

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 IPR2015-01453
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 12 (“Decision to Institute” or “Inst. Dec.”).

After institution of trial, Patent Owner Knauf Insulation, Inc. (the assignee of record) and Knauf Insulation SPRL (“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 22. Johns Manville timely filed a Reply. Paper 31.

A hearing for IPR2015-01453 was held on September 20, 2016. The transcript of the hearing has been entered into the record. Paper 48 (“Tr.”).

We have jurisdiction under 35 U.S.C. § 6. This final written decision is issued pursuant to 35 U.S.C. § 318(a).

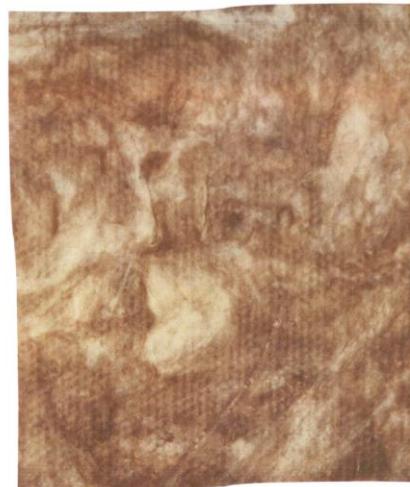
Based on the complete record now before us, we determine that Johns Manville has not shown by a preponderance of the evidence that the sole claim of the ’670 patent is unpatentable.

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. The ’670 patent is also challenged by Johns Manville in IPR2016-00130.

B. The '670 Patent and Claim

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; Prelim. Resp. 1–2. 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.



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.¹ Ex. 1002, (Reply to Off. Act. Aug. 6, 2010, 4).

¹ 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, 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.

C. The Instituted Grounds of Unpatentability

We instituted a trial on the following specific grounds:

References	Basis
Owens Corning PROPINK Smartperm™ Vapor Retarder ²	§ 102
Johns Manville SG Series Spin-Glas® & Range Spin-Glas Brochure ³ in view of OC PROPINK, Johns Manville Microlite® AA Blankets Brochure ⁴ , and the Knauf Crown Floor Slab reference ⁵ .	§ 103
Soundproofing Your Walls, The Family Handyman Magazine ⁶ in view of OC PROPINK, JM Microlite, and Knauf Crown Floor Slab.	§ 103
Knauf: Timber Frame External Walls: Non-Residential Brochure ⁷ in view of OC PROPINK, JM Microlite, and Knauf Crown Floor Slab.	§ 103
Johns Manville SG Series Spin-Glas® & Range Spin-Glas Brochure in view of JM Microlite.	§ 103
Soundproofing Your Walls, The Family Handyman Magazine in view of JM Microlite.	§ 103
Knauf: Timber Frame External Walls: Non-Residential Brochure in view of JM Microlite.	§ 103

² Ex. 1003, Owens Corning, *PROPINK Smartperm™ Vapor Retarder* (2004) (“OC PROPINK”).

³ Ex. 1004, Johns Manville, *SG Series Spin-Glas® & Range Spin Glas* (1997) (“JM Spin Glas”).

⁴ Ex. 1005, Johns Manville, *Microlite® AA Blankets*, (2002) (“JM Microlite”).

⁵ Ex. 1006 Knauf, *Crown Floor Slab*, (2006) (“Knauf Crown Floor Slab”).

⁶ Ex. 1007, Wentz, Family Handyman, *Soundproofing Your Walls*, (1998) (“Soundproofing”).

⁷ Ex. 1008 Knauf: *Timber Frame External Walls: Non-Residential*, (2005) (“Knauf Timber Frame”).

Johns Manville supports their challenges with the declarations of Dr. Martin J. Bide (Ex. 1012), Mr. Mark A. Granger (Ex. 1014), Ms. Teresa K. O'Brien (Ex. 1015), Ms. Anne N. Barker (Ex. 1016), Mr. Michael Fay (Ex. 1017, Ex. 1020) and the affidavit of Mr. Christopher Butler (Ex. 1024). Pet. 16, 24, 32, and Appendix – List of Exhibits.

II. OBJECTIONS AND MOTIONS TO EXCLUDE EVIDENCE

Because Knauf raises the issue of whether certain references are prior art in its Objections and Motions to Exclude Evidence, and because this is a threshold issue, we address this Motion before turning to the other issues before us. Knauf objects to, and moves to exclude the testimony of Anne Barker (Exhibit 1016), Christopher Butler (Exhibit 1028), and Michael Fay (Exhibit 1017 and Exhibit 1020), as well as James Worden's cross-examination (Exhibit 1024). Paper 14, Paper 41. Knauf asserts that Johns Manville has improperly relied upon these witnesses' testimony to support the proposition that Exhibits 1003–1006 and Exhibits 1008–1010 are prior art to the '670 patent. Specifically, Knauf argues that "Ms. Barker, Mr. Butler, Mr. Fay, and Mr. Worden lack personal knowledge to support their testimony concerning Exhibits 1003–1006 and 1008–1010—but, instead, have relied entirely on hearsay." Paper 41, 2. Knauf respectively asserts that Exhibits 1003–1006 and 1008–1010 are not properly authenticated as prior art and contain inadmissible hearsay. *Id.* at 6.

Exhibit 1003 (OC PROPINK), Exhibits 1017, 1020 (1st and 2nd Declarations of Michael Fay), Exhibit 1024 (Transcript of Deposition of James Worden)

In conjunction with their Motion to Exclude Exhibits 1003, 1017, 1020, and 1024, Knauf argues that Johns Manville has not provided sufficient evidence that OC PROPINK (Exhibit 1003), relied upon in several of the asserted grounds, is actually prior art to the '670 patent. PO Resp.

10–11. Knauf makes three specific arguments in this regard: (1) that Johns Manville has provided no evidence as to the source of Exhibit 1003; (2) that there is no evidence that Exhibit 1003 was distributed, displayed, or publically available; and (3) that there is no evidence that Exhibit 1003 existed prior to 2015. *Id.* at 12–17. We address, in conjunction with Knauf’s Motion to Exclude, each of these arguments below in reverse order.

Michael Fay is a Product Development Manager employed by Johns Manville. Ex. 1017 ¶ 1. Knauf argues that Mr. Fay’s testimony, stating that OC PROPINK was in his possession in March 2005 when he allegedly saved it to his work computer, is insufficient to show existence of the reference because it is based on a review of the “document properties” of the PDF document itself and not on personal knowledge. PO Resp. 14. Knauf further asserts that OC PROPINK is inadmissible hearsay to the extent Johns Manville or Mr. Fay relies upon any date in OC PROPINK itself, to prove the existence of the document in 2005. *Id.* at 15 (citing Paper 14).

Johns Manville, on the other hand, asserts that Mr. Fay “was ‘aware of and actively investigating the Owens Corning PROPINK Smartperm™ Vapor Retarder product described in Exhibit 1003’ at the time he saved Exhibit 1003 to his work computer on March 28, 2005.” Paper 43 (citing Exhibit 1020 at ¶¶ 3–5); *see* Pet. Reply 2. For the reasons set forth below, we are persuaded that Exhibits 1017, 1020, and 1024 are not hearsay, and that Johns Manville has provided evidence sufficient to show that OC PROPINK is what Johns Manville contends it to be: Owens Corning promotional material and further, that a preponderance of the evidence supports that OC PROPINK was publically accessible in 2005.

Mr. Fay provided two declarations in this proceeding, Exhibits 1017 and 1020. Mr. Fay testified in his first declaration that “[t]he document properties of a PDF of this brochure indicate that the document was created on August 26, 2004 and that I saved this document to my computer on March 28, 2005.” Mr. Fay’s second declaration provides additional testimony based on his email correspondence, dated March 29, 2005, sent to work colleagues, indicating that he was actively investigating the insulation product “OC SMARTPERM” shown in the OC PROPINK document itself. Ex. 1020 ¶¶ 2–3. Also, in his second declaration Mr. Fay alleges that the U.S. Trademark Registration for “PROPINK SMARTPERM” indicates first use of the commercial OC PROPINK product at least as early as May 18, 2004. *Id.* at ¶ 6 (citing Ex. 1023). Mr. Fay further testifies that

[b]ased on my 37 years of industry experience, Owens Corning creation of a public marketing brochure (Exhibit 1003) in August 2004 – a few months after commercial release of the product – is consistent with typical industry practice.

Id.

Knauf argues to the contrary that “Mr. Fay admitted that he had no *personal knowledge* of when Exhibit 1003 was created or when he saved it to his computer.” PO Resp. 14 (citing Ex. 2007, 18:1–14, 25:2–4) (emphasis added). We are not persuaded, however, that Knauf’s position is entirely accurate. Mr. Fay may not specifically remember saving the document on March 28, 2005, but, he states that he remembers obtaining the OC PROPINK document “about 2005 . . . off the internet” and relies on PDF data from the document on his computer to recall the specific date. *See* Ex. 2007, 22:14–19, 28:8–12. We are not persuaded that he has *no* knowledge of when it was saved to his computer. Mr. Fay may not remember

specifically what he did on that day, March 28, 2005, however, he states that he recollects the document itself from the asserted PDF document properties of OC PROPINK and related emails to colleagues that he saved it to his computer that day, as we discuss below. *Id.* at ¶ 6. Knauf argues that this is inadmissible hearsay. PO Resp. 15–16, Paper 41, 5. We disagree. Mr. Fay’s recollections of these activities in 2005, and specifically March 28, 2005, are from his declarations and sworn deposition testimony made during this trial. Mr. Fay is a witness who was subject to cross-examination in two depositions during this trial and his testimony is not an out of court statement. Fed. R. Evid. 801(c), Exs. 2007, 2017. Mr. Fay’s testimony is based, at least in part, on a recorded recollection of the OC PROPINK document itself and the related PDF data he reviewed for purposes of this trial. Fed. R. Evid. 803(5)(a). Moreover, the PDF data is not a “statement” made by a person. *See* Fed. R. Evid. 801(a) *cf. United States v. Washington*, 498 F.3d 225, 231 (4th Cir. 2007) (“[R]aw data generated by the machines do not constitute ‘statements,’ and the machines are not ‘declarants.’ As such, no out-of-court statement implicating the Confrontation Clause was admitted into evidence through the testimony of Dr. Levine.”).

In addition, Mr. Fay substantiates his recollections with an email dated March 29, 2005 sent to co-workers the day after he apparently saved the promotional material to his computer, relating his investigation into the product shown in the OC PROPINK advertisement. Ex. 1020 ¶¶ 2–3. The timing of the email explaining his investigation corroborates persuasively his saving of OC PROPINK to his computer in March 2005 and is further consistent with Owens Corning’s assertions of first sale of the product in May 2004. *See* Ex. 1023. In line with the commercial availability of the

product and OC PROPINK being on, its face, Owens Corning product promotional material copyright dated 2004, it is a reasonable conclusion that in undertaking his job investigating competitors' products, Mr. Fay would have searched the internet, located and downloaded the OC PROPINK document in 2005.

We do not find it unreasonable that over a decade later, as Knauf argues, Mr. Fay cannot independently remember exactly when he downloaded the document. *See* PO Resp. 14 (citing Ex. 18:1–14, 25:2–4). We are persuaded that the genuineness of Mr. Fay's testimony is supported by his consistent statements under oath that do not attempt to reconstruct or reimagine what specific actions he took in March 2005.

Q: Do you have any recollection of when you first obtained that electronic copy?

A: About 2005.

Q: How did you obtain that electronic copy of the Owens Corning advertising literature?

A: I believe I obtained it off the Internet.

Ex. 2007, 22.

Mr. Fay's testimony aligns with that of Knauf's declarant, Mr. James Worden, who was employed as a marketing and communications manager by Owens Corning for almost 30 years, retiring in 2007. Ex. 2008 ¶ 1, Ex. 2009. Mr. Worden verified during his deposition that the 2004 copyright date printed on the OC PROPINK promotional material was accurate.

Q: Do you have any reason to doubt that's an accurate copyright date, in other words, that this was copyrighted and generated in 20[0]4

A: If it says 2004, I believe it was 2004.

Q: So it says, 2004 copyright, you have no reason to doubt the accuracy of that?

A: I have no reason to doubt the accuracy of that.

Ex. 1024, 31:4–11. Mr. Worden further indicated that promotional materials such as OC PROPINK, bearing a 2004 copyright date, would normally have been publically disseminated in that timeframe:

Q: Do you have any reason to doubt that this piece of promotional material relating to PROPINK, SmartPerm Vapor Retarder for moisture control, was disseminated to the public sometime in 2004?

A: I would have to assume . . . I would believe it was in that time period if that's the date on it.

Id. at 32:20–33:4.

Based on this evidence, we determine that the testimony of at least Mr. Fay and Mr. Worden along with the characteristics and circumstances of the document itself are evidence sufficient to establish the authenticity of Exhibit 1003 – OC PROPINK, as a prior art reference. Knauf's assertion in its Motion to Exclude, that "Mr. Worden had no personal knowledge of Exhibit 1003," (Paper 40, 6) is also not persuasive because, as discussed above, Mr. Worden found the OC PROPINK promotional material entirely consistent, in his experience, with Owens Corning's advertising and product promotion practices. Ex. 1024, 31:4–11. When asked if Owens Corning produced product literature such as OC PROPINK for products sold to the public, Mr. Worden replied:

we had literature for everything, yes, multiple pieces that some targeted to certain audiences to make sure we were providing them with appropriate features and benefits that would be important to them, whether they were a contractor or homeowner.

Id. at 33:8–13. Mr. Worden’s cross-examination testimony, as it is directed to his experience and knowledge as a marketing communication manager for Owens Corning, is neither hearsay, because it is not an out of court statement. Neither is Mr. Worden’s testimony inadmissible hearsay under at least Fed. R. Evid. 803(5)–(6) as it relates to evidence of regularly conducted business matters and promotional publications under Fed. R. Evid. 803(17), with which he was generally familiar in the course of his marketing and communications duties for Owens Corning.

We are persuaded by the evidence discussed above that Johns Manville has shown by a preponderance of the evidence that OC PROPINK promotional material would have been publically available in at least 2005 and that Mr. Fay, as part of his investigative research into the products promoted in this document, downloaded OC PROPINK on March 28, 2005. Accordingly, we determine that OC PROPINK qualifies as a publically disseminated printed publication and is prior art to the ’670 patent. Knauf’s Motion to Exclude Exhibits 1003, 1017, 1020, and 1024 is DENIED.

Exhibit 1004 (JM Spin-Glas) and Exhibit 1008 (Knauf Timber Frame)

As discussed in detail below, we are not persuaded that Johns Manville has, on this record, provided persuasive evidence that Exhibit 1004 and Exhibit 1008 are primary references sufficient to support a determination of obviousness. Indeed, Johns Manville states that it no longer relies on Exhibit 1004 in these proceedings. *See* Paper 43, 3, n.1. Procedurally, Exhibit 1004 is part of an instituted ground and here, in our Final Written Decision, we have considered all the evidence for each ground upon which we instituted. Because we determine that they do not qualify as primary references, we need not determine whether or not these documents

should be excluded. Knauf's Motion to Exclude Exhibits 1004 and 1008 is dismissed as moot.

Exhibit 1005 (JM Microlite), Exhibit 1016 (Barker Declaration) and Exhibit 1028 (Butler Declaration)

Knauf moves to exclude Exhibit 1005 based on lack of authentication and improper hearsay. Paper 41, 6–9. Knauf points out that the only witnesses that Johns Manville produced in this proceeding as to the public accessibility of JM Microlite, Ms. Barker and Mr. Butler, do not have personal knowledge of the document, but obtained the file, referenced in this proceeding as Exhibit 1005, from the Wayback Machine.⁸ *Id.* at 7. Essentially, 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. *Id.* at 3–4 (citing Ex. 2006, 29:10–22; Ex. 2016, 24:11–25:1). Johns Manville asserts that “personal knowledge” of the original document is not required for authentication purposes. Paper 43, 4. Johns Manville contends that JM Microlite is essentially, by its contents a self-authenticating business record, and that owing to its public availability on the internet as confirmed by the Wayback Machine and the testimony of Ms. Barker and Mr. Butler, this

⁸ The Wayback Machine is a service provided by The Internet Archive for searching and viewing archived digital internet web pages. Ex. 1028 ¶ 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.

circumstantial evidence is sufficient. *Id.* at 5 (citing *SAP Am., Inc. v. Arunachalam*, Case IPR2013-00195 (PTAB Sept. 18, 2014) (Paper 60 at 22)).

Knauf does not expressly deny that JM Microlite was publicly available, but contends that Exhibit 1005 is not confirmed sufficiently as a true copy of what was originally publically available. *See* Paper 41, 8. We find that the evidence in this proceeding of public availability of Exhibit 1005 weighs in favor of Johns Manville. With respect to the veracity of Exhibit 1005, we have not been apprised of any discrepancies between any copies, reproductions, or downloaded files of JM Microlite and, Knauf fails to offer any affirmative evidence that the document is a fabrication or an alteration of the original. *See* Paper 41, 7–9; *compare* Ex. 1005 with Ex. 1028, 7–9 (comparing the image of the four Microlite AA Blankets in each Exhibit reveals little if any color or other visual discrepancies) Knauf’s forensic specialist, Greg Freemyer, states in his declaration that the internal metadata of Exhibit 1005 “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. Freemyer, 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. *See id.* Further to Mr. Freemyer’s testimony regarding the Wayback Machine, whether or not 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.* at ¶¶ 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 or that the archived copy of the file is somehow compromised as compared to the original file. Thus, Knauf does not persuasively refute Johns Manville’s evidence that JM Microlite is an accurate reproduction of the technical data sheet authored and published by Johns Manville, as evidenced by its internal contents and public availability.

With respect to Knauf’s assertion that reliance by Ms. Barker in her declaration (Exhibit 1016) on the March 2002 date printed on the document itself is inadmissible hearsay under Fed. R. Evid. 801, 802, we disagree. *See* Paper 41, 8; Paper 43, 7–8. Exhibit 1005 is a technical data sheet that on its face appears as promotional material for insulation products that is reasonably understood to have been offered for sale to the public by Johns Manville. *See* Ex. 1005, 2 (The data sheet includes warranty information for customers, stating that “[a]ll Johns Manville products are sold subject to Johns Manville’s Limited Warranty.”). The date printed on JM Microlite is March 2002, and both Ms. Barker’s and Mr. Butler’s declarations consistently indicate that the file presented in this proceeding as Exhibit 1005 was archived in 2006, more than one year prior to the filing of the ’670 patent. Ex. 1016 ¶ 3; Ex. 1028, 7. These dates are all probative of whether JM Microlite as set forth in Exhibit 1005 was publically available prior to the ’670 patent filing date. Knauf has provided no persuasive evidence that either the March 2002 date, or the 2006 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). Thus, we determine on the evidence in this proceeding that Exhibits 1005, 1016, and 1018 are neither hearsay 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).

Johns Manville has established sufficiently the authenticity of JM Microlite under Fed. R. Evid. 901(b)(4) and that Exhibit 1005 and Ms. Barker's related testimony (Exhibit 1016) and Mr. Butler's testimony (Exhibit 1028) are neither hearsay nor inadmissible hearsay. Knauf's Motion to Exclude Exhibits 1005, 1016 and 1028 is DENIED.

Exhibit 1006 (Knauf Crown Floor Slab)

Knauf also moves to exclude Exhibit 1006 based on lack of authentication and improper hearsay. Paper 14, 4; Paper 41, 6–9. Knauf's arguments and evidence relating to exclusion of Knauf Crown Floor Slab, promotional material for glass mineral wool insulation manufactured by Knauf, were grouped together in their Motion to Exclude with Exhibits 1005, 1016, and 1028 discussed above. *See* Paper 41, 6–9. Knauf makes essentially the same arguments for Exhibit 1006, as those asserted with respect to Exhibit 1005 *supra*. *See id.* Knauf Crown Floor Slab has a printing date on the document of February 2006, and Ms. Barker and Mr. Butler's testimony correspondingly indicates that the file was archived January 29, 2007, more than one year prior to filing of the '670 patent. Ex. 1016, ¶ 4; Ex. 1028, 10. We find, for similar reasons as discussed above with respect to Exhibit 1005, that Johns Manville has established sufficiently

the authenticity of Knauf Crown Floor Slab under Fed. R. Evid. 901(b)(4) and that Knauf Crown Floor Slab and Ms. Barker's related testimony (Exhibit 1016) and Mr. Butler's testimony (Exhibit 1028) are not inadmissible hearsay. Knauf's Motion to Exclude Exhibits 1006, 1016, and 1028 is DENIED.

Exhibit 1009 – OC 2006 Report, and Exhibit 1010 – OC 2007 Report

In our Decision to Institute we exercised our discretion not to institute *inter partes* review based on these references. Inst. Dec. 31. Because these references are not part of any instituted grounds, we need not determine, in this proceeding, whether or not these exhibits should be excluded. Knauf's Motion to Exclude Exhibits 1009 and 1010 is dismissed as moot.

III. 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 “that color is an element of the claimed design; this element includes colors that sufficiently impart or convey a variation of distinct hues, but is not limited to ‘brown and cream.’” Inst. Dec. 8, 9. 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 11.

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). For example, there is a random swirl pattern evident in both the color and black and white images of the claimed design shown above. We find the term “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. 16 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” consistently 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 explained 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, but is not limited to ‘brown and cream.’” Inst. Dec. 9. Knauf disagrees, and argues that the prosecution history uses the term “hue” to mean “color.” PO Reply 30 (citing Ex. 2001, 2; Ex. 2010 ¶ 29). This is persuasive, up to a point. Although we agree that “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 Reply 30 (“[I]n distinguishing over the prior art, Knauf Insulation used the term ‘hue’ consistent with its ordinary meaning, i.e., ‘color.’”). 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 a specific term, 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* Ex. 1002, 5–6. In the passage above “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.” In their explanation to the Examiner, Knauf argued that “brown” and “cream” were two distinct “hues,” and the prior art (Foltz) only showed a single hue, e.g. yellow. *Id.* This reasonably leaves open the possibility 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 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 “variations 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. 28 (emphasis added). This

explanation based on the prosecution history was directed towards explaining the type of color variation shown in the Foltz prior art. PO Reply 32–33. 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 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). 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 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, ~~but is not limited to~~ 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. 28. 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 marbleized throughout with at least a brown color, a chocolate color, a coffee color, an almond color, and a beige color; and

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

Id. at 28–29.

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 34. 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. Knauf argues that “to dismiss or ignore those colors would dismiss or ignore an integral part of the claimed design.” *Id.* at 35. 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. 39–40 (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 39. 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, however, does not sufficiently explain why or how such words make the description more precise. *See id.* at 40 ("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 to us that observers as a general matter are familiar with, or have observed a sand-storm, or "haboob." *See* PO Resp. 40. 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 the analysis below is, 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.”

IV. ANALYSIS

A. Principles of Law

1. 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 1233, 1240 (Fed. Cir. 2009) (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).

2. *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 v. Spectrum Furniture Co.*, 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*, 589 F.3d at 1241.

3. *The Ordinary Observer*

Knauf asserts that the ordinary observer 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. 5 (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.” Pet. Reply 9. 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. Ex. 2008 ¶¶ 1–4. Mr. Worden testified that in his experience ordinary purchasers of insulation included homeowners and construction contractors. *Id.* at ¶¶ 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. 22–23 (citing Ex. 1012 ¶ 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 the more persuasive 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 Mr. Worden’s testimony that an ordinary designer of insulation materials may consult “a pigment specialist and/or binder chemist” regarding issues of color. Ex. 2008 ¶ 17.

The designer of ordinary skill in the art for insulation material is therefore a product manager in the insulation manufacturing industry who

has a technical (e.g. engineering) background and who, on issues relating to color, may consult with a person such as a pigment specialist and/or binder chemist having background and training pertaining to color.

B. Alleged Anticipation by OC PROPINK (Ex. 1003)

Johns Manville argues that OC PROPINK anticipates the claimed design because it “discloses the same overall visual appearance as the claimed design of the ’670 patent.” Pet. 24. In its Petition, Johns Manville provides a visual comparison of OC PROPINK and the sole figure depicting the insulation material claimed in the ’670 patent, which we reproduce below:

Jackson '670



OC PROPINK



The sole color figure of the '670 patent is shown on top, in comparison to OC PROPINK shown below. *Id.* at 25.

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 shown in OC PROPINK was the same as the patented insulation material. *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 a material color difference between at least the brown and cream color of the claimed design and the pink color shown in OC PROPINK. Our finding is supported by Knauf’s declarant, Professor Schloss, who states that pink and brown are two of eleven basic color terms and that “the colors in the design patent image would not be described as including pinks or purples by an ordinary observer or ordinary designer.” Ex. 2010 ¶¶ 17, 19. Knauf’s declarant, Professor Rake, concurs that in the image “the colors described are, at a minimum, “brown and cream.” Ex. 2012 ¶ 17. Indeed, during his deposition Johns Manville’s declarant, Dr. Bide, agreed that the color pink was not the same as the colors shown in the claimed design.

Q: So you understand that “anticipation” means the same as what the claim covers?

A: Yes.

Q: And so turning to Paragraph 40 of your declaration, at Page 31, you would be willing to have published in a peer-reviewed article that, in your professional opinion, this Pink Owens Corning fiberglass in Exhibit 1003 is the same as the colors that are in the design patent?

...

A: No.

Q: The colors are quite different, aren’t they?

A: Yes.

Ex. 2003, 24–25. Also, Dr. Bide and Professor Rake both testified in their respective depositions that, in addition to their professional training, they also qualify as an ordinary observer because they have purchased and installed insulation in their own homes. Ex. 2003, 20:12-21:6; Ex. 1026, 55:13–56:5. We find the declarants’ testimony from both parties essentially consistent and in accord with the parties’ definitions of an ordinary observer being a do-it-yourself homeowner as discussed above. Based on this testimony we determine that an ordinary observer would perceive the pink color of the insulation material, as shown in Owens Corning PROPINK, as materially different from the colors, including brown and cream, 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 testimony of the declarants from both parties, we are persuaded that an ordinary purchaser would appreciate a significant color difference between the overall appearances of the designs, and would not be deceived into thinking one was the other, which thus precludes a finding of anticipation.

C. Alleged Obviousness over Johns Manville SG Series Spin-Glas® & Range Spin-Glas Brochure in view of OC PROPINK, JM Microlite and Knauf Crown Floor Slab

For this ground, Johns Manville relies on the JM Spin-Glas reference as the primary reference, shown below in comparison with the claimed design, and asserts that JM Spin-Glas “discloses the same overall visual appearance as the claimed design of the ’670 patent,” Pet. 31.



The sole color figure of the '670 patent is shown, above, on the left in side-by-side comparison to JM Spin-Glas, also shown in color, on the right. *Id.* at 32. We determined, above, that the correct visual impression of the claimed 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 that the claimed design includes a 'waffle pattern' as shown in the sole figure.

Section II.B, *supra*. Johns Manville relies on the testimony of Dr. Bide, who states that “[b]oth designs are insulation material, both have a cloud-like appearance, and both have variations in a swirl pattern.” Pet. 33 (citing Ex. 1012 ¶ 41).

We agree that JM Spin-Glas depicts “insulation material” as recited in the ’670 design patent because the reference specifically titles the above image on the right as “fiber glass insulations.” Ex. 1004. The JM Spin-Glas image, however, shows several rolls of insulation from a relatively distant perspective, as compared to the claimed design. *Compare* Ex. 1001, *with* Ex. 1004. The details of JM Spin-Glas designs are not so clearly discernable in this evidence as to be easily compared to the ’670 patent. Dr. Bide does not explain in his declaration any level of comparative detail as to how he determines that the appearance of JM Spin-Glas as a whole has a “cloud-like appearance” and “variations in a swirl pattern” as in the claimed design. *See* Ex. 1012 ¶ 41. We are not persuaded by Dr. Bide’s testimony because the more distant perspective of the JM Spin-Glas insulation does not present the same level of detail as the claimed design. *Id.* Dr. Bide also does not address this noteworthy difference in the images, or explain what specific aspects of JM Spin-Glas he relies upon to draw the conclusion as to any visual similarity between the insulation designs for these particular features. *Id.* We agree with Knauf’s declarant, Professor Rake, that in JM Spin-Glas “any mixture of the colors is less pronounced than the marbleizing of the ’670 patent.”⁹ Ex. 2012 ¶ 44. Observing JM Spin-Glas for ourselves, we note that the variable lighting and distant perspective of the image incur ambiguity and provide significantly less detail than the claimed design. Thus, we cannot visually confirm that there is sufficient contrast in color to

⁹ Although we did not incorporate Knauf’s descriptive term “marbleizing” into the proper claim construction, we understand generally the term “marbleizing” to infer a visual contrast between colors contextually similar to “cloud-like” and “swirl pattern.”

provide “a cloud-like appearance with variations in a swirl pattern” as the claim construction necessitates.

We determined that color is an aspect of the overall claimed design. *See* Ex. 1002, 10–14 (During prosecution of the application that became the ’670 patent the Examiner accepted Applicant’s “Petition for Color Photograph.”). Knauf argues that the color of the JM Spin-Glas insulation is not brown, but “bluish red in color.” PO Resp. 47. Neither Johns Manville nor Dr. Bide assert that the insulation shown in JM Spin-Glas is, in fact, any particular color, e.g. brown. *See* Ex. 1012 ¶¶ 41–42; *see also* Pet. 33–34 (relying on Ex 1005, “JM Microlite Blankets” for the color brown.). Although we do not find Knauf’s attorney argument that JM Spin-Glas is “bluish red” particularly compelling based on our own observation, neither are we persuaded by any convincing evidence from Johns Manville that JM Spin-Glas is within the color range contemplated by the proper claim construction.

Based in part on these findings, we are also not persuaded that JM Spin-Glas exemplifies “a variation of distinct hues including brown and cream,” as called for under the proper claim construction. As discussed above, Dr. Bide does not address the substantial difference in distal perspective between the images above. Furthermore, keeping in mind this difference in perspective, we agree to an extent with Knauf’s assertion that “[a]n ordinary person, looking at the 2-dimensional photos in [Exhibit 1004] would comprehend light glare and shadows that appear.” PO Resp. 48. Even a cursory review of the image in JM Spin-Glas reveals distinctly visible shadow and light effects across the insulation materials pictured therein. *See* Ex. 1004. Because Dr. Bide’s spectrophotometer test for hue

angle in the JM Spin-Glas image does not account for such visually apparent light and shadow elements, we are not apprised by such a test of any persuasive evidence supporting the appearance in JM Spin-Glas of “distinct hues.”¹⁰ Ex. 1012 ¶ 42. Additionally, Johns Manville does not argue that JM Spin-Glas itself includes the color brown; rather, it apparently relies upon a secondary reference for the color brown. Given this, we are not persuaded that JM Spin-Glas depicts hues including brown and cream. Pet. 33 (citing Ex. 1012 ¶ 41, Ex. 1014 ¶¶ 6–10). Dr. Bide was also unable to visually detect a “waffle pattern” in JM Spin-Glas. *See* Ex. 1012 ¶ 43 (“As for the fourth possible claim element – “waffle pattern on the surface” – I understand and accept it to have been inherent or obvious as described previously.”).

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. Comparing the overall appearances of JM Spin-Glas and the claimed design under the

¹⁰ Dr. Bide measured hue angles on the sole color figure of the ’670 patent, as well as on laser color copies of each of the asserted prior art references in this proceeding, detecting the hues on the sampled images with a spectrophotometer. Ex. 1012 ¶¶ 29–49. 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. We do not, however, accord any weight to Dr. Bide’s spectrophotometer measurements in this proceeding because Johns Manville has not explained how Dr. Bide’s spectrophotometer analysis of hue angle measurements pertains to, or is even relevant, to an ordinary observer or purchaser of insulation material.

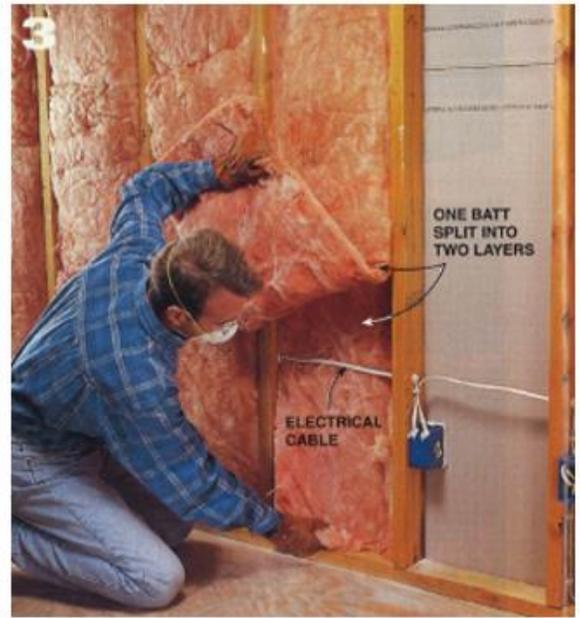
proper claim construction, however, we are not persuaded that the insulation material shown in JM Spin-Glas creates “basically the same” visual impression as the claimed design. *High Point Design*, 730 F.3d at 1312 (quoting *Durling*, 101 F.3d at 103). The insulation depicted in JM Spin-Glas, despite perspective and apparent glare and shadow effects, appears as a relatively consistent color with no definitive separation between adjacent colors or definable color contrast. The insulation material depicted in the ’670 patent is, on the contrary, a swirling variation in distinct colors, or hues, including brown and cream, which does not appear in the JM Spin-Glas insulation design. We are not persuaded that JM Spin-Glas creates a sufficiently similar overall visual impression necessary to be a primary reference.

D. Soundproofing Your Walls, The Family Handyman Magazine in view of OC PROPINK, JM Microlite, and Knauf Crown Floor Slab Soundproofing Your Walls

Johns Manville asserts several images from Soundproofing Your Walls (“Soundproofing”), shown below, as a primary reference, arguing “that the ’670 design and the Soundproofing images share many common visual features, such that they are substantially similar.” Pet. 40. We reproduce, below, the images captioned by Johns Manville as “Soundproofing I,” “Soundproofing II,” and “Soundproofing III” in comparison to the sole Figure of the ’670 patent. *Id.* at 39.



Sole Figure from '670 patent



Soundproofing III

Images of insulation material from Soundproofing Your Walls are shown above, on the right, in comparison to the sole Figure of insulation material from the '670 patent, on the left. Ex. 1007, 3–5.

Knauf disagrees that the images in Soundproofing Your Walls qualify as a primary reference and argues:

Soundproofing also has “significant differences” from the claim[ed] design. Ex. 2012, ¶ 43. It is “predominantly pink with some lighter pink areas” and has many other differences from the claim. *Id.* at ¶ 45. Indeed, the lighter areas appear to be merely glare from the less than planar surface of insulation. This is not a *Rosen* reference for the ornamental features claimed in the []'670 Patent.

PO Resp. 49–50.

We are not persuaded by Knauf’s arguments and conclusory statements by its declarant, Dr. Rake, that there are “significant differences” disqualifying Soundproofing as a primary reference. Ex. 2012 ¶¶ 43, 45. With respect to the issue of “glare,” although we observe a slight reflection

on the horizontal metallic cross-pieces and shadow on the drywall cast by the installer in the images, observing the images in Soundproofing as whole, we see that, unlike in JM Spin-Glas, there is visual consistency in the lighting on the insulation material. Also, viewing the images as a whole, particularly Soundproofing I and Soundproofing III, the perspective and observation point of an observer to the insulation material appears closer than in JM Spin-Glas, providing a more detailed visual perception of the insulation material. Here, because of the visible detail and consistency of the appearance of the insulation material seen across the Soundproofing images, we are not persuaded that perspective, inconsistent lighting, and any resultant “glare” significantly impact the overall visual appearance of the Soundproofing insulation images.

In each of the above three images from Soundproofing the insulation material appears, like that in the claimed design, to reasonably have a cloud-like appearance. Ex. 1007. We are not persuaded by Professor Rake’s description of the texture being “mottled and blotchy” that a reasonable description of the Soundproofing insulation cannot include “cloud-like.” See Ex. 2012 ¶ 45. In Soundproofing, we further observe variations in a swirl pattern. See Ex. 1007. The swirl patterns are not specifically identical to those of the claimed design due to the abstract and formless nature of fibrous strands that make up such insulation material. See Ex. 1014 ¶¶ 4–5. We are persuaded that any difference in swirl pattern is, however, insignificant and due to inherent fabrication methods of insulation material. *Id.* In the Soundproofing II and III images, particularly, we observe a visual distinction between striated pink and cream hues that creates an overall

similar swirling appearance as that created by the brown and cream hues in the claimed design. *Compare* Ex. 1007, *with* Ex. 1001.

Knauf asserts that Soundproofing merely shows that the “color is predominantly pink with some lighter pink areas.” PO Resp. 49 (citing Ex. 2012 ¶ 43). Knauf’s declarant, Professor Rake testifies, likewise, that “[a]ny mixture of pinks in the Soundproofing reference is less pronounced than the marbleizing of the ’670 patent.” Ex. 2012 ¶ 45. This argument is similar to that offered by Knauf during patent prosecution, i.e. that the Foltz reference disclosed insulation that was the same hue, yellow, and lighter yellow, “and the variations are merely the changes in the lightness of yellow.” Ex. 1002, 19. This argument is not persuasive because neither Knauf nor Professor Rake explain fundamentally how an ordinary observer, or a person of skill in the art, can visually differentiate between lightness of color and a different hue. *See* PO Resp. 49–50; Ex. 2012 ¶ 45. Without an objective standard by which to make such a distinction, we can evaluate the evidence only with the reasonable chromatic acuity of an ordinary observer and a person of ordinary skill in the art. Observing Soundproofing in its entirety, we perceive a distinct difference between pink and cream colors that is not caused by glare. Contrasted as it is with the color pink in Soundproofing, cream can be reasonably observed as not only a different color, but a different hue. We are persuaded that despite the difference in the colors pink and brown, a “variation of distinct hues” of the claimed design as it is embodied in brown and cream hues, is reasonably observable in the distinct pink and cream hues chromatically apparent in Soundproofing.

We agree with Knauf that Soundproofing is different because the insulation colors include pink, as opposed to brown. PO Resp. 49.

However, absent evidence that a specific color or objectively definable color range is a particular unique or distinctive aspect of the design sufficient, we are not persuaded that simply a difference in color, such as pink and brown, is sufficient to disqualify Soundproofing as a primary reference. *Cf. In Re Haruna* 249 F.3d at 1336 (“The difference between the design claimed in the ‘031 application and the design of the disks disclosed in Benne is one of more than ‘color alone’ because of the unique difference in effect between a disk with a transparent outer region and a disk with an outer region of any other ‘color.’”)

We also do not observe as clearly a waffle pattern in the insulation shown in Soundproofing although there appears to be some surface texture observable in certain images for example Soundproofing III, above. *See* 2012 ¶ 45, Ex. 1007, 3. The waffle pattern, however, does not play a significant role in the distinctiveness of the claimed design. In the context of the single photograph constituting the claimed invention, the waffle pattern is visually ambiguous and could easily be interpreted as an artifact of image data reproduction. Also, the uncontroverted evidence of record indicates that the waffle pattern is a textural remnant of the manufacturing process common to most insulation materials. *See* Ex.1014 ¶¶ 4–9. Indeed, the ability to visually perceive a waffle pattern may result from the observers’ perspective and nearness to the insulation material. Although we consider it an element of the claimed invention, we are not persuaded that the absence of a clearly discernable waffle pattern in Soundproofing lessens the reasonable perception of overall similarity between the claimed design and Soundproofing. *See Int’l Seaway*, 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.”).

We are persuaded by our own visual observations and comparisons of the Soundproofing to the claimed design, as well as by the evidence of record discussed above, that Soundproofing Your Walls qualifies as a primary reference for purposes of obviousness.

JM Microlite

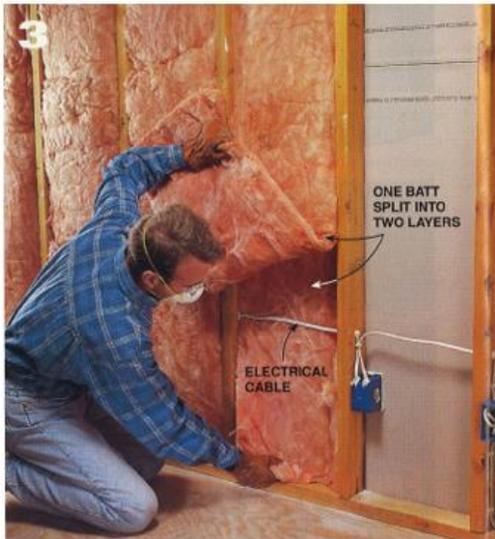
In this ground, Johns Manville asserts several different documents as secondary references. Pet. 40–42. We address initially JM Microlite, reproduced in part below, as a secondary reference to Soundproofing Your Walls.

Microlite® AA Blankets
Aircraft Acoustical and Thermal Insulation



A figure from JM Microlite, above, depicts insulation material designs of various colors. Ex. 1005.

In order to qualify as a secondary reference, JM Microlite must be “so related that the appearance of certain ornamental features in one [design] would suggest the application of those features to the other.” *In re Borden*, 90 F.3d at 1575, quoting *In re Glavas*, 230 F.2d 447, 450 (CCPA 1956). As compared with Soundproofing, below, Johns Manville asserts that JM Microlite discloses an insulation material, i.e. the insulation blanket second from the bottom (third from the top) in the figure on the right, having variations in a swirl pattern, a cloud-like appearance, and a waffle pattern. Pet. 34; Ex. 1005.



Soundproofing III

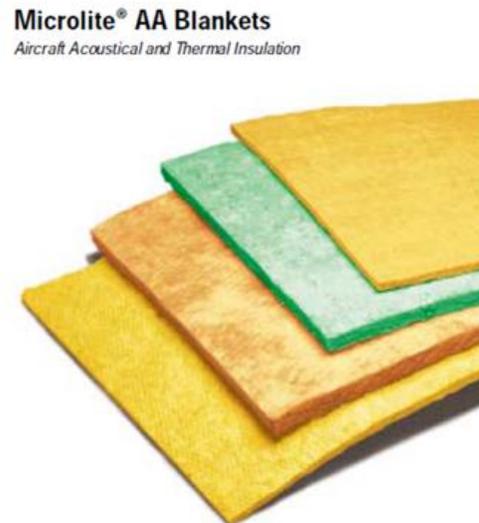


Figure from JM Microlite

Shown in comparison, above, are Soundproofing III (an image picturing a worker installing insulation) on the left, and on the right a figure from JM Microlite depicting JM Microlite® AA Blankets products.

Knauf does not explicitly counter the assertion that JM Microlite is an appropriate secondary reference. PO Resp. 50. Knauf argues that even assuming JM Microlite “is ‘basically the same’ as the claimed design, JM has still failed to prove that the design would have been obvious to a

designer of ordinary skill of insulation in 2008.” *Id.* Knauf contends that Johns Manville and Dr. Bide “offer[] nothing in terms of ‘suggestion’ or reasons ‘why’ to modify the putative *Rosen* references.” *Id.* at 51 (citing Ex. 1012 ¶¶ 14, 41–51). Knauf argues specifically that the combination of Soundproofing and JM Microlite is based on improper hindsight reasoning and does not explain “*why* would the primary reference be modified in 2008 at all?” *Id.*

Knauf’s assertion that Johns Manville has not pointed to a specific suggestion or rationale explaining a reason “why” JM Microlite should modify the primary Soundproofing reference essentially promotes, at least implicitly, the requirement of a *KSR*-type analysis to properly support the combination of references. PO Resp. 50–51. We are unaware of any case law, nor has Petitioner pointed us to any, that confirms the Supreme Court’s holding in *KSR* is germane to an obviousness determination in design patents, or has any effect upon the relevance of the *Durling* analysis. In *Titan Tire Corp. v. Case New Holland, Inc.*, 566 F.3d 1372 (Fed. Cir. 2009), the Federal Circuit merely noted that there was an “open question” as to the effect, if any, *KSR* had on the *Durling* analysis. *Titan Tire Corp.* 566 F.3d 1372, 1384–85. The Federal Circuit’s reasoning in *MRC Innovations, Inc. v. Hunter Mfg., LLP*, 774 F.3d 1326, 1331 (Fed. Cir. 2014), demonstrates that the *Durling* test is consistent with the factual inquiries identified by the Supreme Court in *Graham v. John Deere Co.*, 383 U.S. 1, 17 (1966).

The *Durling* test requires that the primary and secondary references be “so related that the appearance of certain ornamental features in one would suggest the application of those feature to the other.” *Durling*, 101 F.3d at

103 (quoting *In re Borden*, 90 F.3d 1570, 1575 (Fed. Cir. 1996)). The Federal Circuit explained in *In re Borden* that

[i]n order for secondary references to be considered, however, there must be some suggestion in the prior art to modify the basic design with features from the secondary references. That is, the teachings of prior art designs may be combined only when the designs are “so related that the appearance of certain ornamental features in one would suggest the application of those features to the other.”

In re Borden, 90 F.3d at 1574–75. Under the proper obviousness analysis the reason to combine, in other words, the “suggestion” to modify Soundproofing is found, in large part, in the ornamental design relationship itself, i.e. in the closeness of relative ornamental appearance between the insulation materials disclosed in Soundproofing and JM Microlite. *Id.*

Knauf is correct in asserting that Johns Manville has the burden to compare and explain, with some level of detail, the relatedness of ornamental features in Soundproofing and the insulation design depicted in JM Microlite such that we are persuaded of a sufficient suggestion to combine the references. PO Resp. 51, and see *In re Borden*, 90 F.3d at 1575–76 (Affirming the Boards finding of obviousness based on a combination of design references the Federal Circuit noted the Boards’ findings that “taught the two specific design elements that would convert the Bettix reference into appellant’s claimed design, and did so in a setting that would suggest the combination to one of skill in the art.”). In their Petition, Johns Manville compares Soundproofing, JM Microlite and two other asserted secondary references together as a group, arguing that “[s]pecifically, the four references are highly related because they each depict ordinary insulation products with a cloud-like appearance and a

variation in swirl pattern. In addition, these products are manufactured by companies that directly compete in the insulation industry.” Pet. 41 (citing Ex. 1014 ¶ 2). For purposes of this Decision, however, we need not decide whether JM Microlite is combinable as a proper secondary reference with Soundproofing, because, as discussed below, even assuming it is, we are not persuaded that the modifications proposed by Johns Manville would result in the “same overall visual appearance as the claimed design.” *High Point Design*, 730 F.3d at 1311.

Knauf argues that even if JM Microlite can be properly combined with Soundproofing, “the resulting design would not have the same overall appearance as the claimed design.” PO Resp. 53. Knauf relies on Professor Rake’s testimony with respect to JM Microlite that “[n]one of the blankets provide examples of brown, chocolate, coffee, almond, and beige colors or sandstorm appearance” and “the combination does not achieve the same overall visual appearance as the claimed ‘670 design.” *Id.* at 56 (citing Ex. 2012 ¶ 61). Professor Rake’s testimony appears to be based on the specific recitation in the JM Microlite reference to the “Orange” blanket, as opposed to any brown blanket. Ex. 2012 ¶ 61. Professor Rake states that JM Microlite discloses “four blankets on page 1—a green blanket, an orange blanket, and two amber blankets (of different densities).” *Id.* (citing Ex. 1005). Professor Rake’s testimony that “none of the colors of JM Microlite are correct,” is entitled to some weight because his testimony is based not only on his observation, but on the explicit description in JM Microlite itself, i.e. that the colors amber, orange and green, do not include the color brown. Professor Rake’s testimony that JM Microlite does not include the color brown is consistent with Professor Schloss who states that there are “11

Basic Color Terms [] red, orange, yellow, green, blue, purple, pink, gray, white, black, and brown.” Ex. 2010 ¶ 16.

Johns Manville argues that “JM Microlite Blankets depicts yellow, brown, and green pieces of insulation.” Pet. 34. Johns Manville’s argument apparently suggests that the blanket, second from left in the image, *appears* brown, and not orange as described in the reference itself. Johns Manville does not point us to, nor can we find, any substantive evidence supporting such a conclusion. *See id.* The preponderance of the evidence in this proceeding indicates that the colors in JM Microlite, shown below, are amber, orange and green. Ex. 1005, Ex. 2012 ¶ 61.



A figure from JM Microlite, above on the right depicts insulation material of various colors as compared to the claimed design, on the left. Ex. 1001, Ex. 1005.

Even if we assume that JM Microlite is properly combined with Soundproofing, Johns Manville has failed to provide persuasive evidence, or any evidence at all for that matter, that JM Microlite would have been viewed by an ordinary observer having 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,’” as necessary under the appropriate claim construction. *See Int’l Seaway Trading Corp. v. Walgreens Corp.*, 589 F.3d 1233, 1240 (Fed. Cir. 2009) (“Once that piece of prior art has been constructed, obviousness, like anticipation, requires application of the ordinary observer test, not the view of one skilled in the art.”). Without sufficient evidence to the contrary, we are left with the affirmative evidence of color in JM Microlite being “amber,” “orange,” and “green.” *See Ex. 1005, Ex. 2012* ¶ 61. We are not persuaded that Johns Manville has shown by a preponderance of the evidence that the ’670 patent would have been obvious in view of the asserted combination of Soundproofing and JM Microlite.

OC PROPINK and Knauf Crown Floor Slab

Johns Manville further asserts that the ’670 patent is obvious in view of the combination of Soundproofing and OC PROPINK, as shown below.

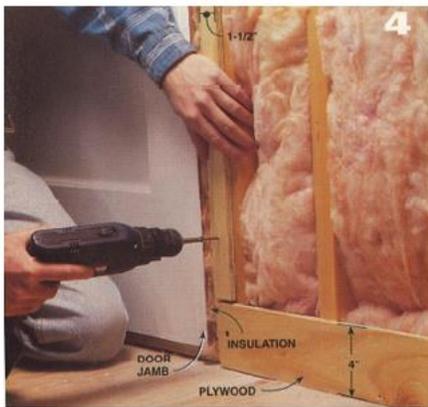


Figure from Soundproofing



Figure from OC PROPINK

Shown in comparison, above, are Soundproofing, an image picturing a worker installing insulation on the left, and on the right an image of insulation material from OC PROPINK.

Although we have qualified Soundproofing as a primary reference, we are not persuaded that OC PROPINK successfully bridges the gap between Soundproofing and the claimed insulation in the '670 patent. *See Apple*, 678 F.3d at 1331. Even assuming that a designer of ordinary skill in the art would consider the appearance of certain ornamental features in either Soundproofing or OC PROPINK suggests the application of those features to the other, we are persuaded here by Knauf's declarant, Professor Rake, that the asserted combination cannot be reasonably observed to "have brown, chocolate, coffee, beige, or almond colors, and possibly lacks cream." Ex. 2012 ¶ 62. Observing the insulation designs in both Soundproofing and OC PROPINK as a whole, an ordinary observer comparing the combination of references to the '670 patent would not have reasonably discerned in these references, either separately or as combined, the same overall visual appearance as the '670 patent because the combination lacks the claimed color, including at least the color brown, an element of the claimed design. *See Section III B.*

We are also not persuaded that Knauf Crown Floor Slab, as shown below in comparison with Soundproofing presents to the ordinary observer the same visual appearance as the claimed insulation material.

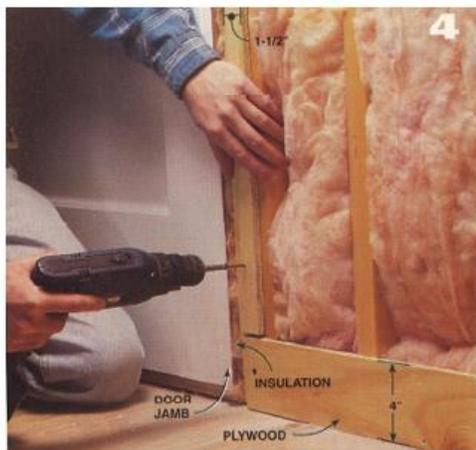


Figure from Soundproofing Figure from Knauf Crown Floor Slab
Shown in comparison, above, are Soundproofing, an image picturing a worker installing insulation on the left, and on the right an image of insulation material from Knauf Crown Floor Slab.

Although we have qualified Soundproofing as a primary reference, we are not persuaded that Knauf Crown Floor Slab successfully bridges the gap between Soundproofing and the claimed insulation in the '670 patent. *See Apple*, 678 F.3d at 1331. Even assuming that a designer of ordinary skill in the art would consider the appearance of certain ornamental features in either Soundproofing or Knauf Crown Floor Slab suggest the application of those features to the other, we agree here with Knauf's declarant, Professor Rake, that Knauf Crown Floor Slab "is bright yellow and orange," not brown and cream. Ex. 2012 ¶ 62. Observing the insulation designs in both Soundproofing and OC PROPINK as a whole, an ordinary observer comparing the combination of references to the '670 patent would not reasonably discern in these references the same overall visual appearance as the '670 patent, because the combination lacks colors, including at least the color brown, an element of the claimed design. Johns Manville has not shown by a preponderance of the evidence that the combination of Soundproofing and either OC PROPINK or Knauf Crown Floor Slab renders the '670 patent obvious.

E. Knauf: Timber Frame External Walls: Non-Residential Brochure in view of OC PROPINK, JM Microlite, and Knauf Crown Floor Slab

Johns Manville relies on Knauf: Timber Frame External Walls: Non-Residential Brochure ("Knauf Timber Frame") as the primary reference, shown below in comparison with the claimed design, and asserts that Knauf

Timber Frame “discloses the same overall visual appearance as the claimed design of the ’670 patent.” Pet. 43.



Sole Figure from ’670 patent

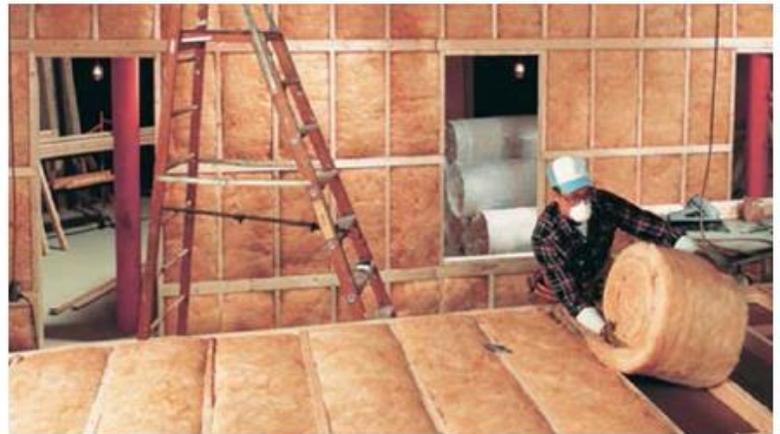


Image from Knauf Timber Frame

Shown in comparison, above, are the sole Figure from the ’670 patent on the left, and on the right a figure from Knauf Timber Frame.

Johns Manville asserts that “[b]oth designs are (1) insulation material with (2) a cloud-like appearance, and (3) variations in a swirl pattern.” Pet. 45 (citing Ex. 1012 ¶ 45). It is apparent that Knauf Timber Frame depicts “insulation material,” as the ’670 design patent is entitled, because the reference depicts a worker installing a roll of insulation on an “off-site” prefabricated wall, oriented parallel to the floor. Ex. 1008, 3. Neither the horizontally oriented wall, nor the vertical wall behind the worker provides a particularly detailed view of the insulation, and, as with JM Spin-Glas, one observes the insulation in Knauf from a relatively distant perspective, as compared to the claimed design. *Compare* Ex. 1001, *with* Ex. 1008. Dr. Bide does not explain in his declaration any level of comparative detail as to how he determines that the appearance of Knauf Timber Frame as a whole

has a “cloud-like appearance” and “variations in a swirl pattern” as in the claimed design. *See* Ex. 1012 ¶ 45. We are not persuaded by Dr. Bide’s testimony because the more distant and angled perspectives of the Knauf Timber Frame insulation design does not present the same level of detail as the claimed design. *Id.* Dr. Bide also does not assess this significant difference in the images or explain what specific aspects of Knauf Timber Frame he relies upon to draw his conclusion as to any visual similarity between the insulation designs for these particular features. *Id.* We agree with Knauf’s declarant, Professor Rake, that to the extent there is a visible “variation of color” we cannot visually confirm that there is sufficient contrast so that Knauf Timber Frame insulation appears as “having a cloud-like appearance or variations in a swirl pattern.” Ex. 2012 ¶ 46.

Based on these findings, we are also not persuaded that Knauf Timber Frame exemplifies “a variation of distinct hues including brown and cream,” as called for under the proper claim construction. As discussed above, Dr. Bide does not address the difference in perspective between the images above. Furthermore, keeping in mind this difference in perspective, we agree to an extent with Knauf’s assertion that “the lighter areas appear to be merely glare from the less than planar surface of insulation.” PO Resp. 50. The images in Knauf Timber Frame, as a whole, reveal distinctly visible shadow and light effects across the insulation materials. *See* Ex. 1008, 3. Because Dr. Bide’s spectrophotometer test for hue angle in the Knauf images does not account for such visually apparent light and shadow elements, we are not apprised by such a test of any persuasive evidence supporting the characteristic of “distinct hues” in Knauf Timber Frame insulation. Ex. 1012 ¶ 46. Additionally, Johns Manville fails to

substantively address the issue of color in Knauf Timber Frame. Given this lack of evidence, and our own observation, we are not persuaded that Knauf depicts hues including brown and cream. *See* Pet. 43–47. As discussed above, although we do not consider the waffle pattern a particularly significant feature of the claimed invention, Dr. Bide could not testify that he was able to visually detect a “waffle pattern” in Knauf Timber Frame. *See* Ex. 1012 ¶ 45 (“As for the fourth possible claim element – “waffle pattern on the surface” – I understand and accept it to have been inherent or obvious as described previously.”).

It is accurate that both designs are for “insulation material.” *Compare* Ex. 1001, *with* Ex. 1008. It is not enough, however, that the reference is understood by one of ordinary skill to be insulation material. *See In re Rosen*, 673 F.2d at 391, *see also Apple*, 678 F.3d at 1332. Comparing the overall appearances of Knauf and the claimed design under the proper claim construction we are not persuaded that the insulation material shown in Knauf Timber Frame 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). The Knauf insulation, despite perspective and apparent glare and shadow effects, appears as a relatively consistent color with no definitive separation between adjacent colors or definable color contrast. Here, although reasonably described as cloud-like, no further details of the Knauf Timber Frame insulation design are clearly discernable based on the evidence in the record. For example, it is not clear, just by viewing the proffered photos, what the insulation looks like as to any swirling effect, color or hue differentiation, or what the color of the insulation actually is. *See* Ex. 1008. All of these features, at least, contribute to the overall

appearance of the patented design. Without supporting evidence, we are left to guess at what is shown in the photos of Knauf Timber Frame. The insulation material depicted in the '670 patent is, on the contrary, a swirling variation in distinct colors, or hues, including brown and cream, which does not appear in Knauf's insulation. We are not persuaded that Knauf Timber Frame creates a sufficiently similar overall visual impression required to be a primary reference.

V. 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.

VI. ORDER

For the reasons given, it is
ORDERED that the Petition is DENIED as to the sole claim of the '670 patent; and
FURTHER ORDERED that Knauf's Motion To Exclude Evidence is DISMISSED as moot as to Exhibits 1004, 1008, 1009, and 1010, and DENIED as to Exhibits 1003, 1005, 1006, 1016, 1017, 1020, and 1024.

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.

IPR2015-01453
Patent D631,670 S

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