ‘not structured’ collection of ‘five or six’ binders of hard-copy files’ Mr. Mota had collected

over ‘25, 30 years’” no skilled searcher would have reasonably been expected to discover, at least initially, these brochures in his personal files. *Id.* at 3–4. Also, Johns Manville contends that it was surprising Mota even had the documents, as it was a violation of the company’s 7 year document retention policy. *Id.* On these facts, Johns Manville contends that section 315(e)(1) does not “charge JM with full knowledge of the content and significance of every document in the possession of every one of its thousands of employees worldwide at the time the first petition was filed.” *Id.* at 4. And, Johns Manville argues, such an interpretation “would vitiate ‘reasonably’ from § 315.” *Id.*

C. Estoppel Analysis under 35 U.S.C. § 315(e)(1)

For the reasons below, we are not persuaded that Johns Manville reasonably could have raised Exhibits 1004 and 1005 in its first petition in IPR2015-01453.

1. 35 U.S.C. § 315(e)(1)

Section 315(e)(1) provides:

(e) Estoppel. —

(1) Proceedings before the office.—The petitioner in an inter partes review of a claim . . . that results in a final written decision . . . may not request or maintain a proceeding before the Office with respect to that claim on any ground that the petitioner raised or reasonably could have raised during that inter partes review.

35 U.S.C. § 315(e)(1); *see* 37 C.F.R. 42.73(d).

Neither JM 1997 Brochure nor JM 2000 Brochure were raised in any grounds in IPR2015-01453. Thus, the issue before us is whether the grounds in this proceeding are grounds Johns Manville “reasonably could have raised during that inter partes review.” 35 U.S.C. § 315(e)(1). Our

analysis, below, addresses initially the appropriate legal interpretation of Section 315(e)(1), and then applies the specific facts of this case to the proper interpretation.

The plain language of section 315(e)(1) states that the estoppel applies to grounds a petitioner “*reasonably* could have raised.” (Emphasis added). The statute is grammatically clear in that the verb phrase or predicate, “*reasonably* could have raised,” is logically tied to its subject, “petitioner.” The word “*reasonably*” is not a mandatory word such as, “*must*,” or “*shall*.” The word “*reasonably*” is a qualifier that refers to the discretion applied by a qualified searcher in conducting an adequate search. This is consistent with the legislative history of section 315:

The present bill also softens the could-have-raised estoppel that is applied by inter partes review against subsequent civil litigation by adding the modifier ‘*reasonably*.’ It is possible that courts would have read this limitation into current law’s estoppel. Current law, however, is also amenable to the interpretation that litigants are estopped from raising any issue that it would have been physically possible to raise in the inter partes reexamination, even if only a scorched-earth search around the world would have uncovered the prior art in question. Adding the modifier ‘*reasonably*’ ensures that could-have-raised estoppel extends only to that prior art which a skilled searcher conducting a diligent search *reasonably* could have been expected to discover.

157 Cong. Rec. S1360-94 (daily ed. Mar. 8, 2011) at 1375 (stmt. of Sen. Kyl). A reasonable reading of section 315(e)(1) does not mandate estoppel of all prior art in the possession of a petitioner, or prior art which petitioner, e.g. via its employees, may have possessed or known about at some point in time. To the contrary, the prior art estopped is that which “a skilled searcher conducting a diligent search *reasonably* could have been expected to

discover.” *Id.* Congress easily could have broadened the estoppel provision to extend to “any ground that the petitioner raised or [] could have raised during that inter partes review,” but it did not. *See id.*

As noted by both parties, and based on the legislative history of the statute noted above, the Board and courts have consistently applied the section 315(e)(1) “reasonably could have raised” estoppel provision to prior art “which a skilled searcher conducting a diligent search reasonably could have been expected to discover.” *Compare* Mot. to Terminate, 3 (citing *Praxair Distribution, Inc. v. Ino Therapeutics LLC*, IPR2016-00781, Paper 10 at 7 (Aug. 25, 2016) (quoting 157 Cong. Rec. S1375) *with* Opp. to Mot. to Terminate, 2 (citing *Clearlamp, LLC v. LKQ Corp.*, No. 12 C 2533, 2016 WL 4734389 at *8 (N.D. Ill. March 18, 2016)). The proper interpretation of section 315(e)(1) essentially places “a skilled searcher” as proxy for petitioner, which is simply a pragmatic understanding that a “petitioner,” for example a corporate entity, is not itself a skilled searcher of prior art, but employs such a person to conduct a diligent prior art search.

Understanding the ordinary meaning of the statute, we address also Knauf’s following argument in footnote 2, page 3, of its Motion to Terminate:

JM’s argument that estoppel should not apply because its *lawyers* had not yet interviewed Mr. Mota at the time of filing IPR2015-01453 is misplaced. *See* Ex. 1003. By its terms, § 315(e)(1) looks to whether the *petitioner* (not its outside counsel) was aware, or reasonably should have been aware, of a reference.

We disagree. As discussed above, a skilled searcher essentially stands in the petitioner’s shoes, and Knauf’s Motion to Terminate itself points out that the language of section 315(e)(1) encompasses “prior art which a skilled searcher conducting a diligent search reasonably could have been expected

to discover.” Mot. to Terminate 3, (citing *Praxair Distribution, Inc. v. Ino Therapeutics LLC*, Case IPR2016-00781, slip op. at 7 (PTAB Aug. 25, 2016) (Paper 10)).

We think it important, also, to address Knauf’s argument under section 315(e)(1) that Mr. Mota’s possession of the brochures imputes knowledge of these documents to Johns Manville, and that, essentially under a theory of vicarious liability, Johns Manville “reasonably should have known” of these brochures. Mot. to Terminate, 2–3 (citing *Kellogg Brown & Root Servs., Inc. v. U.S.*, 728 F.3d 1348, 1369 (Fed. Cir. 2013)). This argument is not persuasive for at least two reasons. First, regardless of whether we view Johns Manville or its employee, Mr. Mota, as possessing the documents, the word “reasonably” signifies certain leeway and a meaning besides strict liability. Nowhere in its plain meaning and legislative history does section 315(e)(1) expressly, or impliedly, consider the entire universe of institutional “knowledge” of a petitioner and its employees as being strictly estopped. *See, e.g., Figueroa v. Sec’y of Health & Human Servs.*, 715 F.3d 1314, 1322 (Fed. Cir. 2013) (“[T]he term left out must have been meant to be excluded.” (quoting *Chevron U.S.A. Inc. v. Echazabal*, 536 U.S. 73, 81 (2002))); *Espenschied v. MSPB*, 804 F.2d 1233, 1237 (Fed. Cir. 1986) (“Where Congress explicitly enumerates certain exceptions to a general prohibition, additional exceptions are not to be implied in the absence of evidence of a contrary legislative intent.” (quoting *Andrus v. Glover Constr. Co.*, 446 U.S. 608, 616–617 (1980))). Second, without explicit direction from Congress, we are not persuaded that it is reasonable for a person, an employee, or even a corporate entity itself, to have immediate recollection, at least in a temporal sense, regarding every bit

of information, evidence, documents or other corporate materials that they may have been aware of at some point in time.

2. *Whether grounds based on prior art documents possessed by a Johns Manville employee fall within the “reasonably could have raised” language of Section 315(e)(1)*

We are not persuaded that Johns Manville reasonably could have raised the grounds in this proceeding, including the JM 1997 and JM 2000 brochures, in its first petition in IPR2015-01453. The evidence before us persuades us that the skilled searchers employed by Johns Manville conducted a reasonably diligent search that did not, initially, discover these documents.

Johns Manville provides a declaration from Laura Mullendore, an attorney at the law firm of Kilpatrick Townsend & Stockton LLP, and also counsel of record in the related district court proceeding between the parties. Ex. 1003 ¶ 1. Ms. Mullendore testifies that she and a colleague, as well as Johns Manville’s in-house counsel, interviewed nearly thirty employees between early March 2015 and mid-May 2015 in Johns Manville’s Building Insulation and Performance Materials divisions, the two divisions allegedly responsible for the insulation product accused of infringing the ’670 patent. *Id.* at ¶ 3. They interviewed the employees specifically “regarding their knowledge of and possession of document potentially relevant to the issues in that [proceeding].” *Id.* Ms. Mullendore states that Joe Mota was not among the personnel interviewed in the initial search because he worked in a different division, the OEM division, at Johns Manville. *Id.* at ¶ 4. According to Ms. Mullendore, it came to Johns Manville’s attention, sometime in August 2015, that in his duties relating to “product training,

sales training and literature development, Mr. Mota had retained personal archival copies of JM brochures.” *Id.* at ¶ 5. In-house counsel for Johns Manville, along with Ms. Mullendore, interviewed Mr. Mota on August 31, 2015, and collected Mr. Mota’s hardcopy files. *Id.* at ¶ 6. These hard-copy files apparently included the JM 1997 and JM 2000 Brochures. *Id.*

Knauf argues that “[a] skilled searcher looking for prior art reasonably would have investigated historic versions of the accused products and interviewed JM personnel associated with those products, especially JM’s OEM Group Market Manager, Mr. Mota.” *Mot. to Terminate*, 4. Knauf, however, has presented no evidence of who a “skilled searcher” would be nor any evidence that Ms. Mullendore is not a “skilled searcher.” *Id.* Moreover, Knauf has presented little, if any, evidence of what investigative tools and techniques would have been used by a skilled searcher searching a company the size of James Manville. Nor has Knauf supplied any evidence, or even an explanation, detailing how a skilled searcher would have, for example, prioritized company divisions, facilities and selected personnel in undertaking a diligent search in these or similar circumstances so that any and all relevant documents were initially discovered. *Id.* Indeed, Knauf has not provided any evidence that Ms. Mullendore did not investigate historic versions of the accused products or that Ms. Mullendore failed to use proper investigative skills, techniques, and tools in her search for relevant prior art. *Cf. International Business Machines Corp. v. Intellectual Ventures II LLC*, IPR2014-01465, Paper 32 at 5 (Nov. 6, 2015) (“We are persuaded that Petitioner reasonably could have raised Estrin 1987 in the earlier proceeding because Patent Owner’s evidence sufficiently establishes that a skilled

searcher conducting a diligent search would have likely searched the IEEE Xplore and uncovered Estrin 1987.”)

Knauf argues that the search was not diligent, apparently because Mr. Mota’s testimony “makes clear that he was the JM employee with the most knowledge concerning historic OEM products and related literature.” Mot. to Terminate, 4 (citing Ex. 1017 ¶¶ 1–3; Ex. 1030 ¶¶ 1–3; Ex. 2019, 8:2–21, 10:5–17, 15:17–16:13, 30:18–31:18. Although Mr. Mota does state that in the course of approximately thirty years of OEM business experience he has “been responsible for product training, sales training, literature development and overall business leadership” we are provided no reasoning from Knauf as to *how* this qualifies him as the “JM employee with *the most* knowledge” concerning historic documents. *See id.* (emphasis added); *see also* Ex. 1017 ¶¶ 1–3. Mr. Mota certainly had access and input to company marketing materials, as did other employees, but Knauf has not pointed to persuasive evidence indicating that he was the person *most likely* in the company to maintain such brochures or marketing materials. *See* Ex. 2019, 11:1–12:2. Knauf also does not explain that there was initially any overlooked evidentiary corporate trail or common institutional knowledge that Mr. Mota maintained these documents. Mr. Mota’s work experience and managerial responsibilities at Johns Manville do not, alone, provide sufficient probative weight to support a finding that in not initially interviewing him, the searchers were somehow unskilled or not diligent in their investigations.

Knauf fails to provide persuasive evidence supporting the contention that Mr. Mota, as an OEM division manager with certain marketing and sales duties and responsibilities within the company, would be more important, to interview than anyone else, or at least as important to interview

as anyone else. In other words, without at least some facts supporting the allegation that Mr. Mota was responsible for, or commonly known to maintain such historical corporate documents, we cannot determine that it is unreasonable that Ms. Mullendore or corporate counsel did not interview Mr. Mota until after the filing of the first *inter partes* review petition.

It is a simple matter to allege that because the documents were eventually found in Mr. Mota's hard-copy files he was the most important employee to interview. This allegation, however, is to an extent hindsight on Knauf's part, and unsupported by sufficiently probative evidence apart from the eventual discovery of the brochure hard copies themselves in Mr. Mota's possession. *See* Mot. to Terminate, 4. Weighing the facts in this case, we are not persuaded that Knauf has presented sufficient reasons and evidence to determine that the failure to interview Mr. Mota and discover the brochures submitted here as Exhibits 1004 and 1005, prior to the filing of the first *inter partes* review by Johns Manville, was unreasonable within the meaning of section 315(e)(1). Knauf's Motion to Terminate is, therefore, *denied*.

3. Joinder

With respect to Knauf's argument that Johns Manville reasonably could have raised the grounds in this proceeding, in the earlier IPR2015-01453 case by filing a request for joinder, we agree that if Knauf had shown sufficiently the searchers to be not diligent or unreasonable in their search, then requesting joinder could have been of strategic benefit in evading the estoppel provisions of section 315(e)(1). *See* PO Reply ISO Mot. to Terminate, 2. As discussed above, however, we are not persuaded that the

search was unreasonable or not diligent, and thus there is no estoppel under section 315 (e)(1) to overcome.

III. OBJECTIONS AND MOTIONS TO EXCLUDE EVIDENCE

Knauf objects to, and moves to exclude Exhibits 1004, 1005, and 1010 along with the supporting testimony of Joe Mota (Exhibits 1017, 1030), Richard Graves (Exhibit 1028), Anne Barker (Exhibit 1018), and Christopher Butler (Exhibit 1031). Mot. to Exclude, 1. Specifically, Knauf argues that these witnesses “each (i) lack personal knowledge to support their testimony that Exhibits 1004, 1005, and 1010 accurately portray documents that purportedly existed and were publicly available long before 2015 and (ii) provided the foregoing testimony based solely on hearsay.” *Id.* Knauf further asserts that Exhibits 1004, 1005, and 1010 are not properly authenticated as prior art and contain inadmissible hearsay. *Id.* at 8.

A. *Whether Exhibits 1004, 1005 and 1010 are Properly Authenticated*

Knauf moves to exclude Exhibits 1004, 1005 and 1010 based on lack of authentication and improper hearsay. *Id.* at 8. Knauf asserts that the witnesses that Johns Manville produced in this proceeding in support of public accessibility of Exhibits 1004 and 1005, i.e. Mr. Mota and Mr. Graves, do not have personal knowledge of the documents being publicly distributed. Mot. to Exclude, 8. Knauf argues that the dates on the documents upon which Mr. Mota and Mr. Graves rely are hearsay and “are not evidence that JM distributed the documents to anyone outside of the company. At most, they are evidence the documents were in Mr. Mota’s internal JM files as of those dates.” *Id.* at 9. Knauf asserts that these dates are essentially an “uncorroborated archive date” and no public accessibility has been shown by the discovery of these documents in Mr. Mota’s hard-

copy files. *Id.* (citing *Apple Inc. v. DSS Technology Mgmt., Inc.*, Case IPR2015-00369, slip op. at 6 (PTAB Aug. 12, 2015) (Paper 14)).

Johns Manville contends that Knauf's challenge is to the sufficiency and weight of the evidence, i.e. whether it qualifies as prior art, not to admissibility, and therefore not the proper subject of a motion to exclude. Opp. Mot. to Exclude, 3. Johns Manville argues further, to the extent admissibility is at issue, that "personal knowledge" is not required for authentication purposes. *Id.* at 4–5 (citing *EMC Corp.*, Case IPR2013-00084, slip. op at 30 (PTAB May 15, 2014) (Paper 64)). Johns Manville contends that the exhibits may be authenticated by relevant testimony "that the evidence is what it is claimed to be," as Mr. Mota and Mr. Graves have done. *Id.* at 5–6 (citing *id.* at 5 (citing *SAP Am., Inc. v. Arunachalam*, Case IPR2013-00195, slip op. at 22 (PTAB Sept. 18, 2014) (Paper 60)).

First, we note that the authentication and hearsay issues as they relate to the printed date information on the brochures are, to an extent, intertwined with admissibility as well as Knauf's merits arguments, because the date evidence in these documents is relied on by Mr. Mota and Mr. Graves in support of both publicly availability and authentication of the documents as advertising brochures. We disagree, however, that the dates printed on the exhibits are inadmissible hearsay under Fed. R. Evid. 801, 802. *See* Mot. to Exclude 1–5. Exhibits 1004 and 1005 are Johns Manville advertising brochures describing certain insulation products and application examples that, on their face, appear as promotional material for insulation products and reasonably understood to have been offered for sale to the public by Johns Manville. *See* Exs. 1004, 1005 (featuring brochures including specific insulation product information and specifications expressly directed to

customers as well as exemplary applications for insulation in refrigerators, air-handling equipment etc.). The date printed on Exhibit 1004 is “12/97” and on Exhibit 1005 is “10/00 (Replaces 12/97).” Exs. 1004, 14, 1005, 10. Both Mr. Mota and Mr. Graves consistently indicate that the dates printed on the exhibits are indicative of when the advertising brochures would have been first printed and shortly thereafter, disseminated to customers. Ex. 1017 ¶ 2; Ex. 2020, 31:19–40:2. Mr. Mota consistently described that for these promotional materials “[d]uring the 1997-2000 time frame, technical, marketing, and/or product manuals, brochures, and guides were freely distributed within JM and on a non-confidential basis to the public.” Ex. 1030 ¶ 6, *and see* Ex. 2019, 21:1–24, 26:4–27:2.

We determine that the documents are sufficiently authenticated, first, because the marketing, company contact and product information expressly set out in the brochures, along with the witnesses’ corroborating statements, show sufficiently that Exhibits 1004 and 1005 are what they appear to be, that is, advertising brochures that were printed and produced for dissemination to Johns Manville’s customers and sales personnel for unrestricted distribution to the public. Second, we determine that the dates on the brochures are not merely “archival” dates in Mr. Mota’s files as Knauf contends. *See* Mot. to Exclude, 4 (citing *Apple Inc. v. DSS Technology Management, Inc.*, IPR2015-00369, slip op. at 6 (PTAB August 12, 2015) (Paper 14)). Mr. Mota and Mr. Graves both explain that it was standard practice at Johns Manville to print these dates on the brochures to indicate a first printing of the brochure. Ex. 2019, 20:23–21:24; Ex. 2020, 39:4–40:2. This testimony is corroborated, at least circumstantially, by the documents themselves where, for example, Exhibit 1005 states “10/00

(Replaces 12/97),” where 12/97 is the date printed on Exhibit 1004 and Exhibit 1005.

We agree with Knauf that hearsay is not admissible under Fed. R. Evid. 802. Mot. to Exclude, 2. However, based on the testimony of Mr. Mota and Mr. Graves, we find that the dates printed on the brochures were a common business practice at James Manville. *See* Ex. 2019, 20:23–21:24; Ex. 2020, 39:4–40:2. These dates, along with the testimony of Mr. Mota and Mr. Graves, are probative of the authenticity of the documents themselves and their existence and purpose at the relevant time period. Knauf has provided no persuasive evidence that either the December 1997 date or the October 2000 dates as printed on the brochures are untrustworthy, or that either Mr. Mota’s or Mr. Graves’s testimony are inconsistent with this assertion. Also, we do not consider Mr. Mota or Mr. Graves’s declarations to be hearsay, as they are not out-of-court statements. In an *inter partes* review, direct testimony is typically provided via affidavit, with cross-examination taken via deposition. 37 C.F.R. § 42.53(a) *and see* Ex. 2019, 20:23–21:24; Ex. 2020, 39:4–40:2, 44:15–20. Thus, we determine on the evidence in this proceeding that Exhibits 1004 and 1005 are properly authenticated and not inadmissible hearsay because they have been shown to be commercial product advertising publications under Fed. R. Evid. 803(17) and include customary date information that, based on the sworn testimony of Mr. Graves and Mr. Mota, was made in the regular course of business and is thus subject to the business records exception under Fed. R. Evid. 803(6).

With respect to the authentication of Exhibit 1010, Owens Corning – 2006 At A Glance Report, and the testimony of Ms. Anne Barker and Mr. Christopher Butler, Knauf argues that the witnesses’ testimony is

inadmissible because, for example. Ms. Barker “speculates that Exhibit 1010, which she downloaded in 2015, accurately reflects another file that was ‘publicly available’ and ‘archived’ at a much earlier date.” Mot. to Exclude 5 (citing Ex. 1018 ¶ 5). Knauf reasons that without personal knowledge of the original document, neither witness can support the authenticity of the file obtained via the Wayback Machine as an accurate reproduction of what was available to the public prior to the filing date of the ’670 patent and, therefore, Johns Manville failed to lay a foundation for its admission into evidence.³ *Id.* at 5–6 (citing Ex. 2006, 29:10–22; Ex. 2016, 24:11–25:1).

Ms. Barker, a research analyst for the law firm of Kilpatrick Townsend & Stockton, LLP testified that she downloaded Exhibit 1010 from the Internet Archive, and that data associated with the file indicated that the document was archived in 2007 and donated to the Internet Archive for inclusion in the Wayback Machine. Ex. 1018 ¶ 5. Mr. Butler’s affidavit similarly indicates that, based on the available URL and date information, that Exhibit 1010 was archived in 2007. Ex. 1031, 1, 30.

For authentication purposes, Knauf contends that Exhibit 1010 does not “accurately reflect” what was originally publicly available and earlier archived. *See* Mot. to Exclude, 5. The issue of accuracy is somewhat misplaced here because it is applicable to color images, and therefore bears

³ The Wayback Machine is a service provided by The Internet Archive for searching and viewing archived digital internet web pages. Ex. 1031 ¶ 2. Mr. Christopher Butler, the Office Manager for the Internet Archive, explains that “[t]he archived data made viewable and browseable by the Wayback Machine is compiled using software programs known as crawlers, which surf the Web and automatically store copies of web files, preserving these files as they exist at the point of time of capture.” *Id.* at ¶¶ 1, 4.

more on the evidentiary weight the document may be entitled to. For authentication purposes, the question is whether the document is properly what James Manville asserts, that is, a publicly available document or file in 2007 including, *inter alia*, images and description of insulation products. Pet. 37.

We find that the evidence of public availability of Exhibit 1010 based on the document itself as well as associated URL dates from the Wayback Machine and the testimony of Mr. Freemeyer, Ms. Barker and Mr. Butler weighs in favor of proper authentication. Exhibit 1010 has on its cover page the date “06” apparently referring to a 2006 time frame. Ex. 1010, 1. Consistent with Ms. Barker and Mr. Butler’s testimony that Exhibit 1010 was archived in 2007, in the document, data ascribed to 2006 year is found explicitly throughout the document itself. *Id.* at 3; Ex 1018 ¶ 5; Ex. 1031, 30. (Report shows various financial data for “year to date 2006”). The document itself, an annual report including general company sales and financial data, as well as more specific company product information, appears on its face as advertising and promotional material directed to other companies and potential customers, illustrating Owens Corning’s product lines and capabilities. *See id.* The document also has nothing indicating that dissemination is restricted in any manner. *Id.*

Knauf’s forensic specialist, Greg Freemeyer, states in his declaration that the internal metadata of Exhibit 1010 “showed a last modified date of either June 12 or June 19, 2015, and thus it appears these exhibits are not the same files described in Ms. Barker’s declaration as having been downloaded on approximately March 2 or June 10, 2015.” Ex. 2013 ¶ 19. Mr. Freemeyer, however, does not explain persuasively, if at all, why the “last

modified date” recorded in internal document metadata indicates that these are not the same files as those archived in 2007. *See id., and see* Ex. 1031, 1, 30. Further to Mr. Freemyer’s testimony regarding the Wayback Machine, whether a webcrawler is programmed to not save certain files, ignore robot commands it encounters, or even supposing the crawler can access files that are password protected, this does not bear on whether the information captured by the crawler was in fact on that site on the date it was archived. *See id.* ¶¶ 15–18. Neither Mr. Freemyer nor Knauf provide compelling evidence that the URL date indicating archival date of the file is not credible or not trustworthy. *See* FRE 803(6)(E). Thus, Knauf does not persuasively refute Johns Manville’s evidence that Exhibit 1010 is an annual report authored and published by Owens Corning as evidenced by its internal contents, dates and apparent public availability as a file available on the internet in 2007.

With respect to Knauf’s assertion that reliance by Ms. Barker in her declaration (Exhibit 1018) on the 2007 date printed on the document itself is inadmissible hearsay under Fed. R. Evid. 801, 802, we disagree. The dates referred to in Exhibit 1010, and both Ms. Barker’s and Mr. Butler’s declarations consistently indicate that the file presented in this proceeding as Exhibit 1010 was archived in 2007, more than one year prior to the filing of the ’670 patent. Ex. 1018 ¶ 3; Ex. 1031, 7. These dates are all probative of whether Exhibit 1010 was publicly available prior to the ’670 patent filing date. Knauf has provided no persuasive evidence that either the URL dates in Ms. Barker’s or Mr. Butler’s declarations are untrustworthy. Also, we do not consider Ms. Barker or Mr. Butler’s declarations to be hearsay, as they are not out-of-court statements. In an *inter partes* review, direct testimony is

typically provided via affidavit, with cross-examination taken via deposition. 37 C.F.R. § 42.53(a). Johns Manville has established sufficiently the authenticity of Exhibit 1010 at least under Fed. R. Evid. 901(b)(4) and that Exhibit 1010 and Ms. Barker's related testimony (Exhibit 1018) and Mr. Butler's testimony (Exhibit 1031) are neither hearsay nor inadmissible hearsay.

Thus, we determine on the evidence in this proceeding that Exhibits 1004, 1005, and 1010 are properly authenticated and, even if hearsay, not inadmissible hearsay because they are commercial publications under Fed. R. Evid. 803(17) and documents subject to the business records exception under Fed. R. Evid. 803(6). We determine, further, that the related affidavits supporting the authenticity and relevance of the documents, Exhibits 1017, 1018, 1028, 1030, and 1031, are not hearsay. Knauf's Motion to Exclude Exhibits 1004, 1005, 1010, 1017, 1018, 1028, 1030, and 1031, is therefore *denied*.

B. Dr. Bide's Testimony

Knauf asserts that Dr. Bide is neither an ordinary observer for obviousness purposes, nor a designer of ordinary skill in the art. Mot. to Exclude, 12. Knauf argues specifically that we should exclude Dr. Bide's declaration because his "analysis does not reflect the perspectives of the ordinary observer/designer for the '670 Patent" and is therefore not relevant under Fed. R. Evid. 401–403 and 702. *Id.* at 11, 13.

We agree with Knauf that Dr. Bide's spectrophotometer measurements are tests that neither an ordinary observer, nor a designer of ordinary skill in the art, would generally undertake in assessing the color of insulation. PO Reply, 6. Dr. Bide measured hue angles on the sole color

figure of the '670 patent, as well as on laser color copies of certain of the asserted prior art references in this proceeding, detecting the hues on the sampled images with a spectrophotometer. Ex. 1013 ¶¶ 30–48. Notably, we have not been apprised of any measurements of the hue angle for the images in Exhibits 1004 and 1005. *See id.* ¶¶ 27–41

Dr. Bide is a Professor in the Department of Textiles, Fashion Merchandising and Design at the University of Rhode Island, and holds a Ph.D. in the Chemistry of Dyes from the University of Bradford, United Kingdom. Dr. Bide has conducted research in dyes and color for over thirty years and his testimony is entitled to certain weight. *Id.* ¶¶ 3–5. We do not, however, accord weight to Dr. Bide's spectrophotometer measurements in this proceeding because Johns Manville has not explained persuasively how Dr. Bide's spectrophotometer analysis of hue angle measurements pertains to an ordinary observer or purchaser of insulation material. Also, it is not clear from Dr. Bide's testimony whether he undertook spectrophotometer measurements on the primary references in this proceeding, namely Exhibits 1004 and 1005, or if he merely failed to include them in his analysis. *See* Ex. 2018, 12:24–13:13.

We determine that Dr. Bide's testimony does, however, have certain relevance to understanding the color issue from the perspective of both an ordinary observer and a designer of skill in the art. Dr. Bide testifies that he has purchased insulation products numerous times as a homeowner.

Q. Have you personally ever purchased insulation?

A. Yes.

Q. How many times?

A. Approximately 20. A guess.

Ex. 2003, 20:12–16. Dr. Bide also testifies that in undertaking comparisons of the '670 patent to the prior art he relied upon his own visual observations and also his experience as a color scientist. In his declaration, Dr. Bide states that “I used basic visual inspection *and* spectrophotometric analysis to assess whether each prior art image contains the five elements allegedly disclosed in the claim of the '670 patent.” Ex. 1013 ¶ 27 (emphasis added). During his deposition Dr. Bide confirmed that his opinion was not based solely on the perspective of a color scientist.

Q. · Well, which perspective did you analyze that that pink photo is the same as the patent?

A. · Well, I analyzed it in several respects, one of which was as a color scientist.

Q. · And that's the perspective that you set forth in your sworn declaration, Exhibit 1012, correct?

A. · I analyzed it in several ways. One of them is as a color scientist, others of which are still in my declaration, which I just used my human vision.

Id. at 26:11–23. Dr. Bide in his capacity as a color scientist has certain know-how and technical skills which allow him to attempt to scientifically confirm his own visual observations. *See* Ex. 1013 ¶¶ 7–8, 27. Patent Owner has not explained persuasively why this expertise precludes him from being also an ordinary observer of insulation products. We find that Dr. Bide's use of spectrophotometric analysis to confirm the hue and color differences he observed in the images, to be a logical analytical step for an ordinary purchaser of insulation products, who happens also to be a color scientist. Our finding is not based on the substance of Dr. Bide's spectrophotometric analysis per se, but on an understanding that it is a reasonable methodology to attempt to confirm, with scientific measurement,

the visual appearance of specific colors and hue to an ordinary observer. *See id.* ¶ 29.

In addition, we find that Dr. Bide’s expertise is relevant to determination of color in insulation by a designer of ordinary skill in the art. Color is clearly an aspect of the claimed design at issue here in this proceeding. *See* Inst. Dec. 10–13. The color issue arises from Knauf’s submission of a color photograph and Knauf’s arguments relating to hue, lightness, and color to differentiate the claimed design from the prior art during prosecution of the ’670 patent. *See* Ex. 1002, 19–20 (“To the extent there are variations in the color of Foltz, the hue remains constant and the variations are merely the changes in the lightness of yellow.”) We do not find it unreasonable to use a color expert, such as Dr. Bide, to assess color differences in products. Indeed, James Worden, Knauf’s declarant, confirms that where color is an issue in insulation design, one of skill in the art of making insulation, such as a Product Manager, probably would not have specific “color” experience and would understand that “a color pigment specialist may provide an understanding of coloring various substances.” Ex. 2008 ¶¶ 15–16.

We find that portions of Dr. Bide’s testimony are, therefore, relevant to certain issues pertaining to color and thus Knauf’s motion to exclude Dr. Bide’s declarations is *denied*.

IV. CLAIM CONSTRUCTION

A. *Legal Standard*

In an *inter partes* review, “[a] claim in an unexpired patent shall be given its broadest reasonable construction in light of the specification of the patent in which it appears.” 37 C.F.R. § 42.100(b). With respect to design

patents, it is well-settled that a design is represented better by an illustration than a description. *Egyptian Goddess, Inc. v. Swisa, Inc.*, 543 F.3d 665, 679 (Fed. Cir. 2008) (en banc) (citing *Dobson v. Dornan*, 118 U.S. 10, 14 (1886)). Although preferably a design patent claim is not construed by providing a detailed verbal description, it may be “helpful to point out . . . various features of the claimed design as they relate to the . . . prior art.” *Egyptian Goddess*, 543 F.3d at 680; cf. *High Point Design LLC v. Buyers Direct, Inc.*, 730 F.3d 1301, 1314 (Fed. Cir. 2013) (remanding to district court, in part, for a “verbal description of the claimed design to evoke a visual image consonant with that design”) (citation omitted).

B. The Claimed Design

In our Decision to Institute, we determined that the claimed design includes a “‘waffle pattern’ as shown and described by the sole figure” and “colors that sufficiently impart or convey a variation of distinct hues, such as brown and cream.” Inst. Dec. 10, 12–13. We also found that the overall appearance of the design “depicts insulation material having a cloud-like appearance with variations in a swirl pattern.” *Id.* at 14.

We are aware of the tension that exists, based on the particular facts of a case, as to whether or not it is appropriate to provide a verbal construction of the claimed design. See *Egyptian Goddess* 543 F.3d at 679 (stating that the Board is “not obligated to issue a detailed verbal description of the design if it does not regard verbal elaboration as necessary or helpful.”). It may be preferable not to provide a detailed claim construction in certain cases. However, observing the design in this proceeding as a whole, a claim construction such as “insulation material as shown in the sole figure of the ’670 patent,” would not reasonably provide a substantive factual or

evidentiary basis for comparison relative to the prior art. Here, because the single color photograph depicting “insulation material” is, on its face, visually amorphous, lacking clear structure, form, and environment in which to give context to the design, we consider a verbal claim construction helpful to compare the claimed design to the prior art. *See Egyptian Goddess*, 543 F.3d at 680 (“While it may be unwise to attempt a full description of the claimed design, a court may find it helpful to point out . . . various features of the claimed design as they relate to the accused design and the prior art.”); *see also High Point Design*, 730 F.3d at 1314 (holding that a district court erred by failing to translate the design into a verbal description for purposes of a non-obviousness analysis).

We reproduce, again, the sole drawing illustrating “[t]he ornamental design for insulation material,” as recited in the ’670 patent claim:



This figure, on the left, is the claimed design as it appears on the front page of the ’670 patent as a photocopy of the color photograph filed during prosecution. Ex. 1001, 1.



This figure, on the right, is an image of the actual color photograph depicting the claimed design, as filed during prosecution of the ’670 patent. Ex. 1002, (Reply to Off. Act. Aug. 6, 2010, 4).

For example, considering the claimed design, we observe a random swirl pattern evident in both the color and black and white images of the

claimed design shown above. We find the phrase “variations in a swirl pattern” helpful to objectively describe what we observe as the relative arrangement between the “distinct hues” shown in the photograph. Moreover, both parties have advanced this term in their proposed claim constructions. *Compare* Pet. 17 with PO Resp. 28. Observing the design as a whole, “swirl pattern” is somewhat less than specific. We agree to an extent with Knauf’s Declarant, Professor Rake, that “swirl pattern” can aptly describe a variety of patterns. Ex. 2012 ¶ 28. Thus, to facilitate a more expressive elocution of this element, we further described the contrast imparted by the “swirl pattern” consistent with the prosecution history of the ’670 patent as having a “cloud-like appearance.” Ex. 1002, 33. Both parties have also included this term in their proposed constructions. *Compare* Pet. 16 with PO Resp. 28.

We further construed the claimed insulation material to include “a ‘waffle pattern’ as shown and described by the sole figure.” Inst. Dec. 8. We noted in our Institution Decision that in “observing the overall appearance of the design, the ‘waffle pattern’ is visually apparent, although not terribly distinct, in the color photograph.” *Id.* Neither party substantively disputes our interpretation of this element of the claim. *Compare* PO Reply 13, with Pet. Resp. 28.

We consider color to be ornamentation that may play a role in the patentability of the claimed design. *In re Haruna*, 249 F.3d at 1336. Color alone, however, cannot be the sole basis for patentability. *See Application of Iknayan*, 274 F.2d 943, 944 (C.C.P.A. 1960) (*citing In re Cohn*, 80 F.2d 65, 66 (C.C.P.A. 1935) (“It cannot be successfully argued that patentability of a design may rest on color alone.”)). Although *In re Cohn* is an older case, we

find it lends certain relevance to our discussion here, particularly where the Court explains that “[i]t has been well settled in a long line of decisions that color, if an essential feature of a design, must be so defined or connected with some symbol or design ‘that other manufacturers may know what they may safely do.’” *In re Cohn*, 80 F.2d 65, 66 (C.C.P.A. 1935). As set forth in the proper claim construction, color is an aspect of the presently claimed design.

With this case law in mind, we determined in our claim construction based in part on the prosecution history of the ’670 patent that “color is an element of the claimed design; this element includes colors that sufficiently impart or convey a variation of distinct hues, such as brown and cream.” Inst. Dec. 14. Knauf argues that “more precision is required to properly verbalize this aspect of the claim” and, also, that the prosecution history uses the term “hue” to mean “color.” PO Resp. 34–35 (citing Ex. 2002, 2; Ex. 2010 ¶ 29). Although we agree that colloquially, “hue” and “color” *can* mean the same thing, we do not understand from reading the prosecution history of the ’670 patent that Knauf was in fact using “color” and “hue” as synonyms, as they now assert. *See* PO Resp. 37 (discussing prosecution of the ’670 patent in which “Knauf Insulation therefore employed the term ‘hue’ as a synonym for *color* such that the phrase ‘same hue’ and the phrase ‘same color’ had the same meaning.”) Knauf appears, however, to have differentiated between the terms in their arguments to the Examiner during the prosecution of the ’670 patent:

Specifically, Foltz fails to disclose or suggest an insulation material with a variation of distinct hues throughout the insulation material, as claimed in the design of the present invention. Foltz discloses an insulation material with the same hue - yellow - throughout. To the extent there are *variations in*

the color of Foltz, the hue remains constant and the variations are merely the changes in the lightness of yellow.

In contrast, the claimed invention includes a variation of distinct hues, such as brown and cream. Applicant is not aware of any prior art that discloses a variation of distinct hues throughout the insulation material.

Ex. 1002, 19–20 (emphasis added). We understand Knauf’s explanation here to mean that “hue” is essentially a “constant” encompassing some range of color variation, for example where the yellow “hue” is constant in Foltz, variations in the “color” yellow may subsist. *See id.* In the explanation provided to the Examiner “hue” and “color” are grammatically different. A plain reading of the third sentence of the first block paragraph above reveals that “color” is the subject of the sentence, and “hue” is the object of transitive verb “remains.” This is an explicit grammatical differentiation and imparts a different meaning to the words. Also in its explanation to the Examiner, Knauf argued that “brown” and “cream” were examples of two distinct “hues,” and the prior art (Foltz) only showed a single hue, yellow. *Id.* This is consistent with the understanding that the different hues, i.e. “brown” and “cream,” each encompass some range or variation of color within each of the hues “brown” and “cream.” Our understanding is also consistent with Patent Owner’s declarant, Professor Karen B. Schloss, a professor in color studies at Brown University, who testified with respect to the above passage from the prosecution history that “the word ‘hue’ . . . was used colloquially to refer to different colors, even if they fall within the same hue angle.” Ex. 2010 ¶ 34.

We are not persuaded, as Knauf argues, that the phrase “variation of distinct hues” needs to be specifically qualified by the clause “so that the

variations of distinct hues *are not limited* to changes in the lightness and darkness of a single color.” PO Resp. 33 (emphasis added). This assertion is based on the prosecution history explaining the type of color variation only as applied to the Foltz prior art. *See id.* at 36–38. We are also not persuaded to qualify the phrase in the context of a negative limitation. In other words, the proper claim construction does not reasonably impart any restriction of distinct hues based on “changes in the lightness and darkness of a single color,” and Knauf’s reference to the Foltz prior art in the prosecution history of the ’670 patent does not sufficiently explain why we must articulate a definitive statement that the claim is *not* limited in this manner. As clarified below, therefore, we maintain our determination that the claimed design as properly construed includes “colors” and “a variation of distinct hues.”

Based on the underlying prosecution history and viewing the color photograph of the insulation material itself as the most helpful aspect in ascertaining the proper claim construction, we determine that color and hue are elements of the claimed design and constrained, as is the nature of a design patent, by the single color photograph as filed. *See Ex. 1002, 13* (Petition for Color Photograph). In our Institution Decision we used the phrase “such as brown and cream,” which was taken directly from the prosecution history. Inst. Dec. 12–14. We are persuaded by Knauf’s position to clarify this aspect of our claim construction, as shown by underlining and strikeout below, to be consistent with the prosecution history and clarify that the claimed colors “including brown and cream” are observed in the single color photograph as filed. Accordingly, we determine that color is an element of the claimed design; this element includes “colors

as shown in the sole figure of the '670 patent that sufficiently impart or convey a variation of distinct hues, such as including 'brown and cream.'"

We turn next to additional language alleged by Knauf to be “language, which more precisely captures the overall appearance of the claimed design.” PO Resp. 33. For the reasons set forth below, we are not persuaded that additional limitations (f)–(h) of Knauf’s proposed construction, listed below, are necessary to understand the claimed design.

(f) wherein the insulation material has a cream color;

(g) wherein the cream color is marbled throughout with at least a brown color, a chocolate color, a coffee color, an almond color, and a beige color; and

(h) wherein the marbling creates a sand-storm appearance, as shown in the sole color photograph of the patent.

Id. at 33–34.

We agree with Knauf that “anyone viewing the sole figure of the '670 Patent would see the specific colors present in the photograph and understand them to be part of the claimed design.” *Id.* at 39. Our claim construction discussed *supra* reflects the requirement to look to the single color photograph embodying the claimed design. *See Egyptian Goddess*, 543 F.3d at 679–80. Also, with respect to asserted elements (f) and (g), our construction *includes* the colors “brown and cream” as an element of the claimed design. We are not persuaded that there is any benefit in reiterating, as separate elements, that “a cream color” and “at least a brown color” are elements of the claimed design.

Knauf’s element (g) further lists a variety of additional colors purportedly related to “brown”, i.e. “a chocolate color, a coffee color, an almond color, and a beige color.” PO Resp. at 34, 40. Knauf argues that by

not including these other colors “the Board has ignored an integral part of the claimed design.” *Id.* at 41. A problem with this argument is that the listing of other allegedly related colors to “brown,” e.g. “coffee color,” is not exhaustive and is therefore unhelpful in defining any specific range that the color “brown” encompasses. For example, the list could just as easily reasonably include the terms “caramel color,” “tan color,” or “russet color.” Our understanding is in accord with that of Knauf’s declarant, Dr. Schloss, who explained in her testimony that “[c]olor naming is complicated because there is no single standard system for naming colors across industries.” Ex. 2010 ¶ 16.

Although we are not persuaded that such an indefinite list of colors is helpful to understand the design, we agree with Knauf that there is some range of “brown” colors that an observer may view in the design. *See* PO Resp. 34–35, *see also* Ex. 2010 ¶ 16 (“The 11 Basic Color Terms are red, orange, yellow, green, blue, purple, pink, gray, white, black, and brown. However, for describing colors in design, this list is severely limited.”). Although Dr. Schloss states that “it is a fair description to state that the color image in the design patent contains regions that appear cream colored, brown colored, chocolate colored, coffee colored, almond colored, and beige colored,” we are not persuaded to limit the claim construction to these colors, particularly where Dr. Schloss also testifies that a specific color range cannot be precisely articulated in a verbal claim construction. *See* Ex. 2010 ¶ 16–17 (“A single color can be described by a variety of names, and a variety of colors can be described by a single name.”).

Keeping in mind the prior art, the determination of an appropriate color range for the ’670 patent is best left to the ordinary observer. *See*

Egyptian Goddess, 543 F.3d at 677 (“Where the frame of reference consists of numerous similar prior art designs, those designs can highlight the distinctions between the claimed design and the accused design as viewed by the ordinary observer.”). Accordingly, we have been attentive in our construction to ensure that the claimed design “includes colors *as shown in the sole figure of the ’670 patent* that sufficiently impart or convey a variation of distinct hues, *including* ‘brown and cream.’”

Knauf asserts that the claim construction should further include the additional descriptions of “marbleizing” and “a sand-storm” to refer to the “swirling” nature of the different hues in the claimed design. PO Resp. 42–43 (citing Ex. 2010 ¶¶ 17–18). Knauf argues that the term “cloud-like . . . is too imprecise since clouds have *many* different types of appearances.” *Id.* at 42. This argument is unpersuasive because Knauf has not adequately explained how “marbleizing” and “sandstorm,” are any more precise than “cloud-like.” These terms “marbleizing” and “sand-storm” in our understanding, just like “cloud-like,” also reasonably “have *many* different types of appearances.” *See id.* Knauf does not explain sufficiently why or how such words make the description more precise. *See id.* at 43 (“Any verbal description that fails to reference that sand-storm appearance is incomplete and unnecessarily imprecise.”). We would agree that such descriptions are similar, or possibly alternatives, but we are not persuaded that their addition to the claim construction offers any additional clarity to understanding the design. Moreover, clouds are a reference with which any observer, ordinary or otherwise, is familiar. The ordinary observer has at least perceived clouds, and more than likely, cloud formations that “swirl.” It is not clear that observers as a general matter are familiar with, or have

observed a sand-storm, or “haboob.” *See id.* We consider these additional asserted descriptive words and terms to be at best duplicative, and are not persuaded that they impart any additional clarity or understanding to the claimed design or facilitate a more accurate comparison with the prior art.

The proper claim construction to be applied in our analysis below is, therefore, that the overall appearance of the design “depicts insulation material having a cloud-like appearance with variations in a swirl pattern and that color is an element of the claimed design; this element includes colors as shown in the sole figure of the ’670 patent that sufficiently impart or convey a variation of distinct hues including ‘brown and cream,’ and the claimed design includes a ‘waffle pattern’ as shown in the sole figure.”

V. ANALYSIS

A. *Principles of Law*

1. *Obviousness*

In a challenge to a design patent based on obviousness under 35 U.S.C. § 103, the ultimate inquiry is “whether the claimed design would have been obvious to a designer of ordinary skill who designs articles of the type involved.” *Apple, Inc. v. Samsung Elecs. Co., Ltd.*, 678 F.3d 1314, 1329 (Fed. Cir. 2012) (quoting *Titan Tire Corp. v. Case New Holland, Inc.*, 566 F.3d 1372, 1380–81 (Fed. Cir. 2009)).

This obviousness inquiry consists of two steps. *Apple*, 678 F.3d at 1329. In the first step, a primary reference (sometimes referred to as a “*Rosen* reference”) must be found, “the design characteristics of which are basically the same as the claimed design.” *Id.* (quoting *Durling v. Spectrum Furniture Co., Inc.*, 101 F.3d 100, 103 (Fed. Cir. 1996)). This first step is itself a two-part inquiry under which the Board “must both ‘(1) discern the

correct visual impression created by the patented design as a whole; and (2) determine whether there is a single reference that creates ‘basically the same’ visual impression.” *High Point Design*, 730 F.3d at 1312 (quoting *Durling*, 101 F.3d 100, 103 (Fed. Cir. 1996)).

In the second step, the primary reference may be modified by secondary references “to create a design that has the same overall visual appearance as the claimed design.” *Id.* at 1311. However, the “secondary references may only be used to modify the primary reference if they are ‘so related [to the primary reference] that the appearance of certain ornamental features in one would suggest the application of those features to the other.’” *Durling*, 101 F.3d at 103 (quoting *In re Borden*, 90 F.3d 1570, 1575 (Fed. Cir. 1996)). We determine whether or not references may be properly combined from the perspective of a designer of ordinary skill in the art. *Int’l Seaway Trading Corp. v. Walgreens Corp.*, 589 F.3d 1233, 1241 (Fed. Cir. 2009).

2. Anticipation

Notably for design patents, the “ordinary observer” test for anticipation is the same test used for infringement. *See Int’l Seaway Trading Corp. v. Walgreens Corp.*, 589 F.3d at 1240 (applying *Egyptian Goddess* holding to the test for anticipation). The ordinary observer is quite often a consumer, or purchaser, considering a product in the ordinary course of business. *See Goodyear Tire & Rubber Co. v. Hercules Tire & Rubber Co.*, 162 F.3d 1113, 1117 (Fed. Cir. 1998) (“[T]he focus is on the actual product that is presented for purchase, and the ordinary purchaser of that product.”). In *Egyptian Goddess*, the Federal Circuit explained that the ordinary observer is also a person familiar with the prior art designs. *Egyptian*

Goddess 543 F.3d at 675–78. For purposes of determining anticipation, it is necessary to compare all the ornamental features of the claimed design to the prior art under the ordinary observer standard. *Int’l Seaway*, 589 F.3d at 1243 (“[T]he ordinary observer test requires consideration of the design as a whole.”) (citation omitted). For purposes of comparison, the question is whether the claimed design and the prior art are substantially the same: “The mandated overall comparison is a comparison taking into account significant differences between the two designs . . . minor differences cannot prevent a finding of anticipation.” *Id.*, see also *Crocs, Inc. v. Int’l Trade Comm’n*, 598 F.3d 1294, 1303 (Fed. Cir. 2010).

3. *The Ordinary Observer*

Knauf asserts that the ordinary observers of insulation material “are the people who install such products in homes and other buildings, such as contractors and do-it-yourself homeowners.” PO Resp. 4 (citing Ex. 2008, ¶¶ 10–12; Ex. 2007, 17:14–21; Ex. 2004, 7:8–18). Johns Manville did not expressly define the ordinary observer in its Petition, but agrees that “the ordinary observer is quite often a consumer, or purchaser, considering a product in the ordinary course of business.” Reply 2. Johns Manville considers its declarant Dr. Bide to be an ordinary observer, as he testifies that he has purchased and installed insulation in his own home. *Id.* (citing Exhibit 2003 at 20:12–21:6). Johns Manville also does not dispute the definition provided by Knauf. *Id.* To support its definition, Knauf relies on its declarant, James Worden, an employee at Owens Corning who worked in various marketing and communications capacities relating to fiberglass insulation for Owens Corning for over 28 years. PO Resp. 4–5 (citing Ex. 2008 ¶¶ 1, 2, 9). Mr. Worden testified that in his experience ordinary

purchasers of insulation included homeowners and construction contractors. Ex. 2008 ¶¶ 10–11. Based on these facts and evidence we are persuaded that it is reasonable to adopt Knauf’s definition of an ordinary observer.

4. The Designer of Ordinary Skill

Johns Manville asserts that the relevant designer of ordinary skill is “someone with a background and training in color and color management. . . and could be a professional in one of several different industries: a graphic designer, a person involved in the measurement of color in textiles, a color consultant, a color measurement instrument professional, or a person involved in paint pigmentation.” Pet. 25 (citing Ex. 1013 ¶ 13). Knauf disagrees and argues that “the ‘designer of ordinary skill’ for insulation materials is a product manager who has a technical (e.g. engineering) background and who . . . does not have any specialized training in color.” PO Resp. 7 (citing Ex. 2008, ¶¶ 14–16).

A designer of ordinary skill in the art of insulation materials is generally someone “who designs articles of the type involved.” *See High Point Design*, 730 F.3d at 1313 (quoting *Durling*, 101 F.3d at 103). Knauf proposes a credible definition for an ordinary designer. *See* PO Resp. 7–9. For one thing, the claimed design is for “insulation material,” not color *per se*. *See* Ex. 1001. Furthermore, Knauf’s definition is supported not only by its own witness James Worden, but also Johns Manville’s witnesses. Exs. 2008 ¶¶ 13–16; 2004, 3:24–6:10; 2007, 12:23–13:17. For example, Mark Granger, an employee of Johns Manville, is a mechanical engineer who has been involved in the design of insulation materials for almost 40 years. Ex. 2004 3:24–4:21. Mr. Granger testified during his deposition that an

“[e]ngineering background is common,” and that he could not recall ever working with someone with a degree in color science. *Id.* at 4:22–6:10.

However, we do not discount Knauf’s declarant, Mr. Worden, who testifies that an ordinary designer of insulation materials may consult “a pigment specialist and/or binder chemist” regarding issues of color. Ex. 2008 ¶ 17. We must fully address the issue of who is a “designer of ordinary skill” before proceeding further, because, as Knauf points out, if Dr. Bide is not a designer of ordinary skill, then, Johns Manville’s arguments stand essentially without support of relevant expert testimony. *See* PO Resp. 8–9.

As discussed above, Knauf has asserted in this case that a product manager who has a technical or engineering background and is familiar with the insulation manufacturing process, but who does not have any specialized training in color, is a designer of ordinary skill. PO Resp. 7–10. This definition has some appeal, mainly because the claimed article of manufacture here is insulation, and it does not appear, based on the testimony of witnesses from both parties, that in the insulation manufacturing process any particular expertise in color of the insulation was generally necessary. *Compare* Ex. 2004, 3:15–5:7 *with* Ex. 2008 ¶¶ 14–16.

Color, however, is an issue here in this case that involves colored insulation material, specifically because Knauf conceded during prosecution that “color is an integral part of the claimed invention.” Ex. 1002, 13. We agree that a product manager can be “a designer of ordinary skill in the art” as applied to designs because a product manager, in charge of manufacturing insulation, is knowledgeable and sufficiently trained to fabricate such products. PO Resp. 7. That a product manager without certain expertise,

such as in color, may be a “designer of ordinary skill” does not explain why such a definition must necessarily exclude another person, with a skill set in color, as a designer of ordinary skill. We find this to be particularly reasonable where an unfamiliar aspect of insulation design, such as color, is a concern. Indeed, James Worden, Knauf’s declarant, confirms that a Product Manager who did not have certain experience, for example with color, would understand that “a color pigment specialist may provide an understanding of coloring various substances.” Ex. 2008 ¶¶ 15–16. Thus, while Dr. Bide’s testimony may not be particularly relevant to all aspects of insulation design, here, where color is an integral part of the design, it is reasonable to include aspects of his particular expertise within the purview of an ordinary designer. *See In re Nalbandian*, 661 F.2d 1214, 1216 (C.C.P.A. 1981) (“The ‘ordinary designer’ means one who brings certain background and training to the problems of developing designs in a particular field.”)

We determine that the designer of ordinary skill in the art for insulation material therefore may be a product manager in the insulation manufacturing industry who has a technical (e.g. engineering) background and, on issues relating to color, may also be a person such as a pigment specialist and/or binder chemist having background and training pertaining to color in development of the insulation design.

B. Alleged Obviousness – JM 1997 Brochure or JM 2000 Brochure, in combination with either Soundproofing or OC 2006 Report

Johns Manville argues that the sole claim of the ’670 patent is rendered obvious by either the JM 1997 Brochure in combination with Soundproofing or OC 2006 Report reference or, alternatively, the JM 2000 Brochure similarly in combination with either Soundproofing or OC 2006

Report reference. Pet. 26–50. In Grounds 1 and 2 respectively, Johns Manville asserts the JM 1997 Brochure, and alternatively the JM 2000 Brochure, as a primary or *Rosen* reference, i.e. as “a something in existence, the design characteristics of which are basically the same as the claimed design.” *Id.* at 28. Specifically, Johns Manville argues that the brochures are evidence of “(1) insulation material with (2) a cloud-like appearance, and (3) variations in a swirl pattern,” as well as the “waffle pattern” when the insulation images in the JM 1997 and JM 2000 brochures are magnified. *Id.* at 28, 46. Johns Manville argues further that the JM 1997 and JM 2000 Brochures reveal by “a simple visual assessment” a variation in hue whereby the only difference between the JM brochures and the claimed design “is one of degree.” *Id.* at 32, 47.

Knauf contends to the contrary that the claimed design is not obvious in view of the asserted references for several reasons. First, Knauf argues that Dr. Bide, as a color scientist, is not a ‘designer of ordinary skill’ of insulation.” PO Resp. 45–46. Second, Knauf contends that neither that JM 1997 nor JM 2000 Brochures are a proper primary or *Rosen* reference. *Id.* at 46. Third, if the asserted brochures are appropriate *Rosen* references, Knauf asserts that Johns Manville has failed to provide a suggestion or reason to modify either JM 1997 or JM 2000 and that the combination can, therefore, only be supported by hindsight. *Id.* at 50. We address each of Knauf’s arguments in turn, below.

As a matter of housekeeping, we note that the images asserted as prior art from JM 1997 and the JM 2000 Brochures appear dissimilar mainly in the nature of a slight color differentiation. The prior art images are shown side-by-side, below.



The JM 1997 Brochure image is shown, above, on the left in side-by-side comparison to the JM 2000 Brochure image, on the right. Ex. 1004, 5, Ex. 1005, 3.

The most apparent disparity in overall appearance between these images appears to be a slightly different brown color. *See id.* The disparity, however, is not so significant that we are persuaded it is worthwhile to articulate a difference between the color of the two asserted prior art images. To be clear, we find the allegedly different brown colors here to be reasonably close and encompassed within the nature of a “brown hue,” which, as discussed in our claim construction, permits some variation of color with the hue. *See* Section IV.B. The difference in color between these images, to the extent there is one, makes no difference in our analysis below. Therefore, using the example of the prior art image from JM 1997 Brochure we address, below, the issue of whether the images from the brochures are appropriate *Rosen* references.

Below is a side-by-side comparison of the sole figure of the ’670 patent on the left, and the JM 1997 Brochure image on the right:



The sole claim of the '670 patent is shown, above, on the left in side-by-side comparison to the JM 1997 Brochure image, on the right. Ex. 3001, Ex. 1004, 5.

Comparing these images side-by-side, Knauf contends that there are “numerous differences,”

[f]or example, in contrast to the “cloud-like appearance” and “variations in a swirl pattern,” Exhibit 1004 “looks more like mud or clay,” and the “surface texture appears blotchy or mottled.”

PO Resp. 47 (citing Ex. 2012 ¶¶ 41–42). Knauf’s declarant, Lance Rake, considering the overall appearance of the designs, testifies that

[c]olors in the ‘670 patent claim range from very light cream to very dark brown with abrupt contrast changes, but the colors in the Exhibit 1004 vary only slightly and the transitions are gradual. When the overall designs are considered, a designer of ordinary skill would not see these two designs to be substantially similar.

Ex. 2012 ¶ 52. Addressing specific features set out in our claim construction, Professor Rake alleges further that in the JM 1997 Brochure there is “a lack of a recognizable cloud-like appearance (in my opinion the

appearance is mottled or blotchy—definitely not cloud-like). There is no swirl pattern.” *Id.* at ¶ 53.

Johns Manville’s declarant, Dr. Bide, testifies on the other hand that he reviewed all the prior art in the Petition, and found each prior art reference to have a “cloud-like appearance” which “appears to be a common feature in insulation material.” Ex. 1013 ¶ 18. Dr. Bide explains that he bases his opinion, at least in part, on the Examiner’s finding during prosecution of the ’670 patent that in comparing the claimed design to the Foltz prior art “[t]he fibers of the insulation material have been pressed together to form a cloud like appearance that is basically the same in both.” *Id.* (citing Ex. 1003, 33). Similarly, asserting that “variations in a swirl pattern are normal in light-density fiberglass insulation products such as batt insulation,” Dr. Bide relies on the Examiner’s finding from the prosecution history that “[v]ariations in swirl pattern of the material are considered normal in batt insulation materials, as evidenced by reviewing the prior art listed by the examiner.” *Id.* ¶ 19. Dr. Bide concludes also, based on his own visual comparison of the prior art in this proceeding to the claimed insulation design, that “the cloud-like appearance described above and variations in a swirl pattern [are] essentially identical to the prior art and to the insulation material claimed in the ’670 patent.” *Id.*

We determine that Knauf has the better argument with respect to these elements because it is Professor Rake’s analysis which is most consistent with the appropriate claim construction.

Our claim construction analysis, above, explained that we observe a random swirl pattern evident in both the color and black and white images of the claimed design shown above. We find the phrase “variations in a swirl pattern” helpful to

objectively describe what we observe as the relative arrangement between the “distinct hues” shown in the photograph.

Professor Rake opines that different from a swirling “cloud-like” appearance where “[c]olors in the ‘670 patent claim range from very light cream to very dark brown with abrupt contrast changes,” the prior art insulation “appearance is mottled or blotchy—definitely not cloud-like.” Ex. 2012 ¶¶ 52–53. Professor Rake’s testimony is persuasive because he focuses on the interplay of the visibly different colors or hues in the design and the prior art, as opposed to a sweeping assumption that all batt-type insulation has a “cloud-like” and “swirl” appearance. The problem with Dr. Bide’s assumption is two-fold; first, there is scant evidence presented to us in this proceeding, besides the Examiner’s statement in the prosecution history, that a “cloud-like” and “swirl” appearance is ubiquitous in all batt-type insulation. Ex. 1002, 33. Second, the Examiner’s assumption, and hence Dr. Bide’s reliance thereon, appears to be based on certain physical, i.e. mechanical and structural properties of fiberglass insulation that are not clearly evident in the claimed invention. *See id.* (“The fibers of the insulation material have been pressed together to form a cloud like appearance.”) In other words, we observe a swirling, cloud-like appearance based on the visually apparent colors and hue contrast in the claimed invention, not on unclaimed 3-dimensional structural or manufacturing aspects of insulation material in general. Observing the overall appearance of the insulation material in the images in Exhibit 1004 as compared to the claimed design, we do not see the same distinct contrast between the colors and hues that accounts for the “a cloud-like appearance with variations in a swirl pattern” as the proper claim construction requires. *See* Section IV.B.

Although Knauf, relying on its declarant, Professor Rake, argues that the colors in the JM 1997 Brochure “are not the same as shown in the ‘670 patent photograph,” we disagree. We determined, above, “that color and hue are elements of the claimed design and constrained, as is the nature of a design patent, by the single color photograph as filed.” Section IV.B. Observing the images side-by-side, we observe that there is little difference in the brown color between the images, and also discern little, if any, difference in the cream color between the images, to the extent a cream color is discernible in the prior art. Our observation is more in accord with Johns Manville’s position that “the JM 1997 Brochure . . . possesses a color scheme that is nearly, if not entirely, identical to the ‘brown and cream’ color scheme depicted in the ‘670 patent drawing.” Pet. 42. The colors appear similar, however we do not agree that the “color scheme,” as that term is directed to the contrasting cloud-like and swirling arrangement of the colors in the ‘670 patent, is the same or even particularly similar. For example the relative area, or aggregate, of brown color in the claimed design appears roughly equal to the area, or aggregate, of cream color. *See Ex. 1001, Fig.* The JM 1997 Brochure has significantly more area or aggregate of brown and to the extent a cream color is discernable, a contrast is very slight and difficult to distinguish. *See Ex. 1004, 5.*

Johns Manville has not directed us to any substantive testimony or evidence to support its position with respect to the similarity of the specific brown and cream colors between the ‘670 patent and the JM 1997 Brochure. However, we find it self-evident that the colors are visually similar when observing the side-by-side images, so that our finding as to similarity in

color reasonably needs no additional corroborating testimony or evidence apart from the images themselves.

With respect to a “waffle pattern,” we agree with Johns Manville’s assertion that a “waffle pattern can be seen imprinted on the surface of the cured fiberglass product in the below magnified segment of the JM 1997 Brochure.” However, observing the design as a whole we find that the “waffle pattern” has little visual influence on the overall appearance of the claimed design. The “waffle pattern” is not easily discernable and apparently an artifact of the manufacturing process of insulation, thus, to the extent we have included this as an element of the claimed invention it’s contribution to the overall appearance of the design itself, or in comparison with the prior art, is minimal and carries little weight in our analysis of whether JM 1997 is an appropriate primary reference.

For the remaining elements of the claim, namely “a variation of distinct hues” as required under our claim construction, Johns Manville relies on the secondary references. *See* Pet. 35–44.

Considering our analysis, above, we find that the main similarity between JM 1997 Brochure and the claimed design is the brown color visually evident in both insulation designs. Even giving some weight to the “waffle pattern” similarity, we are not persuaded by our assessment of the overall appearance of the design and the applied prior art reference, that the brown and cream colors and hues in the JM 1997 Brochure present to an observer the same color “scheme” and distinctive contrast that provides the visually apparent swirling cloud-like appearance of the claimed insulation design. The claimed design is embodied not in color alone, but in the interplay and contrasting nature of the distinct colors and hues which are

discerned by the viewer as a sharp division between the colors or hues. And, it is this sharp contrast or division and the random nature of the arrangement which expresses in the claimed design its cloud-like appearance and swirl pattern.

It is accurate that both designs are for “insulation material.” *See* Ex. 1001, Ex. 1004. It is not enough, however, that the reference is understood by one of ordinary skill to be the same field of art. *See In re Rosen*, 673 F.2d 388, 391 (CCPA 1982), *see also Apple*, 678 F.3d at 1332. Also, where similarity of color is the only other significant related element in the overall visual comparison between the claimed design and JM 1997 Brochure, we are not persuaded that JM 1997 Brochure constitutes “a single reference that creates ‘basically the same’ visual impression” as the claimed design. Comparing the overall appearances of JM 1997 Brochure and the claimed design under the proper claim construction, we are not persuaded that the insulation material shown in JM 1997 Brochure creates “basically the same” visual impression as the claimed design. *High Point Design*, 730 F.3d at 1312 (quoting *Durling*, 101 F.3d at 103).

For the same reasons, the insulation depicted in the JM 2000 Brochure is relatively consistent in brown color with no definitive separation between adjacent brown and cream colors or definable color contrast. *See* Ex. 1005, 3. The overall appearance of the insulation material depicted in the ’670 patent is, on the contrary, a swirling cloud-like contrast in distinct colors, or hues, including brown and cream. We are not persuaded that either the JM 1997 or JM 2000 Brochures create a sufficiently similar overall visual impression necessary to be a primary reference. *Id.*

C. Alleged Anticipation – JM 1997 Brochure or JM 2000 Brochure

As discussed above in Section V.B., observing the prior art references as a whole we do not perceive a substantial disparity between the images relied upon by Johns Manville for anticipation from the JM 1997 and JM 2000 Brochures, apart from a minimal color difference. We therefore address the anticipation issues in this proceeding in the context of the JM 1997 Brochure.

Johns Manville argues that the JM 1997 Brochure anticipates the claimed design because it “shows brown and cream color insulation as shown in the drawing of the ’670 patent. Any ordinary observer can confirm this.” Pet. 51. Knauf argues to the contrary that “a simple visual comparison demonstrates that “an ordinary observer . . . would not consider these two designs to be ‘substantially the same’ nor be induced ‘to purchase one supposing it to be the other.’” PO Resp. 56 (citing *Int’l Seaway*, 589 F.3d at 1239).

We provide, below, a comparison of the image from JM 1997 in comparison to the claimed design.



The sole claim of the '670 patent is shown, above, on the left in side-by-side comparison to the JM 1997 Brochure image, on the right. Ex. 3001, Ex. 1004, 5.

Having determined the proper claim construction and understanding the appropriate definition of an ordinary observer, the question becomes whether an ordinary observer, or purchaser of insulation material, for example a homeowner or construction contractor, would be deceived into thinking that the insulation depicted by the image in the JM 1997 Brochure was the same as that shown in the claimed insulation design. *See Richardson v. Stanley Works, Inc.*, 597 F.3d 1288, 1295 (Fed. Cir. 2010) *see also Int'l Seaway*, 589 F.3d at 1240 (Using the ordinary observer test “we will continue our well-established practice of maintaining identical tests for infringement and anticipation.”).

We determine that an ordinary observer would not purchase one of the insulation designs, thinking it to be the other. Most noticeably, observing the designs together, we are persuaded that a homeowner and a construction contractor would perceive in the claimed design a visually distinct separation or contrast between the brown and cream colors that is not apparent in the JM 1997 Brochure. Considering the side-by-side images, above, we observe that the colors themselves, as compared among the prior art references and the claimed design, are similar, e.g. being reasonably described as “brown and cream.” Our comparison of the overall appearance of the images, however, best comports with the assessment of Knauf’s declarant, Professor Rake, who states that

[t]he '670 patent design is much higher contrast – with brighter cream color areas contrasting sharply with the darker brown areas. In many areas of the design, light cream colored areas are

directly adjacent to dark brown areas, creating very strong contrasts. The Exhibit 1004 image, on the other hand, is a much “flatter” design - the light cream areas are not as light as the ‘670 patent design, and the darker brown areas are not as dark, so the overall image is much lower contrast. Also, the transition between light areas and dark areas is more gradual, resulting in a softer, “gradient” look.

Exhibit 2012 ¶¶ 40, 45. Also, we are persuaded by Professor Rake’s statement that the insulation shown in the JM 1997 Brochure

does not have a cloud-like appearance - it looks more like mud or clay than clouds. There is no indication of a variation of a swirl pattern in the Exhibit 1004 reference. There are soft transitional changes in color apparent on the surface, but these changes lack a circular or spiral motion associated with a swirl pattern.

Id. at ¶ 46. Professor Rake’s explanation is a more expressive description, and consistent with our observation that the JM 1997 Brochure appears to have more area, or aggregate, of brown and to the extent a cream color is discernable, any contrast is very slight and difficult to distinguish.

In addition, Johns Manville provides little, if any evidence apart from attorney argument, that an ordinary observer would consider these designs to be the same. *See* Pet. 51–52, *and see* Pet. Reply (“Dr. Bide . . . has not offered any opinion as to whether Exhibit 1004 or Exhibit 1005 anticipates the ‘670 Patent.”)

Also, Professor Rake testifies that, in addition to his professional training, he qualifies as an ordinary observer because he has purchased and installed insulation in his own home. Ex. 1032, 55:13–56:5. We find Professor Rake’s testimony consistent and in accord with our definition of an ordinary observer including a do-it-yourself homeowner as discussed above. *See* Section IV.B. Based on Professor Rake’s testimony and our

own observations in comparing the overall appearances of the JM 1997 Brochure to the '670 patent claim, we determine that an ordinary observer would perceive the insulation material, as shown in JM 1997, as materially different from the claimed contrasting brown and cream colors forming the swirling, cloud-like appearance of the insulation depicted in the claimed design. *See Int'l Seaway* 589 F.3d at 1243 (“The mandated overall comparison is a comparison taking into account significant differences between the two designs, not minor or trivial differences that necessarily exist between any two designs that are not exact copies of one another.”). Giving weight to the testimony of Professor Rake, we are persuaded that an ordinary purchaser would appreciate a significant difference between the overall appearances of the JM 1997 and JM 2000 Brochures and the claimed design, and would not be deceived into thinking one was the other, which thus precludes a finding of anticipation.

VI. CONCLUSION

Johns Manville fails to establish by a preponderance of the evidence that the sole claim of the '670 patent is unpatentable on the basis of any of the instituted grounds.

VII. ORDER

For the reasons given, it is
ORDERED that the Petition is DENIED as to the sole claim of the '670 patent;
FURTHER ORDERED that Knauf's Motion to Terminate under 35 U.S.C. § 315(e)(1) is DENIED; and

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FURTHER ORDERED that Knauf's Motion to Exclude Evidence is DENIED as to Exhibits 1004, 1005, 1010, 1017, 1018, 1028, 1030, and 1031.

This is a Final Written Decision under 35 U.S.C. § 318(a). 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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