IN THE UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF IOWA WESTERN DIVISION

MERIDIAN MANUFACTURING, INC.,

Plaintiff,

VS.

C&B MANUFACTURING, INC., d/b/a HITCHDOC,

Defendant.

No. C15-4238-LTS

MEMORANDUM OPINION AND ORDER ON MOTIONS FOR SUMMARY JUDGMENT

I. INTRODUCTION

This patent case is before me on: (1) a motion (Doc. No. 90) for summary judgment on invalidity filed by defendant C&B Manufacturing, Inc. (HitchDoc), (2) a motion (Doc. No. 92) for summary judgment as to HitchDoc's affirmative defenses, filed by plaintiff Meridian Manufacturing Inc. (Meridian) and (3) a motion (Doc. No. 88) for summary judgment to limit damages filed by HitchDoc. Meridian filed resistances (Doc. Nos. 101, 107) to both of HitchDoc's motions and HitchDoc filed replies (Doc. Nos. 108, 109). HitchDoc filed a resistance (Doc. No. 99) to Meridian's motion for summary judgment but Meridian did not file a reply.¹

Meridian holds United States Patent No. 6,964,551 B1 ('551 Patent), which involves component claims for an agricultural trailer. In its complaint (Doc. No. 2), Meridian alleges that HitchDoc is a competitor that makes agricultural equipment, including trailers that infringe on the '551 Patent. On June 9, 2017, after conducting a *Markman* hearing, I filed an order (Doc. No. 52) in which I construed certain claims

¹ The parties have also filed motions to exclude certain expert opinions. Doc. Nos. 111, 113, 118. I will address these motions in this order.

contained in the '551 patent (the *Markman* order). The parties then filed motions (Doc. Nos. 55, 56) for summary judgment on infringement. On October 27, 2017, I entered an order (Doc. No. 75) granting Meridian's motion for summary judgment and finding, as a matter of law, that HitchDoc's trailer infringes on claims 1, 2, 3, 9, 10 and 11 of the '551 Patent. The parties then filed the present motions addressing invalidity and damages.

Trial is scheduled to begin on November 5, 2018. The motions are fully briefed and ready for decision. I find that oral argument is not necessary.

II. RELEVANT FACTS

The following facts are undisputed, except where noted otherwise:

A. The '551 Patent

The '551 Patent, entitled "Trailer for Transporting Bulk Seed Boxes," is an invention designed to help farmers transport large seed bags or boxes to planters in the fields. The following embodiment is depicted in Figure 1:

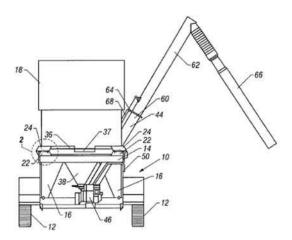


Figure 1

Meridian filed its complaint of patent infringement on November 23, 2015. Of the 19 claims contained in the '551 patent, Meridian alleged that HitchDoc's product, the Travis Seed Cart, infringes claims 1, 2, 3, 9, 10 and 11. These claims are:

1. An improved trailer for transporting a bulk seed box, the box having first and second sidewalls, a bottom, a top, and a flange extending along the sidewalls adjacent the bottom of the box, the trailer comprising:

a wheeled bed for supporting a bulk seed box, the bed having a perimeter edge;

a hopper extending below the bed for receiving seed from the bulk seed box:

a conveyor operatively connected to the hopper for unloading seed from the hopper; and

the bed having guide plates inclining upwardly and outwardly from the perimeter edge of the bed to facilitate centering of the box on the bed.

- 2. The improved trailer of claim 1 wherein the bed has four corners and the guide plates are located at the corners of the bed.
- 3. The improved trailer of claim 1 further comprising lock bars on the bed to overlappingly engage the flange of the seed box to secure the seed box to the bed.
- 9. The improved trailer of claim 1 wherein the conveyor is an auger including a first inner section and a second outer section pivotally attached to the first section for movement between transport and discharge positions, and including a gas cylinder to facilitate movement of the second section between the transport and discharge positions.
- 10. The improved trailer of claim 1 wherein each guide plate extends outwardly at an obtuse angle from the bed.
- 11. The improved trailer of claim 1 wherein the guide plates define an enlarged box entrance sloping downwardly and inwardly toward the bed so that the box will automatically center on the bed when loaded onto the bed.

Doc. No. 31 at 7-8.

Claim 1 is the only independent claim at issue. The bulk of the parties' arguments focus on the guide plates "inclining upwardly and outwardly from the perimeter edge of the bed." An example of a Meridian guide plate is circled in Figure 2:

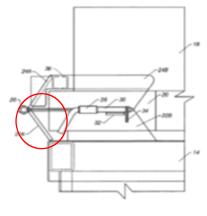


Figure 2

B. History of the '551 Patent

Garry Friesen, the inventor of the '551 Patent, has no engineering degree and had never observed a seed tender before he worked on the project that resulted in the '551 Patent. He believed there was an issue with loading and positioning seed boxes on a seed cart. Friesen initially used perpendicular guide plates and straps to secure the boxes. To improve the design, he decided to provide a bigger target for the forklift operator to hit and allow the seed box to slide into position. He then switched to plates that extend upwardly and outwardly from the bed of the cart and exchanged the straps for lock bars.

Friesen filed his application for the '551 Patent on December 12, 2001. At that time, Claim 1 described the guide plates as "extending upwardly and outwardly to facilitate centering the box on the bed." Doc. No. 107-1 at 4. The patent examiner rejected the application because of Patent No. 6,092,974 (the Roth Patent). The Roth Patent had guide plates around the perimeter extending straight upwardly, as depicted in Figure 3.

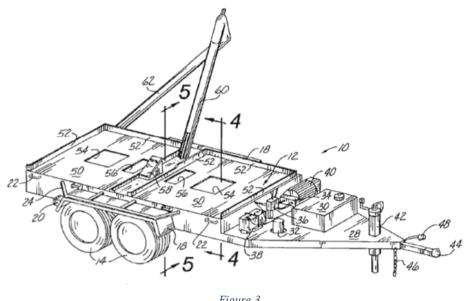


Figure 3

To overcome the Roth patent, Friesen amended Claim 1 to state, in relevant part, that the guide plates incline upwardly and outwardly from the bed. The patent examiner rejected this second attempt because of the Roth patent and Patent No. 1,675,701 (the Fitch patent). The Fitch Patent is depicted in Figure 4:

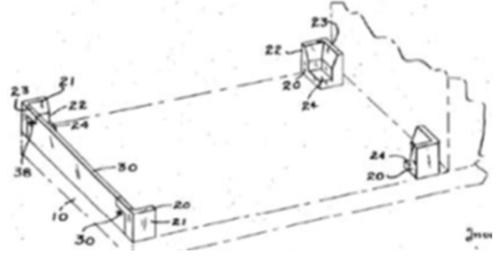


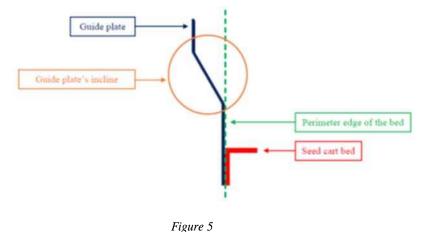
Figure 4

While difficult to see in this depiction, the interior surfaces of the plates incline upwardly and outwardly from the bed. The Fitch patent is not directed toward an agriculture-specific device, but to trucks used to transport general containers.

Friesen then amended Claim 1 to its present form, stating the guide plates inclined "upwardly and outwardly *from the perimeter edge of the bed*." (emphasis added) The patent examiner rejected Friesen's application for a third time. On appeal, however, the Board of Patent Appeals and Interferences (the Board) overturned the examiner's rejection, noting that the Fitch brackets had inclined walls that were within the perimeter edge of the bed. The '551 Patent issued on November 15, 2005. Meridian is the current owner.

C. Infringement

In late 2001 or early 2002, before the '551 Patent issued, Friesen began selling his seed tenders with the patented features and showing them at farm shows under the "Seed Titan" name. Wyman Travis, creator of the Travis Seed Cart now sold by HitchDoc, often attended the same farm shows. He designed the Travis Seed Cart in late 2004 or early 2005. The guide plates of the Travis Seed Cart are depicted in Figure 5.



HitchDoc acquired the right to sell the Travis Seed Cart in 2009. HitchDoc has known about the '551 Patent since at least July 1, 2011, when it submitted the '551 Patent to the

United States Patent and Trademark Office (USPTO) as part of an information disclosure statement.

Between November 20, 2005, and September 24, 2008, Meridian purchased 1,000 patent decals for its tenders.² Between 2005 and 2009, Meridian sold 2,283 box seed tenders. The parties dispute how many of the tenders sold had patent decals. On September 17, 2015, Meridian gave HitchDoc actual notice of infringement by sending HitchDoc a cease and desist letter.³ HitchDoc continued selling the Travis Seed Cart after receiving the cease and desist letter and did not seek counsel's opinion regarding infringement of the '551 Patent before Meridian filed its complaint. At no time has Meridian affirmatively consented to HitchDoc's infringement.

Meridian filed its complaint for patent infringement on November 23, 2015. At the *Markman* stage, I found that "perimeter edge of the bed" meant the planar boundary around the bed, rather than the physical point where the side and top surfaces of the bed intersect. With that understanding, I found that HitchDoc's seed tenders literally infringed on Claim 1 (and by extension claims 2, 9, 10 and 11) of the '551 Patent. Doc. No. 75 at 16. I also found that Claim 3, which describes lock bars that "overlappingly engage the flange of the seed box," was infringed. *Id.* at 18–19. After my ruling that the Travis Seed Cart infringed the '551 patent, HitchDoc started a redesign of its seed cart.⁴

Additional facts will be discussed below as necessary.

² Meridian purchased 200 decals on December 20, 2007; 100 on February 22, 2008; 250 on March 20, 2008; 100 on September 18, 2008; and 150 on September 24, 2008. Doc. No. 89-2 at 2-3; Doc. No. 101-1 at 4-6.

³ The parties dispute whether HitchDoc was on constructive notice of infringement prior to that time.

⁴ The parties dispute whether the redesign solved the infringement issue and whether HitchDoc continued to sell the original infringing design after I issued my ruling. *See* Doc. No. 89-2 at 7; Doc. No. 101-1 at 16-18.

III. SUMMARY JUDGMENT STANDARDS

Any party may move for summary judgment regarding all or any part of the claims asserted in a case. Fed. R. Civ. P. 56(a). Summary judgment is appropriate when "the pleadings, depositions, answers to interrogatories, and admissions on file, together with affidavits, if any, show that there is no genuine issue of material fact and that the moving party is entitled to a judgment as a matter of law." *Celotex Corp. v. Catrett*, 477 U.S. 317, 322 (1986).

A material fact is one that "'might affect the outcome of the suit under the governing law." *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986). Thus, "the substantive law will identify which facts are material." *Id.* Facts that are "critical" under the substantive law are material, while facts that are "irrelevant or unnecessary" are not. *Id.*

An issue of material fact is genuine if it has a real basis in the record, *Hartnagel v. Norman*, 953 F.2d 394, 395 (8th Cir. 1992) (citing *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 586-87 (1986)), or when "a reasonable jury could return a verdict for the nonmoving party" on the question." *Woods v. DaimlerChrysler Corp.*, 409 F.3d 984, 990 (8th Cir. 2005) (quoting *Anderson*, 477 U.S. at 248). Evidence that only provides "some metaphysical doubt as to the material facts," *Matsushita*, 475 U.S. at 586, or evidence that is "merely colorable" or "not significantly probative," *Anderson*, 477 U.S. at 249-50, does not make an issue of material fact genuine.

As such, a genuine issue of material fact requires "sufficient evidence supporting the claimed factual dispute" so as to "require a jury or judge to resolve the parties' differing versions of the truth at trial." *Anderson*, 477 U.S. at 248-49. The party moving for entry of summary judgment bears "the initial responsibility of informing the court of the basis for its motion and identifying those portions of the record which show a lack of a genuine issue." *Hartnagel*, 953 F.2d at 395 (citing *Celotex*, 477 U.S. at 323). Once the moving party has met this burden, the nonmoving party must go beyond the pleadings

and by depositions, affidavits, or otherwise, designate specific facts showing that there is a genuine issue for trial. *Mosley v. City of Northwoods*, 415 F.3d 908, 910 (8th Cir. 2005). The nonmovant must show an alleged issue of fact is genuine and material as it relates to the substantive law. If a party fails to make a sufficient showing of an essential element of a claim or defense with respect to which that party has the burden of proof, then the opposing party is entitled to judgment as a matter of law. *Celotex*, 477 U.S. at 322.

In determining if a genuine issue of material fact is present, I must view the evidence in the light most favorable to the nonmoving party. *Matsushita*, 475 U.S. at 587-88. Further, I must give the nonmoving party the benefit of all reasonable inferences that can be drawn from the facts. *Id.* However, "because we view the facts in the light most favorable to the nonmoving party, we do not weigh the evidence or attempt to determine the credibility of the witnesses." *Kammueller v. Loomis, Fargo & Co.*, 383 F.3d 779, 784 (8th Cir. 2004). Instead, "the court's function is to determine whether a dispute about a material fact is genuine." *Quick v. Donaldson Co., Inc.*, 90 F.3d 1372, 1376-77 (8th Cir. 1996).

On cross motions for summary judgment, the "court must rule on each party's motion on an individual and separate basis, determining, for each side, whether a judgment may be entered in accordance with the Rule 56 standard." 10A Charles Alan Wright, Arthur R. Miller & Mary Kay Kane, *Federal Practice and Procedure* § 2720 (3d ed. 1998). Because the parties seek summary judgment on the same issue, I will consider all the parties' arguments, keeping in mind the separate inferences that are to be drawn from each motion. *See Wright v. Keokuk Cnty. Health Ctr.*, 399 F. Supp. 2d 938, 946 (S.D. Iowa 2005).

IV. DISCUSSION

A. Invalidity Under Section 103

HitchDoc argues that all infringed claims (1, 2, 3, 9, 10 and 11) are invalid as obvious pursuant to 35 U.S.C. § 103.⁵ Doc. No. 91-1 at 4. HitchDoc argues that the standard the Board used to determine that the patent is valid is no longer appropriate under current law, and the current standard for obviousness is much lower. *Id.* at 23–25. Under the new standard, HitchDoc claims the '551 Patent is clearly an obvious combination of well-known elements from other patents. *Id.* at 19.

35 U.S.C. § 103 states:

A patent for a claimed invention may not be obtained . . . if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains.

"Once issued, a patent is presumed valid . . . and the challenging party has the heavy burden of proving invalidity by substantial evidence." *Saturn Mfg., Inc. v. Williams Patent Crusher & Pulverizer Co.*, 713 F.2d 1347, 1350 (8th Cir. 1983). A patent already obtained can be subsequently found invalid if it is obvious under this section. *Motorola, Inc. v. Alexander Mfg. Co.*, 786 F. Supp. 808, 813 (N.D. Iowa 1991). A patent is obvious if a "combination of familiar elements according to known methods . . . does no more than yield predictable results." *KSR Int'l Co. v. Telelex Inc.*, 550 U.S. 398, 416 (2007). A party seeking to invalidate a patent as obvious must also show that "a skilled artisan would have been motivated to combine the teachings of the prior art references to achieve the claimed invention and . . . would have had a reasonable expectation of success." *Bristol-Myers Squibb Co. v. Teva Pharms. USA, Inc.*, 752 F.3d

⁵ In its motion for summary judgment as to HitchDoc's other defenses, Meridian takes the position that "material fact indeed appear to exist regarding § 103 such that it is properly before the Court and trier of fact." Doc. No. 92-1 at 8.

967, 973 (Fed. Cir. 2014).

Whether an invention is obvious under § 103 is a legal conclusion based on the underlying facts of record. *Velander v. Garner*, 348 F.3d 1359, 1363 (Fed. Cir. 2003). The factual inquiries are "(1) the scope and content of the prior art; (2) the level of ordinary skill in the prior art; and (3) the differences between the claimed invention and the prior art," as well as any additional "objective indicia of nonobviousness." *PAR Pharm., Inc. v. TWI Pharms., Inc.*, 773 F.3d 1186, 1193 (Fed. Cir. 2003). These secondary characteristics of nonobviousness include commercial success, long felt but unsolved needs, and failure of others. *Saturn Mg.*, 713 F.2d at 1351.

Before I can address the parties' arguments on invalidity, I must determine the applicable record. Two of the four contested expert witnesses, James Heise and John Hamilton, have provided opinions regarding certain elements of the obviousness analysis. Meridian filed a motion (Doc. No. 118) to exclude Heise, to which HitchDoc resisted (Doc. No. 127). Meridian filed a reply (Doc. No. 132). HitchDoc filed a motion (Doc. No. 111) to exclude Hamilton, which Meridian resisted (Doc. No. 123). HitchDoc filed a reply (Doc. No. 134).

1. The Daubert Analysis

Federal Rule of Evidence 702 governs the admission of expert testimony. The rule states that a qualified expert may testify "in the form of an opinion or otherwise" if:

- (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
- (b) the testimony is based on sufficient facts or data;
- (c) the testimony is the product of reliable principles and methods; and
- (d) the expert has reliably applied the principles and methods to the facts of the case

Fed. R. Evid. 702. To be admissible, expert testimony must be both relevant and reliable. *Weisgram v. Marley Co.*, 169 F.3d 514, 517 (8th Cir. 1999), *aff'd*, 528 U.S. 440 (2000). Evidence is relevant if it tends to make a fact more or less probable and is of consequence in determining the action. Fed. R. Evid. 401. To satisfy the relevancy requirement, "the proponent must show that the expert's reasoning or methodology was applied properly to the facts at issue." *Smith v. Bubak*, 643 F.3d 1137, 1138 (8th Cir. 2011) (quoting *Barrett v. Rhodia, Inc.*, 606 F.3d 975, 980 (8th Cir. 2010)).

Evidence is reliable if it is useful to the finder of fact in deciding an ultimate issue of fact, the expert is qualified and the evidence used by the expert is reliable. *Peters v*. Woodbury Cty., Iowa, 979 F. Supp. 2d 909, 919 (N.D. Iowa 2013), aff'd sub nom. Peters v. Risdal, 786 F.3d 1095 (8th Cir. 2015). The trial court has broad discretion when determining the reliability of expert testimony. United States v. Vesey, 338 F.3d 912, 916 (8th Cir. 2003). Doubts on whether the testimony will be helpful should be resolved in favor of admissibility. *Peters*, 979 F. Supp. 2d at 919 (quoting *Larabee v*. MM&L Int'l Corp., 896 F.2d 1112, 1116 n.6 (8th Cir. 1990)). Testimony is useful if it will provide information "beyond the common knowledge of the trier of fact." Langenbau v. Med-trans Corp., 167 F. Supp. 3d 983, 996 (N.D. Iowa 2016). "An expert's testimony may be excluded on 'reliability' grounds if it is 'so fundamentally unsupported that it can offer no assistance to the jury." Peters, 979 F. Supp. 2d at 920 (quoting Polski v. Quigley Corp., 538 F.3d 836, 839 (8th Cir. 2008)). An expert may rely on experience-based testimony if the expert also explains how that experience lead to his conclusion, why it is a sufficient basis for the opinion and "how that experience is reliably applied to the facts." Vesey, 338 F.3d at 917.

Federal Rule of Evidence 704 provides that expert evidence is admissible even if it embraces an ultimate issue in the case. Fed. R. Evid. 704(a). Thus, to the extent an expert lays proper foundation by demonstrating an adequate basis for an opinion, the opinion may be admissible. *Langenbau*, 167 F. Supp. 3d at 995. However, opinions

that merely tell the trier of fact what result to reach are not admissible. *Id.*; *Lee v. Andersen*, 616 F.3d 803, 808–09 (8th Cir. 2010).

Under *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579 (1993), the district court must perform a "gatekeeping function" to ensure that irrelevant or unreliable expert testimony is not introduced into evidence. *See, e.g., In re Zurn Pex Plumbing Prod. Liab. Litig.*, 644 F3d 604, 613 (8th Cir. 2001). More specifically:

The objective of the *Daubert* inquiry "is to make certain that an expert, whether basing testimony upon professional studies or personal experience, employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field." *Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137, 152, 119 S. Ct. 1167, 143 L.Ed.2d 238 (1999). [T]his is a flexible, case-specific inquiry. "The trial court ha[s] to decide whether this particular expert had sufficient specialized knowledge to assist the jurors in deciding the particular issues in the case." *Id.* at 156, 119 S. Ct. 1167 (quotation omitted); *see* Fed. R. Evid. 702 and Advisory Committee Notes.

American Auto. Ins. Co. v. Omega Flex, Inc., 783 F.3d 720, 722–23 (8th Cir. 2015). This "gatekeeper" function requires me to "make a 'preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid and of whether that reasoning or methodology properly can be applied to the facts in issue.'" Kudabeck v. Kroger Co., 338 F.3d 856, 860 (8th Cir. 2003) (quoting Daubert, 509 U.S. at 592–93).

2. James Heise

a. Opinion

James Heise's testimony consists of an expert report (Doc. No. 91-21) as well as deposition testimony (Doc. No. 117-14). A summary of his opinions are as follows:

• All the claims of the '551 Patent are invalid as obvious under prior art. Doc. No. 91-21 at 8, 38.

- He declines to provide an opinion on any "secondary considerations" because Meridian did not provide sufficient evidence of those considerations. *Id*.
- A person of ordinary skill in the art is "a person who has designed seed carts or similar devices . . . as would a mechanical designer or engineer with 2 to 4 years of formal technical/engineering education or 5 to 7 years of on-the-job training in product design and/or a person with equivalent training and experience in the field of invention." *Id.* at 9.
- Prior art does include products other than "mobile seed carts for transporting bulk seed containers," because using guide plates is a common practice in many industrial and agricultural settings. *Id.* at 11.
- The problem the '551 Patent attempts to solve is placing a box or container safely, efficiently and accurately onto an elevated platform, or a "defined zone." *Id.* at 11–13.
- A detailed breakdown of the differences and disclosures between the prior art and each claim of the '551 Patent. *Id.* at 16–38.

Heise has 38 years of experience in mechanical engineering, including industrial design and manufacturing. Doc. No. 91-21 at 4. He is the named inventor of subject matter covered by six patents. *Id.* He has an associate degree in mechanical engineering and a Bachelor of Science and Master of Science in mechanical engineering. *Id.* However, he is not a licensed Professional Engineer. Doc. No. 117-14 at 2. There is no evidence that he has specific experience with seed tenders or agricultural machinery.

Meridian argues that Heise's testimony should be excluded because he is not qualified to testify on the validity of a patent. Doc. No. 118-1 at 9. Meridian also contends that his opinion is not based on sufficient facts or data, but rather on flawed methodology and misunderstanding. *Id.* Meridian faults Heise for (1) applying the wrong standard of "person of ordinary skill in the art," (2) ignoring secondary indicia of nonobviousness, (3) not applying the "presumed validity" standard, (4) not using a "clear and convincing" standard of proof, (5) supplying a legal conclusion, (6) using an

improper obviousness rationale, (7) employing the wrong scope of prior art and (8) mischaracterizing prior art. *Id.* at 11–12, 17, 19.

b. Qualification

Meridian argues that Heise is not qualified to offer an opinion on obviousness because he has no legal training. *Id.* at 10. However, while the question of obviousness is a question of law, it is perfectly appropriate for a non-legal expert in the field to use his expertise to explain why earlier technology makes the claims of a patent obvious. The proper question is whether the expert is qualified in the area of the pertinent art, not whether the witness is a legal expert. *See Sundance, Inc. v. DeMonte Fabricating Ltd.*, 550 F.3d 1356, 1363–64 (Fed. Cir. 2008); *Icon Health & Fitness, Inc. v. Strava, Inc.*, 849 F.3d 1034, 1041 (Fed. Cir. 2017); *see also United States v. Hawley*, 562 F. Supp. 2d. 1017, 1040 (N.D. Iowa 2008) ("[A]n expert may testify that factual circumstances demonstrate that a person did not meet a legal duty that is otherwise defined by the court.").

A witness may qualify as an expert in the relevant field if they, at the least, have ordinary skill in the pertinent art. *Sundance*, 550 F.3d at 1363. It is not necessary that they have more than ordinary skill or that they have expertise in the specific technology that is the subject of the patent. *See In re Paoli R.R. Yard PCB Litig.*, 35 F.3d 717, 741 (3d Cir. 1994). Here, Heise has many years of experience in mechanical engineering and industrial design as well as experience with patenting technologies. He has multiple degrees in mechanical engineering. I find that although he is not a Professional Engineer and has not designed seed tenders specifically, he is qualified to testify as an expert witness about the design and ultimate validity of the claims in the '551 Patent.

c. Person of ordinary skill

Meridian argues that Heise (1) used the wrong standard for a person of ordinary skill in the art and (2) the standard he used was not based on sufficient facts and data.

Doc. No. 118-1 at 11. Meridian claims he used the wrong standard because it includes unrelated prior art and does not include the inventor of the patent. *Id.* at 11.

Whether the inventor meets the standard for person of ordinary skill is irrelevant because the standard is based on a hypothetical person. *Life Techs., Inc. v. Clontech Labs., Inc.*, 224 F.3d 1320, 1326 (Fed. Cir. 2000); *Bausch & Lomb, Inc. v. Barnes-Hind/Hydrocurve, Inc.*, 796 F.2d 443, 448 (Fed. Cir. 1986) ("Inventors, as a class . . . [are set] apart from the workers of *ordinary* skill). The parties have agreed that a person of ordinary skill in the art is someone with "decades of experience designing agricultural implements, such as seed tenders." Doc. No. 91-1 at 22; Doc. No. 107 at 11. Heise stated in his report that "[a] person who has designed seed carts or similar devices would be a person of ordinary skill in the art." Doc. No. 91-21 at 9. He then opined that a person with a certain level of education would be the equivalent of that standard. I am not convinced that because Heise suggested Friesen was not a person of ordinary skill that his opinions must therefore be excluded. Whether a person of that standard would, in fact, consider certain other patents as prior art or whether Heise's opinion is consistent with this stated standard is open to cross-examination but does not require exclusion.

d. Secondary considerations of nonobviousness

The court or finder of fact must examine the secondary considerations, if present, before coming to a conclusion about obviousness. *See Transocean Offshore Deepwater Drilling, Inc. v. Maersk Drilling USA, Inc.*, 699 F.3d 1340, 1349 (Fed. Cir. 2012) ("This objective evidence must be 'considered as part of all the evidence, not just when the decisionmaker remains in doubt after reviewing the art.'"). Evidence of secondary considerations may come from expert testimony. *See Commonwealth Sci. & Indus. Research Organisation v. Buffalo Tech. (USA), Inc.*, 542 F.3d 1363, 1377 (Fed. Cir. 2008). But expert reports on prior art or obviousness need not have included those secondary considerations. *See Hitkansut LLC v. United States*, 127 Fed. Cl. 101, 113 (Fed. Cl. 2016) (finding that the expert report was not flawed simply because he did not

comment on secondary considerations and explaining that secondary considerations is "in the nature of rebuttal evidence"); *Syntex (U.S.A.) LLC v. Apotex, Inc.*, 407 F.3d 1371, 1383 (Fed. Cir. 2005) ("[T]he secondary consideration[s] . . . exist[] largely to provide a means for patentees to show" a patent is nonobvious.).

In his report, Heise stated that he understood secondary considerations may also bear on obviousness and that Meridian has the burden of production on those considerations. Doc. No. 91-21 at 8. He stated that Meridian's documents available at the time he made his report were not clear as to what those considerations were, so he was unable to respond to any secondary considerations. *Id.* The fact that he did not opine on secondary considerations is not fatal to the admissibility of his opinion. Meridian can cross-examine Heise about additional factors, but secondary considerations are within the purview of the fact finder and the responsibility of the patentee. Experts are not required to address them in forming opinions.

e. Legal standards

"Once issued, a patent is presumed valid." *Saturn Mfg.*, 713 F.3d at 1350. A defendant seeking to overcome the presumption of validity must do so by persuading the factfinder of the patent's invalidity by clear and convincing evidence. *See Microsoft Corp. v. i4i Ltd. P'ship*, 564 U.S. 91, 97 (2011). This standard is for the jury to apply and does not govern the standard of reliability for expert opinions. *See Hitkansut*, 127 Fed. Cl. at 113 (explaining that an expert may testify even if "unaware of what burden of proof will ultimately be required"); *Iplearn, LLC v. Blackboard, Inc.*, No. CV 11-876 (RGA), 2014 WL 4967122, at *2 (D. Del. Oct. 2, 2014) ("Clear and convincing evidence and the presumption of validity are not standards required of expert opinion on invalidity, but standards used by the fact finder. These are legal concepts that are for jury determinations, not for expert witnesses.").

I find that even if Heise did not consider the presumption of validity or the clear and convincing standard, these omissions would not render his opinions inadmissible. In any event, he testified that he had a general understanding of the burden of proof, but focused on prior art and standard knowledge of engineering design. Doc. No. 117-14 at 6. He stated that he "hold[s] no opinion as to [the patent's] validation at this time" *Id.* at 13. His opinion is not inadmissible on this issue.

f. Legal opinion

An expert may testify as to a fact-based opinion but cannot state legal conclusions. *Transamerica Life Ins. Co. v. Lincoln Nat. Life Ins. Co.*, No. C 06-110-MWB, 2009 WL 2478, at *2 (N.D. Iowa Jan. 5, 2009). When opinions are mere legal conclusions without any analytical reasoning or support, they are inadmissible. *In re Acceptance Ins. Cos. Sec. Litig.*, 423, F.3d 899, 905 (8th Cir. 2005). The ultimate conclusion of invalidity due to obviousness is an issue of law. *Velander*, 348 F.3d at 1363. However, an expert's opinion should not be excluded solely because it "states that something 'would have been obvious.'" *Icon Health & Fitness*, 849 F.3d at 1041. If the opinion as a whole contains factual findings related to the ultimate statement, then it is admissible. *Id.*

Heise concluded that the '551 Patent is obvious over prior art. Doc. No. 91-21 at 8. He stated he was advised on the legal definition of obviousness but does not attempt to explain that definition. *Id.* I find that his opinions that the particular construction of the guide plates would have been obvious is appropriate, because they are supported by factual findings related to the ultimate opinion. Heise explains that his conclusion is based on the purposes and functionality of the components of prior art and how they compare to the '551 Patent. *See id.* at 11–13, 20, 21, 23, 33–34.

g. Impermissible obviousness rationale

Meridian argues that Heise's obviousness rationale is improper because it (1) relies on impermissible hindsight and (2) does not state a reason or motivation a person of ordinary skill in the art would have to combine features of other patents. Doc. No. 118-1 at 19; Doc. No. 132 at 7. Evidence as to the subjective motivations of inventors is not

material to obviousness because the analysis is based on a hypothetical person. *Life Techs.*, 224 F.3d at 1325. The inventor's own path is hindsight. *Millennium Pharms.*, *Inc. v. Sandoz Inc.*, 862 F.3d 1356, 1367 (Fed. Cir. 2017).

While not an enumerated element, a "motivation to combine" can be an important piece of the obviousness analysis. *See KSR*, 550 U.S. at 418–22 (2007). Courts use the "teaching/suggestion/motivation" (or TSM) test, which states that in order to establish obviousness based on a combination of elements in prior art, "there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant." *Sabasta v. Buckaroos, Inc.*, 683 F. Supp. 2d 937, 957 (S.D. Iowa 2010) (quoting *In re Kotzab*, 217 F.3d 1365, 1369–70 (Fed Cir. 2000)). In 2007, the Supreme Court explained in detail how to use this test for obviousness. *KSR*, 550 U.S. at 416. The Court explained that courts should not use a "rigid approach" with the test. *Id.* at 415. Courts may often need to "look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge" of a person with ordinary skill. *Id.* at 418. A court can also use common sense, though "it can be important to identify a reason that would have prompted a person of ordinary skill . . . to combine the elements" of prior art. *Id.*

Heise states that he reviewed Friesen's testimony and that this testimony provides evidence of design need and design expedience that was lacking when the Board approved the '551 Patent. Doc. No. 91-21 at 20. He explains that Friesen's testimony confirms that it was "natural for a person of skill in the art" to combine elements from prior patents, modify them and create the '551 Patent. *Id.* at 21. I find that reliance on Friesen's testimony is hindsight, and so that portion of the report is inadmissible. However, that is not the only evidence Heise relied upon to conclude the patent is obvious. At the beginning of his report, Heise discussed generally the geometric considerations and principles of guiding objects onto surfaces that go towards the "common sense" category of motive to combine. *Id.* at 12–15. While not determinative,

and certainly subject to cross-examination and rebuttal, this is sufficient to permit Heise's obviousness opinion to be admitted into evidence.

h. Scope of prior art

Courts use two tests to define the scope of analogous prior art: "(1) whether the art is from the same field of endeavor, regardless of the problem addressed and, (2) if the reference is not within the field of the inventor's endeavor, whether the reference still is reasonably pertinent to the particular problem with which the inventor is involved. *Smartdoor Holdings, Inc. v. Edmit Indus., Inc.*, 707 F. App'x 705, 708 (Fed. Cir. 2017). Each claim in the product should be considered as a whole. *See Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 1537 (Fed. Cir. 1983) ("The question, therefore, is whether the inventions set forth in claims 1, 3, 4, 6 and 7, *each* as a whole, would have been obvious.") (emphasis added).

Heise explained how he determined the scope of prior art, which he defines as "the art of bulk material handling." Doc. No. 117-14 at 7-8. In his report he states:

I have been told to assume that, from a legal standpoint, the scope and content of the prior art includes all available prior art form the same filed as the claimed invention, or, if not from the same field, art reasonably pertinent to the problem the inventor was attempting to solve.

Doc. No. 91-21 at 9. This is the proper legal standard for scope of the prior art. Meridian argues that Heise did not consider the '551 Patent as a whole, but considered it on a "feature-by-feature" basis. Doc. No. 118-1 at 18. Heise subdivided his report by each claim in the '551 Patent. *See* Doc. No. 91-21 at 16, 34, 35, 38. After reviewing his report, I find that Heise ultimately considered each claim as a whole. His opinion is not inadmissible on this basis.

i. Incorrect construction of claims

Meridian contends that Heise makes two factual mistakes fatal to the admissibility of his opinion when identifying components of prior art. Doc. No. 118-1 at 18. First, Meridian argues that in Patent No. 4,163,425 (Bedard), Heise improperly identified the baseplate (claim 10) as the bed, when the bed is really claim 2. *Id.* However, Heise did identify the bed in Bedard as claim 2. Doc. No. 91-21 at 25. While the beams to which the plates are attached may not extend the entire width of the bed (*see* Doc. No. 107 at 18), Heise's report discusses whether the plates themselves extend past the boundary of the bed. Doc. No. 91-21 at 25-26. I recognize that at one point (Doc. No. 91-21 at 26), it appears that the bed is labeled as claim 10. But above that, in the full patent diagram, the bed is labeled as claim 2 and is identified as claim 2 in Heise's description. *See id.* at 25. I find his opinion is not inadmissible on this basis.

Second, Meridian argues that Heise drew an uneven line on the Roberts patent to improperly show that the guide plates extend past the planar boundary of the bed. Doc. No. 118-1 at 18. Meridian's argument is best depicted in Figure G at Doc. No. 107-3 at 56. HitchDoc provides a response drawing in Doc. No. 127 at 18. Heise specifically addresses the difference between the two parties' construction in his report. Doc. No. 91-21 at 24. Both drawings are so specific that I find this issue is best resolved through cross-examination, as it goes more toward the weight of Heise's opinion than to admissibility.

3. John Hamilton

Hamilton has provided an opinion on the existence of acceptable, noninfringing alternatives and on secondary characteristics of nonobviousness. His opinions are summarized as follows:

⁶ To the extent Meridian may imply that Heise intentionally drew the line unevenly and misrepresented the prior art, there is no indication that any error was intentional.

- Other seed tender manufacturers "produce bulk seed tenders which are non-acceptable alternatives" because they do not provide for the ability to use seed boxes. Doc. No. 111-3 at 17-18.
- Some products are non-acceptable alternatives because the caddy does not provide the "filling/convey aspect of the '551 Patent." *Id*.
- Some products are unacceptable alternatives because "they do not provide the self-aligning function of the '551 Patent." *Id*.
- There is evidence of long felt need, failure of others, teaching away, copying by competitors, praise by others and commercial success in the documents and testimony that was available when Heise made his report. Doc. No. 11-4 at 36-39.

Hamilton is a licensed Professional Engineer, a mechanical engineer instructor and has worked as a consulting engineer. Doc. No. 111-3 at 27. He has technical design experience and extensive teaching experience. *Id.* at 27–28.

a. Acceptable noninfringing alternatives

HitchDoc argues Hamilton's opinions on acceptable alternatives are inadmissible because (1) he is not qualified as a marketing expert, (2) his opinions are based on an incorrect view of the law and (3) his opinion is contrary to other facts in the record. Doc. No. 111-1 at 8-11.

The existence of acceptable, noninfringing alternatives to the patent affects whether damages are available. *See Standard Havens Prods., Inc. v. Gencor Indus., Inc.*, 953 F.2d 1360, 1373 (Fed. Cir. 1991) (stating that to establish the right to lost profits a patentee must show (1) demand for the patented product, (2) absence of acceptable noninfringing alternatives, (3) capability to exploit the demand for the product and (2) the amount of profit the patentee would have made). The fact that a competing device exists in the market does not necessarily make that device an acceptable alternative. *Id.* The key factor is whether the alternative products have the advantages

of the patented product. *Id.* Additionally, if purchasers are "motivated to purchase because of particular features available only from the patented product, products without such features . . . would not be acceptable." *Id.* Whether a product is ultimately an acceptable alternative is determined by consumer demand, as shaped by the "consumers' intended use for the patentee's product, similarity of physical and functional attributes of the patentee's product to alleged competing products, and price." *Grain Processing Corp. v. Am. Maize-Prod. Co.*, 185 F.3d 1341, 1355 (Fed. Cir. 1999).

Hamilton is not qualified to testify about consumer behavior or demand. His expertise is in the engineering and mechanical fields. He is a professional engineer and instructor and has worked as a consulting engineer. However, I find that Hamilton is not offering an opinion on consumer behavior in his acceptable alternatives analysis. Rather, his opinions focus on the technical advantages of the '551 Patent and whether competing products contain those advantages. Doc. No. 111-3 at 17–18. It appears that Hamilton did not consider or rely on any consumer market analysis. Because consumer demand is a necessary part of the overall acceptability analysis, I will exclude those portions of Hamilton's opinions in which he concludes that certain competitors' products are acceptable alternatives. However, those portions of his opinions describing advantages that are present (or not) in the competitor products are technical issues, on which I find he is qualified to testify.

Hamilton acknowledged "that to be an acceptable non-infringing alternative, a product must be acceptable to a user as a substitute for the product covered by the patent in suit (*namely, having the advantages offered by the patented product*.) The mere existence of a competing product is not enough." *Id.* at 6 (emphasis added). He provided an overview of the '551 Patent and discussed its advantages. *Id.* at 7–11. This

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⁷ Meridian appears to have other evidence relevant to the consumer demand issue and is free to offer that evidence at trial. Doc. No. 123 at 10–11. However, there is no indication that Hamilton relied on that evidence in forming his opinions.

demonstrates an accurate understanding of the law regarding the limited portion of the analysis on which I find Hamilton is qualified to testify.

Finally, I do not agree that the Line of Sight Group (LOSG) study contradicts Hamilton's opinions so as to render them inadmissible, as Hamilton's report and the LOSG study address distinct issues. Hamilton's report focuses on technical advantages while the LOSG study focuses on the commercial aspect – the subject on which Hamilton will not be permitted to testify. The impact of the LOSG study on Hamilton's opinions, if any, goes toward the weight of the opinions, not their admissibility.

b. Secondary considerations

Hamilton provides an opinion on the following secondary considerations: long-felt need, failure of others, teaching away, commercial success, praise of others and copying. Doc. No. 111-4 at 37–38, 39. HitchDoc argues that Hamilton's opinions on secondary considerations are inadmissible because (1) he is not qualified in marketing, economics or finance areas, (2) his opinions are contrary to law, (3) his opinions are contrary to other facts of record and (4) his opinions lack methodology. Doc. No. 111-1 at 11–12.

i. Long-felt need

To demonstrate long felt need, there must be an "articulated identified problem and evidence of efforts to solve that problem." *Perfect Web Techs., Inc. v. Info USA, Inc.*, 587 F.3d 1324, 1332–33 (Fed. Cir. 2009) (quoting *Tex. Instruments v. U.S. Int'l Trade Comm'n*, 988 F.2d 1165, 1178 (Fed. Cir. 1993)). Hamilton states that Roth provides evidence of long-felt need because the patent notes that "there existed a longstanding need for a new and improved type of trailer." Doc. No. 111-4 at 36. Hamilton also states that the testimony of Wyman Travis provides evidence of long-felt need. *Id.* at 37. I find Hamilton's opinions as to long-felt need are nothing more than conclusory statements about how the jury should interpret evidence. I will exclude Hamilton's opinions concerning long-felt need.

ii. Failure of others

The purpose of evidence showing the "failure of others" is to show "indirectly the presence of a significant defect in the prior art, while serving as a simulated laboratory test of the obviousness of the solution to a skilled artisan." *In re Cyclobenzaprine Hydrochloride Extended-Release Capsule Patent Litig.*, 676 F.3d 1063, 1082 (Fed. Cir. 2012). The evidence must show that others tried to satisfy a particular demand but failed to do so. *Id.* at 1082–83. Hamilton states that Roth provides evidence as to the failure of others because "in seeking to remedy the problem that Roth identifies" Roth did not use the inclining guide plates of the '551 Patent. Doc. No. 111-4 at 37. He also states that Wyman Travis is an example of the failure of others because he did not add sloping guideplates. *Id.* Again, I find that Hamilton's opinions on this issue are conclusory and not helpful to the trier of fact. As noted above, he is free to testify about the technical aspects of other patents, but his opinions concerning the alleged failure of others are not admissible.

iii. Teaching away

A reference "teaches away" when it discourages a person of ordinary skill from following a certain path, or leads that person in a "direction divergent from the path that was taken by the applicant." *DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 567 F.3d 1314, 1327 (Fed. Cir. 2009). A reference does not teach away, however, if it "merely expresses a general preference for an alternative invention but does not 'criticize, discredit, or otherwise discourage' investigation into the invention claimed." *Id.* (quoting *In re Fulton*, 391 F.3d 1195, 1201 (Fed. Cir. 2004)).

This factor relies on technical aspects of a patent. Hamilton states that in his opinion, Roth would teach one skilled in the art away from guide plates extending upwardly and outwardly from the perimeter edge of the bed. Doc. No. 111-4 at 37. He then explains what Roth teaches. I find that Hamilton's opinion on this point, does have a factual basis (albeit a limited one) and relies on technical expertise about the components

of both the Roth and the '551 Patent that would be helpful to the jury. I find Hamilton's opinions on the teaching away issue to be admissible.

iv. Commercial success and praise of others

Commercial success is relevant only if there is a nexus between the success and the claimed invention. *Tokai Corp. v. Easton Enters., Inc.*, 632 F.3d 1358, 1369–70 (Fed. Cir. 2011). Commercial success is typically shown by "significant sales in a relevant market, and that the successful product is the invention disclosed and claimed in the patent." *Ormco Corp. v. Align Tech., Inc.*, 463 F.3d 1299, 1312 (Fed. Cir. 2006). "However, if the marketed product embodies the claimed features, and is coextensive with them, then a nexus is presumed and the burden shifts." *Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, 229 F.3d 1120, 1130 (Fed. Cir. 2000). The "praise of others" in the same industry must also be linked to the patented invention. *See Apple Inc. v. Samsung Electrs. Co., Ltd.*, 839 F.3d 1034, 1053–54 (Fed. Cir. 2016).

Hamilton states that Wyman Travis' testimony provides evidence of both commercial success and praise of others because his sales began to pick up when he redesigned the seed cart and as a result "he received praise from others." Doc. No. 111-4 at 38. He also states that he understood Meridian enjoyed commercial success because of the patented technology. *Id.* at 39. As noted above, however, Hamilton's expertise is limited to the technical and engineering aspects of the patent. He does not have the requisite expertise in market forces or consumer expectations to provide opinions as to commercial success or other commercial aspects of an invention. His opinions as to commercial success and praise of others are inadmissible.

v. Copying

"[C]opying requires the replication a specific product." *Iron Grip Barbell Co.*, *Inc. v. USA Sports, Inc.*, 392 F.3d 1317, 1325 (Fed. Cir. 2004). Not every competing product that could fall within the scope of a patent indicates copying. *Id.* Evidence of

copying includes internal company documents, evidence of disassembling and photographing a prototypes features, using photographs as blueprints or access to patented product combined with substantial similarity. *Wyers v. Master Lock Co.*, 616 F.3d 1231, 1246 (Fed. Cir. 2010). Hamilton states that Travis' testimony provides evidence of copying because he was aware of Friesen's design. Doc. No. 111-4 at 38. He also opines that Chad Mohns' testimony provides evidence of copying because Mohns stated that their competitors copied their design. *Id*.

I find that Hamilton's opinions on the copying factor are conclusory, would not be helpful to the jury and are beyond the scope of expertise. As such, those opinions are not admissible.

4. Scope of prior art

Now that I have determined which expert opinions are admissible with regard to the validity of the '551 Patent, I will turn to the substance of the parties' summary judgment arguments. As explained above, one of the inquires relating to obviousness is the proper scope of prior art. *PAR Pharm.*, 773 F.3d at 1193. Both the scope and the content of the prior art are factual questions to be determined by the jury. *Graham v. John Deere Co. of Kan. City*, 383 U.S. 1, 17 (1966); *see also Kinetic Concepts, Inc. v. Blue Sky Med. Grp., Inc.*, 554 F.3d 1010, 1019 (Fed. Cir. 2009).

The two tests for defining the scope of analogous prior art are (1) field of endeavor and (2) problem addressed by the invention. *Smartdoor Holdings*, 707 F. App'x at 708. The appropriate field of endeavor is determined by "reference to explanations of the invention's subject matter . . . including the embodiments, function, and structure" of the invention. *In re Bigio*, 381 F.3d 1320, 1325 (Fed. Cir. 2004). If both the invention and the prior art have the same purpose, then the reference relates to the same problem, "which supports an obviousness rejection." *Unwired Planet, LLC v. Google Inc.*, 841 F.3d 995, 1000–01 (Fed. Cir. 2016). A reference not within the same field of endeavor is still pertinent if it is one that "logically would have commended itself to an inventor's

attention in considering his problem." In re Clay, 966 F.2d 656, 659 (Fed. Cir. 1992).

HitchDoc contends that the scope of prior art is broad and pertains to the problem of centering containers on a vehicle, not just boxes on an agricultural seed cart. *Id.* at 21. HitchDoc argues the range of prior references must be broad because Meridian claims the level of ordinary skill is high. *Id.* at 22. HitchDoc argues that the Fitch Patent, Patent No. 3,449,801 (LaFont), Bedard, Patent No. 5,000,633 (Kowalik), Patent No. 1,710,7373 (Kiesel) and Patent No. 2,017,414 (Liebegott) are all included in the scope of prior art and render the '551 Patent invalid due to obviousness. *See* Doc. No. 91-1 at 25-42.

Meridian argues that the scope of prior art is narrow and includes only trailers for transporting bulk seed boxes. Doc. No. 107 at 11. But even if the field of endeavor is broadened to include "agricultural implements," Meridian claims that the only proper prior art is the Roth patent. *Id.* Meridian contends that the problem addressed by the '551 Patent is the narrow problem of placing seed boxes on the trailer bed of a seed tender while using a forklift, and notes that none of the references asserted by HitchDoc relate to that particular problem. *Id.* at 12. Meridian thus argues that Fitch, which it referenced in its claim interpretation arguments, is not prior art. *Id.* at 14.

Meridian cites to Garry Friesen's deposition to demonstrate the specific problem solved by the '551 Patent.⁸ Doc. No. 107-2 at 3 ¶ 14. Friesen testified that the guide plates were placed in a way to give the forklift more space for the boxes and to maximize the support from the legs of the seed tender. Doc. No. 107-3 at 92. Meridian also cites the patent itself and Hamilton's expert opinions. Doc. No. 107-2 at 2 ¶ 13. The '551 Patent states that an objective of the invention is to "facilitate loading of the box on the

⁸ The citation refers to Doc. No. 107-3 at 91. The table of contents in the appendix goes to page 81. However, the cited testimony appears to be a partial duplicate of the deposition pages at page 15. It is unclear why the rest of the pages were not together with the cover page or why the table of contents did not include the rest of the appendix.

bed." Doc. No. 91-19 at 7. Hamilton's report states that Friesen was attempting to "develop a means of placing a box containing seed onto a cart in as effective manner as possible while minimizing the risk of damaging the boxes." Doc. No. 107-3 at 46.

HitchDoc cites the Fitch patent and the '551 Patent. Doc. No. 91-1 at 21. HitchDoc also refers to Heise's expert report. *Id.* at 29–32, 34, 37, 39–48 (cited as Morehead Aff. Ex. Q). Heise's report states that the problem is placing a box or container safely, efficiently and accurately on an elevated surface, meaning that the scope of prior art should include art from non-agricultural industries. *Id.* HitchDoc argues that the '551 Patent states that the problem it solves is centering and maintaining containers on a vehicle. *Id.* at 21. The language of the patent, however, discusses only flat trailer beds and a "trailer for bulk seed boxes." Doc. No. 31-19 at 7. This language could support either Meridian's or HitchDoc's interpretation.

As noted above, the parties dispute whether Fitch is prior art. HitchDoc argues that Meridian must concede Fitch is prior art because it relied on Fitch in arguing the interpretation of claim 1. Doc. No. 91-1 at 21, 29. HitchDoc does not cite any law for this argument. Meridian argues that the prosecution history is not determinative because prior art was never part of the discussion. Doc. No. 107 at 14.

HitchDoc is correct that Meridian relied on the Fitch patent in arguing for summary judgment on the issue of infringement. *See* Doc. No. 57 at 13–14. In addition, during the prosecution history, the patent examiner identified Fitch as being prior art. Doc. No. 91-10 at 7–8. Fitch deals with positioning a container on a freight truck and uses four brackets to center the freight containers. Doc. No. 91-15 at 55. Nothing indicates that the Fitch invention is specific to the field of agriculture.

I relied on Fitch to help define "perimeter edge," as that term is used in the '551 Patent. Doc. No. 75 at 13–14. I noted that the patent examiner identified that it would have been obvious for a person of ordinary skill in the art to modify Fitch to create the invention described in the '551 Patent. *Id.* at 14. However, I find that the patent examiner's conclusion that Fitch is prior art is not determinative. Nor, as noted above,

has HitchDoc provided legal support for the argument that Fitch must be considered prior art because Meridian relied on it when arguing that infringement occurred. Because the scope of the prior art is a factual question for the jury, I will not undertake to determine that scope as a matter of law.⁹

5. Content of prior art

Because the scope of prior art must be determined by the jury, I need not address the content of the prior art at this time. I will also not separately address the dependent claims because if there is a question of fact on the scope of prior art on claim 1, there is a question of scope of prior art for the other claims as well.

6. Motivation to combine

I have previously addressed the standard for determining a motive to combine in discussing the admissibility of James Heise's expert opinion. *See* Section IV(A)(2)(g), *supra*. A patent claim can be proved to be obvious by showing that there was a known problem at the time of the invention for which an obvious solution existed. *KSR*, 550 U.S. at 420. Or, if a certain technique has been used to improve devices similar to the challenged device in the same way, a court could find the technique was obvious. *Id.* at 417. *KSR* did not overrule the TSM test but noted that it should be used flexibly.

⁹ For purposes of their cross-motions, the parties agree that a person of ordinary skill in the art is one with "decades of experience designing agricultural implements, such as seed tenders." Doc. No. 91-1 at 22; Doc. No. 107 at 11. However, the parties disagree on the effect of that definition. Citing *McGinley v. Franklin Sports, Ltd.*, 262 F.3d 1339, 1351 (Fed. Cir. 2001), HitchDoc argues that the high skill level supports a broad range of prior art. Doc. No. 91-1 at 22. In *McGinley*, the court stated that "[w]here the level of skill is high, one may assume a keener appreciation of nuances taught by the prior art." *Id.* At the same time, a "keener appreciation of the nuances" of the existing prior art does not necessarily mean the entire scope of prior art overall is broad. Meridian argues that the high skill in agricultural implements would limit a person of ordinary skill to agricultural trailers. Doc. No. 107 at 11. Despite the parties' agreement as to the definition of a person of ordinary skill in the art, there is a question of fact as to the scope of prior art.

Sabasta, 683 F. Supp. 2d at 960. Applied flexibly, the TSM test assures that obviousness is based on evidence, and that "teachings, suggestions, or motivations need not always be written references but may be found within the knowledge and creativity of ordinarily skilled artisans." *Id.* (quoting *Ortho-McNeil Pharm.*, *Inc.* v. *Mylan Labs.*, *Inc.*, 520 F.3d 1358, 1365 (Fed. Cir. 2008)).

HitchDoc argues that the evidence, including Fitch, shows that the guide plates resulted from design expediency. *Id.* at 26–27. HitchDoc also argues that multiple prior art references "teach the precise limitation Friesen relied upon for a finding of patentability." *Id.* HitchDoc contends the location of the guide plates was merely a modification of Fitch's guides in response to his particular design needs and so there must be a finding of obviousness. *Id.* at 27–29.

Meridian argues that the extension of guide plates beyond the perimeter was not a design expediency but, instead, was done to improve the performance of the seed tender and improvement does not mean it was a design need. Doc. No. 107 at 22. Meridian argues that HitchDoc has failed to show any evidence of a design need to extend the plates beyond the perimeter. *Id.* at 23. Therefore, there is no evidence of a motivation to combine the Roth and Fitch patents. *Id.* at 24. Meridian also argues that there is evidence of nonobviousness that creates a question of fact. *Id.* at 24–26.

HitchDoc relies on the patent examiner's conclusion that it would "have merely been a design expediency" to extend the plates beyond the bed perimeter by combining Roth, Fitch and then shifting the position of the plates. Doc. No. 91-9 at 3. HitchDoc contends that the Board applied the TSM test too rigidly when it disagreed with the patent examiner and stated the determination of design expediency was not supported by any evidence. Doc. No. 91-14 at 10. However, the Board clearly stated that evidence could come from the prior art references, knowledge of someone of ordinary skill or from the nature of the problem. *Id.* The Board characterized the sources of evidence as "broad" but indicated some evidence was still required. *Id.* This seems to be in line with *KSR*'s mandate of applying the TSM test flexibly.

HitchDoc relies on Friesen's deposition testimony, along with Heise's opinion that it would have been obvious to combine elements of certain pieces of prior art. Doc. No. 91-21 at 20. Meridian relies on Friesen's testimony as well, arguing that the design of the guide plates was "not an expedient choice" because there were other ways Friesen could achieve his goals. Doc. No. 107 at 22. Meridian also relies on Hamilton's opinion that the guide plate extension was not a design expediency but, instead, "an intentional part of the problem solving" that resulted in "a lower cost and less labor intensive manufacturing process." Doc. No. 107-3 at 50.

The parties disagree on the definition of "design expediency." Meridian argues it is the "convenient, though perhaps not optimal, design choice" but does not cite any sources. Doc. No. 107 at 22. HitchDoc appears to use the "design need" definition as used in *KSR*. Doc. No. 91-1 at 23. The dictionary definition of "expediency" is "the quality of being suited to the end in view." Merriam-Webster Dictionary https://www.merriam-webster.com/dictionary/expediency. I find "design expediency" for purposes of an obviousness analysis is more in line with the "design need," so the fact that the choice to extend the guide plates was not necessarily the most convenient or the only option does not prohibit a finding of obviousness.

However, there remains a question of fact as to whether a person of ordinary skill would be motivated to combine features of prior art. First, as stated above, the jury must make factual findings concerning the scope and content of the prior art. Second, the parties have presented conflicting expert testimony as to whether a design need and common sense would prompt the combination of certain features taught by the prior art.

For all of the reasons set forth above, HitchDoc's motion for summary judgment as to the validity of the '551 Patent will be denied.

B. Damages

HitchDoc seeks to bar Meridian's recovery of damages for infringement that incurred prior to September 17, 2015, and also argues that Meridian is not entitled to

enhanced damages based on willful infringement. Doc. No. 89-1 at 3. I will address these issues separately. I will then address the parties' motions to exclude certain expert opinions that go to the issue of damages.

1. Limitation on Damages

35 U.S.C. § 287, entitled "Limitation on damages and other remedies; marking and notice, states as follows, in relevant part:

Patentees, and persons making, offering for sale, or selling within the United States any patented article for or under them, or importing any patented article into the United States, may give notice to the public that the same is patented, either by fixing thereon the word "patent" or the abbreviation "pat.", together with the number of the patent, or by fixing thereon the word "patent" or the abbreviation "pat." together with an address of a posting on the Internet, accessible to the public without charge for accessing the address, that associates the patented article with the number of the patent, or when, from the character of the article, this can not [sic] be done, by fixing to it, or to the package wherein one or more of them is contained, a label containing a like notice. In the event of failure so to mark, no damages shall be recovered by the patentee in any action for infringement, except on proof that the infringer was notified of the infringement and continued to infringe thereafter, in which event damages may be recovered only for infringement occurring after such notice. Filing of an action for infringement shall constitute such notice.

35 U.S.C. § 287(a) (emphasis added). The statute thus limits damages to acts of infringement that occurred after the patentee gave the alleged infringer actual or constructive notice. *Gart v. Logitech, Inc.*, 254 F.3d 1334, 1345 (Fed. Cir. 2001). The patentee bears the burden of pleading and proving compliance with § 287(a). *Arctic Cat Inc. v. Bombardier Recreational Prod. Inc.*, 876 F.3d 1350, 1367 (Fed. Cir. 2017). The alleged infringer challenging compliance with the statute bears the initial burden of production to "articulate the products it believes are unmarked." *Id.* at 1368. Whether a patentee has complied with the marking statute is a question of fact. *Gart*, 254 F.3d at 1339. The patentee must show that it consistently marked substantially all of the patented

products and that, once marking began, the marking was substantially consistent and continuous. *Nike, Inc. v. Wal-Mart Stores, Inc.*, 138 F.3d 1437, 1446 (Fed. Cir. 1998).

Here, the parties agree that Meridian gave HitchDoc actual notice of infringement on September 17, 2015. Doc. No. 101 at 5. The parties also agree that Meridian may recover damages only for infringement occurring after November 23, 2009. *Id.* The question is whether HitchDoc was on constructive notice of infringement between November 23, 2009, and September 17, 2015. HitchDoc argues that Meridian failed to consistently mark substantially all of its seed carts during that time period and thus did not provide constructive notice. Doc. No. 89-1 at 7. HitchDoc points to Meridian's purchases of patent decals and argues that it would be impossible for Meridian to have marked all of its tenders based on how many decals it purchased. *Id.* at 8–9. HitchDoc also cites communications between Meridian employees and testimony that indicate Meridian did not mark its products. *Id.* at 10–11. Meridian disagrees and also notes that it gave notice of its patent rights in its seed tender user manuals.

On the issue of whether the seed tenders were marked, there is evidence that Meridian ordered patent decals in November 2002, December 2007 and September 2008. Doc. No. 89-13 at 10-11. Some decals were not used. *Id.* at 12-13; Doc. No. 89-17. Mark Loewen, Meridian's Director of Engineering, wrote in 2014: "Historically, Meridian has not placed patent markings on its products, but that is about to change." Doc. No. 89-18 at 4. Peter Trebuschnoj, Meridian's Director of US Operations, indicated that Meridian stopped applying patent decals sometime around 2011. Doc. No. 89-20. In approximately 2014, the plan was to use a standardized patent decal that would refer customers to a website where the specific patents would be listed. Doc. No. 103 at 48, 73. However, it is unclear whether that plan was actually implemented. Doc. No. 89-18 at 10, 13 (Loewen does not recall whether the plan was followed but did not inspect all units). Curtis Famer testified that he believed at least some products were marked with patent stickers prior to May 2014, but not all. Doc. No. 103 at 73.

Surprisingly, in the midst of both parties' citations to the record, there is only a single photo of a product that is marked with the phrase "patent protected." Doc. No. 103 at 57–58. Other pictures show seed tenders with a "Meridian" label but no patent decal. *Id.* at 60–65. Based on the record before me, no reasonable fact finder could find that Meridian "consistently marked substantially all of the patented products" in a way that was substantially consistent and continuous before September 17, 2015.

As for Meridian's argument that it sufficiently "marked" its products by providing a patent number in the user manuals, the statute requires that the marking be affixed to the article itself. 35 U.S.C. § 287(a). The only exception is "when, from the character of the article, this can not be done," in which case the packaging may be marked. *Id.* In a doubtful case, the court should consider the judgment of the patentee in determining whether it was possible to mark the product. *See Sessions v. Romadka*, 145 U.S. 29, 50 (1892). Here, Meridian has not shown that the character of its product required it to mark the packaging rather than the product itself. In fact, the referenced photos indicate that it was possible to affix stickers or decals to the product.

Moreover, Meridian has not generated a genuine issue of fact as to whether the user manuals actually contained a reference to the patent. Meridian has not provided a copy of any such manual containing a reference to the patent. While Meridian cites Trebuschnoj's testimony that the user manuals included the patent number, he wrote in a 2015 email message that Meridian's user manuals had "no reference" to any patents. *See* Doc. No. 103 at 53; Doc. No. 89-20. Thus, even if Meridian could have complied with § 287(a) by marking its user manuals, rather than the product itself, it has failed to produce sufficient evidence to show that it did so.

HitchDoc has shown, as a matter of law, that Meridian did not mark its products in accordance with § 287(a). As such, Meridian is not entitled to recover damages based on infringement that occurred before September 17, 2017, when it provided HitchDoc with actual notice of infringement.

2. Enhanced Damages

"Upon finding for the claimant" in a patent infringement action, "the court may increase the damages up to three times the amount found or assessed." 35 U.S.C. § 284. The court thus has discretion to decide whether the case warrants enhancing damages and the amount of enhancement up to the statutory limit of treble damages. WBIP, 829 F.3d at 1342. However, enhanced damages are appropriate only in egregious cases of misconduct, such as willful, wanton, or malicious behavior. Halo Elecs., Inc. v. Pulse Elecs., Inc., ____ U.S. ____, 136 S. Ct. 1923, 1932 (2016). As such, "[a]n award of enhanced damages does not necessarily flow from a willfulness finding." Presidio Components, Inc. v. Am. Tech. Ceramics Corp., 875 F.3d 1369, 1382 (Fed. Cir. 2017). The issue of willfulness must be decided by the jury. Exmark Mfg. Co. Inc. v. Briggs & Stratton Power Prods. Grp., LLC, 879 F.3d 1332, 1353 (Fed. Cir. 2018).

"Willfulness turns on the actual knowledge of the infringer, and is unrelated to the adequacy of constructive notice by the patentee." *Nike*, 138 F.3d at 1446; *see also WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1341 (Fed. Cir. 2016) ("Knowledge of the patent alleged to be willfully infringed continues to be a prerequisite to enhanced damages."). When willful infringement is found, courts must take into account "the particular circumstances of each case" in deciding whether to award enhanced damages. ¹⁰ *Halo Elecs.*, 136 S. Ct. at 1933.

HitchDoc argues that enhanced damages are not appropriate because there is no evidence that its infringement was willful. Doc. No. 89-1 at 12. Meridian notes, among other things, that HitchDoc cited the '551 Patent in the prosecution of HitchDoc's own patent and argues that HitchDoc's infringement was both willful and egregious. Doc. No. 101 at 10-17. I find the summary judgement record to be insufficient for me to make

¹⁰ Both parties cite the factors discussed in *Read Corp. v. Portec, Inc.*, 970 F.2d 816, 827 (Fed. Cir. 1992) as a test for finding egregiousness. However, it is not necessary for a court to discuss those factors (even if potentially helpful). *See Presidio Components*, 875 F.3d at 1382–83. The only requirement is that the court "consider the particular circumstances of the case."

a finding, as a matter of law, that enhanced damages under § 284 are not recoverable. If the jury finds willful infringement, I will consider an award of enhanced damages based on the entire trial record. HitchDoc's motion for summary judgment on this issue will be denied.

3. Expert Opinions on Damages

If a patent has been infringed, the patentee is entitled to "damages adequate to compensate for the infringement." *AstraZeneca AB v. Apotex Corp.*, 782 F.3d 1324, 1329–30 (Fed. Cir. 2015). Two categories of infringement compensation are lost profits and the reasonable royalty a patentee would have received through arms-length negotiating. *Id.* at 1330. The patentee is entitled to no less that the reasonable royalty. *Id.*

a. Carol Ludington

Ludington was retained by HitchDoc to present opinions on "financial and analytical projects related to damages." Doc. No. 117-1 at 4. She has provided financial analyses to clients for over thirty years, is a certified public accountant and is certified in financial forensics, among other licenses and titles. *Id.* at 5–7. Ludington has provided opinions as to both lost profits and a reasonable royalty. Meridian contests certain portions of her opinions on grounds of both her expertise to issue the opinions and the methodology she employed. The contested aspects of Ludington's opinions are, in summary form, as follows:¹¹

• The patentable feature is only a portion of HitchDoc's product and the damages should be apportion between the guide plates and other features. Doc. No. 117-1 at 19.

37

¹¹ HitchDoc spends a portion of its brief discussing opinions of Ludington that are unchallenged. The unchallenged opinions will be admitted at trial.

- The cost differences between HitchDoc's infringing design and its post-infringement order redesign provides the most useful information for apportionment. Doc. No. 117-2 at 15-16.
- A chart comparing various product features between different companies. Doc.
 No. 117-1 at 13-14.
- A reasonable royalty would not be more than the cost to HitchDoc to develop and implement an alternative design. Doc. No. 117-2 at 16-17.
- A reasonable royalty would be a lump sum of \$15,000 to \$30,000. *Id.* at 18–19. Meridian argues that these opinions should be excluded because (1) Ludington is unqualified to testify on scientific and technical matters, (2) the opinions are based on insufficient facts and unreliable methodology and (3) the opinions are unreliable because Ludington ignored pertinent facts and assumed that Meridian is not entitled to recover damages for infringement that occurred before September 2015. Doc. No. 118-1 at 20, 22–27. HitchDoc argues that the challenged opinions are admissible because Ludington is a qualified damages expert, she did not provide opinions on technical issues and the methodology she used is reliable. Doc. No. 127 at 19, 21, 26.

i. Qualifications

Meridian contends that Ludington is not qualified to testify (1) about a "patentable feature" or (2) about product features that other competitor's products have because she is not a technical expert. Doc. No. 118-1 at 20. On the first issue, Ludington states in her report that she has been retained by HitchDoc and advised that of the various features listed on the seed tenders, the "key feature at issue is guide plates that incline upwardly and outwardly from the perimeter edge of the bed." Doc. No. 117-1 at 4. She then identifies the guide plates as the "Patentable Feature." Ludington is not a legal expert, but here she is not providing an expert opinion on a legal issue. Instead, she is relying on information from other sources to inform her conclusions about her area of expertise,

which is appropriate. *See Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286, 1321 (Fed. Cir. 2014) (stating experts routinely rely on other experts for expertise outside of their field). She can explain her understanding of the particular feature that informed her damages analysis and Meridian is free to cross-examine her about it.

With regard to the second issue, Ludington provided a chart summarizing the features and attributes that are reflected in "marketing literature and other documents." Doc. No. 117-1 at 12-14. The chart shows various attributes of seed tenders sold by HitchDoc, Meridian and other competitors. *Id.* The chart also indicates the sources from which Ludington obtained the information. *Id.* at 14. I find that Ludington is not expressing an expert opinion about these technical features. Instead, she is merely relating the information she used in her ultimate damages analysis. She does not address the mechanics of these features or opine as to how they differ between the various models. I reject Meridian's argument that Ludington has offered opinions on issues for which she is not qualified.

ii. Methodology

Meridian argues that it is improper to limit reasonable royalty damages to the cost of developing a redesigned seed tender. Doc. No. 118-1 at 22. Meridian also argues that Ludington improperly treated HitchDoc's redesign as an available, non-infringing alternative. *Id.* at 23.

Reasonable royalty cap. "A reasonable royalty can be calculated from an established royalty, the infringer's profit projections for infringing sales, or a hypothetical negotiation between the patentee and infringer." Wordtech Sys., Inc. v. Integrated Networks Sols., Inc., 609 F.3d 1308, 1319 (Fed. Cir. 2010). Reasonable royalty rates are not, as a matter of law, capped at the cost of implementing the cheapest available noninfringing alternative. Mars, Inc. v. Coin Acceptors, Inc., 527 F.3d 1359, 1373 (Fed. Cir. 2008). However, that cost may be considered in calculating a reasonable royalty. See Zygo Corp. v. Wyko Corp., 79 F.3d 1563, 1571–72 (Fed. Cir. 1996). If, based on

the facts and circumstances and understanding of the actors, the reasonable royalty rate turns out to be in line with the cost difference, that is entirely appropriate. *See Riles v. Shell Expl. & Prod. Co.*, 298 F.3d 1302, 1312 (Fed. Cir. 2002) ("The economic relationship between the patented method and non-infringing alternative methods, of necessity, would limit the hypothetical negotiation."); *Grain Processing*, 185 F.3d at 1347 (finding that the difference between the production costs of the infringing and non-infringing products would "effectively" cap the reasonable royalty rate because under the facts, the defendant would not have paid more than that in a hypothetical negotiation).

Ludington states that she "understand[s] that HitchDoc's redesigned seed cart has been favorably received by dealers and customers, that it is perceived as more sturdy, and that it is less expensive to produce," relying on a deposition of Chad Mohns and an interview with Brad Mohns and Chad Mohns. Doc. No. 117-2 at 14. She goes on to state that apportionment is appropriate, but there is no information available to "provide a basis for apportionment of profits between the features of the '551 patent and other considerations." *Id.* at 16. Instead, the production cost differences between the infringing design and the re-design is the most useful guidance. *Id.* She states that due to this information, and because there were available, acceptable non-infringing alternatives, "a reasonable royalty would not be more than the cost to HitchDoc to develop and implement an alternative, non-infringing design." *Id.*

Ludington's opinion does not place an automatic cap on damages at the cost of redesign. Rather, she concludes based on the facts and circumstances of this case that a reasonable royalty would not exceed the cost of redesigning the HitchDoc seed tender. She can be cross-examined on this conclusion, but the conclusion is not inadmissible.

Redesign as acceptable alternative. Lost profits ordinarily cannot be recovered if acceptable non-infringing alternatives were available during the period of infringement. *Micro Chem., Inc. v. Lextron, Inc.*, 317 F.3d 1387, 1393 (Fed. Cir. 2003). Acceptable alternatives can also affect the reasonable royalty rate because it would influence the market and the amount a "rational would-be infringer" would be willing to pay. *See*

Grain Processing Corp., 185 F.3d at 1350–51. In order to be an acceptable non-infringing alternative, "the product or process must have been available or on the market at the time of infringement." *Id.* at 1349. Even if a non-infringing substitute was not on the market, it can still be "available" if the infringing party could have manufactured the alternative and would have known it would be acceptable to consumers at the time of the infringement. *Id.* at 1351, 1353–54; *Micro Chem.*, 317 F.3d at 1393. Whether a non-infringing alternative is acceptable is a question of fact for the jury to determine. *See Standard Havens*, 953 F.2d at 1373 ("a reasonable juror could have found" there were not acceptable alternatives available.).

In discussing lost profits, Ludington references acceptable non-infringing substitute products that were on the market, as identified by Zach Eubank and John Hamilton. Doc. No. 117-1 at 32–33. She adds that Eubank neglected to identify HitchDoc's redesigned seed tender as an acceptable non-infringing alternative. *Id.* at 33. Ludington was advised that dealer and customer reactions to the redesign were positive and that the re-design could have been developed and implemented earlier, "[h]ence, the re-design represents an available, acceptable non-infringing alternative." *Id.*; *see also* Doc. No. 117-2 at 14. She concludes that because "there were available, acceptable non-infringing alternatives" a reasonable royalty would not be more than the cost of developing and implement an alternative. *Id.* at 16.

If the necessary equipment, know-how and experience were available at the time of infringement, a substitution may be considered an acceptable, available alternative even if it was not on the market. *Micro Chem.*, 318 F.3d at 1123. Whether the redesigned product is an acceptable, available alternative is ultimately a question of fact for the jury. *DePuy Spine*, 567 F.3d at 1332. Ludington's characterization of HitchDoc's redesigned product as being an available, acceptable alternative does not render her opinion inadmissible. In any event, her opinion does not rely entirely on this characterization, as she cites to multiple other alternatives that other experts have identified as part of her damages analysis. *See* Doc. No. 117-2 at 16-17.

iii. Reliability

Meridian argues that Ludington ignored the costs of the retrofit, focusing only on the cost of the redesign, and provided no sources for the costs she did consider. Doc. No. 118-1 at 26–27. Meridian also claims she ignored the cost of having counsel review the design and the present litigation costs. *Id.* at 26. Meridian contends her reasonable royalty rate is inadmissible because it is significantly less than the revenue HitchDoc made from its infringing product. *Id.* at 27.

At the outset, I note that litigation costs are irrelevant to the reasonable royalty consideration. The hypothetical reasonable calculation must occur before the litigation because litigation can "skew the results" of the negotiation. *ResQNet.com, Inc. v. Lansa, Inc.*, 594 F.3d 860, 872 (Fed. Cir. 2010). Meridian's argument relies on the fact that the knowledge of the lengthy litigation process would have skewed HitchDoc's position and risks. Doc. No. 118-1 at 26. The fact that Ludington did not incorporate litigation costs in her report does not make her opinion inadmissible.

Second, Ludington did not ignore HitchDoc's retrofit. She acknowledges that it occurred but notes that there is a dispute about whether the retrofitted units still infringe the '551 Patent. Doc. No. 117-1 at 10, 34. Whether Ludington should have included the costs that resulted from the retrofit of existing infringing products, in addition to the cost of redesign, goes to the weight of the evidence, not its admissibility. She used reliable methods and legally sufficient facts to come to her conclusions. She also provided sources for the costs she did consider. *See* Doc. No. 117-2 at 17 n. 93–97, 113.

Finally, the fact that Ludington's proposed, reasonable royalty is less than the revenue HitchDoc made from the infringing product also goes to weight, not admissibility, as she has provided sufficient support for her opinion. The issues Meridian raises are proper grounds for cross-examination but do not render Ludington's opinion inadmissible.

iv. Damages before September 2015

Meridian argues Ludington's opinion is inadmissible because it assumes Meridian is not entitled to damages from before September 17, 2015. Doc. No. 118-1 at 28. However, I have already found that this assumption is correct. *See* Section IV(B)(1), *supra*. As such, I reject Meridian's argument on this issue.

b. Zach Eubank

Eubank was retained by Meridian and has provided opinions on both reasonable royalty and lost profits damages. He estimates four potential damages rates based on reasonable royalties. Doc. No. 114-7 at 24. These rates are 3.0%, 5.0%, 8.2% and 10% of sales. *Id.* He states that this range established the minimum amount of compensation to which Meridian is due. *Id.* at 7. His second conclusion is that Meridian would have likely "captured a portion of [HitchDoc's] box tender sales if the infringement had not occurred" and thus is entitled to lost profits. Doc. No. 114-7 at 28. Eubank states that based on John Hamilton's expert report and a report by the Line of Sight Group, Meridian would have "captured at least 24 to 44 percent" of HitchDoc's sales. *Id.* Therefore, Meridian would have made \$2,847,300 in profits if the infringement had not occurred. Based on the combination of a reasonable royalty and lost profits damages, Eubank states that Meridian is entitled to damages in a range of \$3,704,200 to \$5,703,500. *Id.* at 29.

i. Reasonable royalty rates

HitchDoc argues that Eubank's opinion is unreliable because it is based on unrelated and irrelevant license agreements and are not apportioned to the patented feature alone. Doc. No. 121 at 28–33, 36. HitchDoc also argues that Eubank did not perform any research or market analyses to come to his conclusion. *Id.* at 35. HitchDoc claims that Eubank's opinions are merely conclusory and that he did not reliably apply the appropriate factors. Doc. No. 137 at 19–22. Meridian argues that his comparisons with

other licensing agreements are reasonable and Eubanks sufficiently explained the factors he used to come to his conclusion. Doc. No. 125 at 13–14. Additionally, apportionment to the patented feature is not necessary because, according to Meridian, the smallest salable unit is the box tender. *Id.* at 15–17.

As noted above, there are several approaches for calculating a reasonable royalty. *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1324 (Fed. Cir. 2009). One approach is to determine a royalty upon which the parties would have agreed in a hypothetical successful negotiation. *Id.* The factors that must be used to determine this rate are known as the *Georgia-Pacific* factors. *See Georgia-Pacific Corp. v. U.S. Plywood Corp.*, 318 F. Supp. 1116, 1120 (S.D.N.Y. 1970). The second of these factors addresses the rates licensees have paid for the use of other patents comparable to the patent at issue. *Lucent Techs.*, 580 F.3d at 1325.

The Second Georgia-Pacific factor. The plaintiff has the burden of proving that the licenses relied upon are sufficiently comparable and how any differences would affect the appropriate royalty. Lucent Techs., 580 at 1329; Finjan, Inc. v. Secure Computing Corp., 626 F.3d 1197, 1211–12 (Fed. Cir. 2010). There must be a basis in fact to associate the rate from prior licenses to the hypothetical negotiation. Uniloc USA, Inc. v. Microsoft Corp., 632 F.3d 1292, 1317 (Fed. Cir. 2011).

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The factors are: (1) royalties received by patent holder for the licensing of the patent in suit; (2) rates paid by the licensee for use of other patents comparable to the patent in suit; (3) nature and scope of the licenses; (4) licensor's established policy and marketing program to maintain its patent; (5) commercial relationship b/w licensor and licensee; (6) effect of selling the patented specialty in promoting sales of other products; (7) duration of the patent and term of the license; (8) established profitability of the product made under the patent; (9) utility/advantages of the patent tech over old modes/devices; (10) nature of the invention; (11) extent to which the infringer has made use of the invention; (12) portion of the profit/selling price customary in the particular business; (13) portion of realizable profit credited to the invention; (14) opinion and testimony of qualified experts; (15) amount a licensor and a licensee would have agreed upon in a hypothetical negotiation.

ResQNet found that licenses had no relationship to the invention when they did not mention the patent in suit or "showed any other discernable link to the claimed technology." 594 F.3d at 870. Comparable licenses may "cover more patents than are at issue in the action, include cross-licensing terms, [or] cover foreign intellectual property rights." Ericsson, Inc. v. D-Link Sys., Inc., 773d F.3d 1201, 1227 (Fed. Cir. 2014). However, an opinion relying on such licenses must account for the distinguishing facts. Id. In any event, "the fact that license is not perfectly analogous generally goes to the weight of the evidence, not its admissibility." Id. The ultimate determination is to what extent the testimony and evidence would "skew unfairly the jury's ability to apportion the damages to account only for the value attributable to the infringing features." Id. at 1228.

Eubank stated that he "examined market rates for similar royalties paid in the industry." Doc. No. 121-6 at 23. To do so, he searched the RoyaltySource Intellectual Property Database and searched for rates "in the machinery, agricultural, forestry and fishing industries." *Id.* at 23 – 24. He stated that there are several limitations with the data, but did not elaborate on what those limitations are or how they affected the ultimate rates he chose. *Id.* He complied the six licenses he used into a chart. *Id.* at 40. However, this chart does not explain how the technologies that were the subject of those licenses are comparable to the technology at issue in this case. At most, Eubanks provides a brief description of the licensed technology, such as (1) an invention that wraps bales in plastic shooting, (2) an oil extracting rotator machine pulled by cattle or human labor, (3) "assets, patents, know-how and technology and other tangible and intangible assets of the rotatory engine division" and (4) technology that "dry separates agricultural products and sorts them according to various properties." *Id.*

These descriptions do not show how the technologies are comparable to the technology at issue or how Eubank accounted for the differences. "[A]lleging a loose or vague comparability between different technologies or licenses does not suffice." *LaserDynamics, Inc. v. Quanta Comput., Inc.*, 694 F.3d 51, 79 (Fed. Cir. 212). Eubank

testified that he simply chose these six licenses based on his judgment, but did not explain his criteria. Doc. No. 121-20 at 96. Nor has he explained the differences between the technology in the agreements and the patented technology. I find that Eubank's opinions are inadmissible to the extent that they are based on the licensing agreements.

The agreement between Wyman Travis and HitchDoc is a closer question. Doc. No. 121-6 at 19. Eubank discusses how HitchDoc agreed to purchase the Travis Seed Cart business, which included box tenders, and the amount HitchDoc ultimately paid for the seed cart design. *Id.* However, as discussed below, Eubank does not tie the agreement to the question of why HitchDoc and Meridian would have agreed on his proposed royalty rate in hypothetical licensing negotiations.

The Other Georgia-Pacific factors. While Eubank testified that his royalty rates were "primarily" based on the six other licenses discussed above, his report does mention other Georgia-Pacific factors. Doc. No. 121-20 at 102; Doc. No. 121-6 at 17–18. However, a "superficial recitation of the Georgia-Pacific factors, followed by conclusory remarks" is not sufficient. Exmark, 879 F.3d at 1350. Eubank considered the fifth (commercial relationship), sixth (sales of other products), seventh (duration and term), eighth, (profitability based on the patent), ninth (utility of the patent), tenth (nature of the invention), eleventh (extent to which HitchDoc made use of the invention) and twelfth (profits) factors. See Doc. No. 121-6 at 19–23.

As in *Exmark*, Eubank listed the factors and discussed what was included in those categories but did not complete the crucial step of explaining how those factors would influence the parties in a hypothetical negotiation to reach agreement as to his proposed reasonable royalty rates. *See Exmark*, 879 F.3d at 1349. His conclusion is that "[b]ased upon the factors previously noted, I have identified four potential reasonable royalty rate

data points." Doc. No. 121-6 at 24. Because Eubanks did not provide adequate support for his conclusions, his opinion as to reasonable royalties is inadmissible.¹³

ii. Lost profits

As explained above, the second element of proving lost profits is showing that there are no acceptable, non-infringing alternatives to the patented technology. However, a patent owner may satisfy that element by "substituting proof of its market share," which allows the patentee to recover lost profits "despite the presence of acceptable, noninfringing substitutes, because it nevertheless can prove with reasonable probability sales it would have made 'but for' the infringement." *BIC Leisure Prod., Inc. v. Windsurfing Int'l, Inc.*, 1 F.3d 1214, 1219 (Fed. Cir. 1993). HitchDoc argues that Eubank's opinion as to lost profits is unreliable because the record shows there are available and acceptable non-infringing alternatives, which prohibits recovery of lost profits. Doc. No. 121 at 7–16. However, because Eubank's opinion is based on market share, the fact that there may be acceptable alternatives does not render his opinion inadmissible.

HitchDoc also argues that Eubank's lost profits calculations are unreliable because he "blindly relied" on a flawed market share analysis conducted by LOSG and information from Meridian, did not consider sales from a different company and improperly assumed the percentage of Meridian's market decline without performing any independent analysis. *Id.* at 17–20. In addition, HitchDoc contends that Eubank's assumed profit margins are unreliable because he improperly combined the profit margins of other products and improperly assumed profit margin changes without supporting evidence. *Id.* at 20–27. Meridian argues that Eubank properly calculated lost profits and

¹³ Because I find Eubanks' opinion as to royalty rates to be inadmissible in light of the *Georgia Pacific* factors, I need not address whether Eubank properly apportioned those rates to the patented feature.

properly relied on the LOSG study because it was the best available evidence and is of a kind that experts in Eubank's field typically rely on. Doc. No. 125 at 8–10. Meridian claims that Eubank sufficiently explained his estimates, assumptions and reasons for the combined profit margins. *Id.* at 11–13.

When opposing experts rely on conflicting sets of facts, it is not the court's role to evaluate the correctness of the facts underlying one expert's testimony. *Micro Chem.*, 317 F.3d at 1392. Generally, the factual basis of an opinion goes to the credibility, not the admissibility of the testimony. *United States v. Finch*, 630 F.3d 1057, 1062 (8th Cir. 2011). To be excluded on this basis, the opinion must be so "fundamentally unsupported that it can offer no assistance to the jury." *Id.* Doubts about usefulness should "generally be resolved in favor of admissibility." *Id.*

"Experts routinely rely upon other experts hired by the party they represent for expertise outside of their field." *Apple Inc.*, 757 F.3d at 1321, *overruled on other grounds by Williamson v. Citrix Online, LLC*, 792 F.3d 1339 (Fed. Cir. 2015). An expert can rely on the experts of others, but "must explain why he relied on such estimates and must demonstrate why he believed the estimates were reliable." *ZF Meritor, LLC v. Eaton Corp.*, 696 F.3d 254, 292 (3d Cir. 2012). If an expert who is not familiar with the methods and reason underlying someone else's projections, the validity of those projections cannot be ascertained through cross-examination. *Id.* at 292–93. Expert testimony may be excluded if the expert "almost exclusively" relied on speculative estimates and did not perform any independent analysis or verification. *US Salt, Inc. v. Broken Arrow, Inc.*, 563 F.3d 687, 691 (8th Cir. 2009).

Eubank testified that he assumed the LOSG study was valid and relied on its findings. Doc. No. 121-20 at 48. He also stated that he believes the analysis LOSG used is laid out in the report. *Id.* He testified that "whatever was analyzed in the report is what I read and tried to apply as best as possible." *Id.* at 14. In his report, Eubank wrote that he relied on multiple internal financial statements from both Meridian and HitchDoc as well as other studies and documentation aside from the LOSG study. Doc.

No. 121-6 at 33–34. In addition to the documents, he has had discussions with Meridian's management and relied on "public information about the industry." *Id.* at 5. He appears to have conducted his own financial analysis of both Meridian and HitchDoc. *See id.* at 10–11.

Based on my review of his report and the parties' arguments, I find that Eubank's opinions as to market share and lost profits are not so "fundamentally unsupported" that they must be excluded. He reviewed data presented from multiple sources and reached conclusions based on the data. *See Williams v. Sec. Nat. Bank of Sioux City, Iowa*, 358 F. Supp. 2d 782, 807 (N.D. Iowa 2005); *J. Lloyd Int'l, Inc. v. SuperWings Int'l, Ltd.*, No. 15-CV-74-LRR, 2016 WL 7411132, at *8 (N.D. Iowa Dec. 22, 2016). ¹⁴ The same goes for HitchDoc's concerns with Eubank's assumption that Meridian's sales declined by 4% annually. That is an underlying assumption that HitchDoc can question at trial. *See J. Lloyd*, 2016 WL 7411132 at *8.

Nor does relying on sales data documents produced by Meridian render Eubank's testimony unreliable. This situation is not analogous to that in *US Salt*, in which the expert simply adopted internal estimates and projections based on the owner's opinion about the company's expected sales and the nature of the market. 563 F.3d at 691. Here, Eubank relied on historical operating expenses and sales figures. Doc. No. 121-20 at 65. HitchDoc contends that the documents and resulting calculations are unreliable because the profit figures include all seed tenders, bulk tenders and box tenders instead of only box tenders. Doc. No. 121 at 21–22. Again, that criticism goes to the accuracy and weight of the opinion rather than its admissibility.

Finally, the fact that Eubank applied a historical average profit to hypothetical sales absent infringement, rather than the actual profit margin for sales allegedly affected by infringement, does not demonstrate that his opinion is so unreliable as to be

¹⁴ There is not enough information on the record to determine if the LOSG study itself is unreliable. HitchDoc devoted only one paragraph in its final reply brief to the issue. Doc. No. 137 at 5.

inadmissible. HitchDoc seems to be contesting the reasonableness of choosing that method over another. Eubank explained why he did not use the actual profit margins for 2011 and instead used an adjust profit margin. He testified it was to adjust for "industry factors and economic factors" in a pre-damage period. Doc. No. 121-20 at 80. Whether that choice was accurate or reasonable is a topic for cross-examination. The same is true of HitchDoc's complaint that Eubank did not properly account for the impact of the downturn of the agricultural economy, as Eubank specifically noted that "[b]oth companies appear to have been affected by the recent downturn in agriculture." Doc. No. 121-6 at 12.

C. HitchDoc's Other Defenses and Counterclaims

In its motion for summary judgment, Meridian argues that HitchDoc's defenses and counterclaims alleging invalidity under 35 U.S.C. § 101, invalidity for insufficient written description and enablement under 35 U.S.C. § 112, laches, acquiescence, estoppel and statute of limitations are not supported by the record. Doc. No. 92-1 at 8–9, 12, 13, 17. In its response, HitchDoc states that it is either no longer pursuing these arguments or they have been resolved. Doc. No. 99 at 4–5, 7. Therefore, I will grant Meridian's motion for summary judgment and dismiss these defenses and counterclaims.

V. CONCLUSION

For the reasons set forth herein:

- 1. HitchDoc's motion (Doc. No. 90) for summary judgment on invalidity under 35 U.S.C. § 103 is **denied**.
- 2. Meridian's motion (Doc. No. 92) for summary judgment on certain of HitchDoc's defenses and counterclaims is **granted in its entirety**. HitchDoc's affirmative defenses and/or counterclaims of invalidity under 35 U.S.C. § 101, lack of written description and nonenablement under 35 U.S.C. § 112, ¶ 1, laches, acquiescence, estoppel and the statute of limitations are hereby **dismissed**.

3. HitchDoc's motion (Doc. No. 88) to limit damages is **granted in part and denied in part**. The motion is **granted** with regard to actual damages arising from infringement that occurred before September 17, 2015. As a matter of law, those damages are not recoverable in this action. The motion is **denied** with regard to enhanced damages under 35 U.S.C. § 284.

4. Meridian's motion (Doc. No. 118) to exclude the expert testimony of James A. Heise and Carol Ludington is **granted in part** and **denied in part**, as set forth in this order.

5. HitchDoc's motion (Doc. No. 111) to exclude the expert testimony of John Hamilton is **granted in part** and **denied in part**, as set forth in this order.

6. HitchDoc's motion (Doc. No. 113) to exclude the expert testimony of Zach Eubank is **granted in part** and **denied in part**, as set forth in this order.

IT IS SO ORDERED.

DATED this 5th day of October, 2018.

Leonard T. Strand, Chief Judge