

**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 CROSS MOTIONS FOR
SUMMARY JUDGMENT**

I. INTRODUCTION

This patent case is before me on (1) a motion (Doc. No. 55) for summary judgment of noninfringement filed by defendant C&B Manufacturing, Inc. (HitchDoc), and (2) a motion (Doc. No. 56) for summary judgment of infringement filed by plaintiff Meridian Manufacturing Inc. (Meridian). Both parties filed resistances (Doc. Nos. 63, 64) and subsequent replies (Doc. Nos. 67, 72).

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 a memorandum opinion and order (Doc. No. 52) in which I construed certain claims contained in the '551 patent (the *Markman* order). The parties then filed their motions for summary judgment.

I heard oral arguments on both motions on October 20, 2017. Counsel for both parties were well-prepared and presented arguments that were exceptionally helpful. The motions are now ready for decision.

II. FACTS

A. Present Action

The '551 Patent, entitled "Trailer for Transporting Bulk Seed Boxes," is depicted in Figure 1:

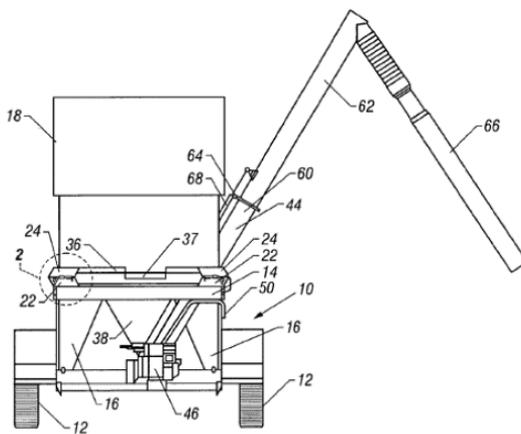


FIG. 1

The invention is designed to help farmers transport large seed bags or boxes to planters in the fields. Typically, farmers must use a forklift to load the boxes onto the trailer and then use a motorized mechanism (such as an auger) attached to the trailer to remove the seeds from those boxes and ultimately deposit them into the planter.

On November 23, 2015, Meridian filed a complaint of patent infringement against HitchDoc for selling various models of its Travis Seed Cart. The Travis Seed Cart is essentially a trailer that is also used to transport bulk seed boxes. Of the 19 claims contained in the '551 patent, Meridian alleges that 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, which is the only independent claim at issue, is at the heart of the infringement claim, particularly with regard to its description of guide plates that “inclin[e] upwardly and outwardly from the perimeter edge of the bed to facilitate centering of the box on the bed.” *Id.* at 7. An example of a Meridian guide plate is circled in Figure 2, with a close up image of a portion of the plate shown in Figure 3:

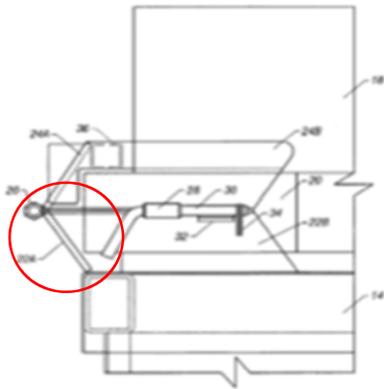


Fig. 2



Fig. 3

HitchDoc’s Travis Seed Cart has box guides for the purpose of facilitating the deposit of seed boxes onto the trailer. These box guides extend vertically for about five inches before extending upwardly and outwardly at a 30 degree angle, as seen in this rough approximation in Figure 4:

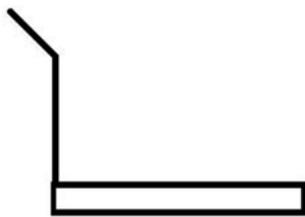


Fig. 4

Neither party disputes the physical attributes of HitchDoc’s box guide. The parties do dispute whether HitchDoc’s box guides infringe the ‘551 patent by “inclin[ing] upwardly and outwardly from the perimeter edge of the bed.”

B. History of the ‘511 Patent

Gary Friesen is the patentee of the ‘551 patent. His original application claimed a trailer with guide plates extending “upwardly and outwardly.” Doc. No. 52 at 6. In 2002, that application was rejected due to prior art, Patent No. 6,092,974 (the Roth patent). *Id.* The rejection prompted Friesen to amend his patent claim to state, in relevant part, that the guide plates “inclin[e] upwardly and outwardly from the bed.” *Id.* at 8.

This amendment distinguished Friesen's invention from Roth because the Roth plates extended straight upwardly. *Id.*; Doc. No. 31-3 at 7-8.

The application as amended was rejected because of both Roth and Patent No. 1,675,701 (the Fitch patent). *Id.* at 9. The Fitch patent is pictured in Figure 5.

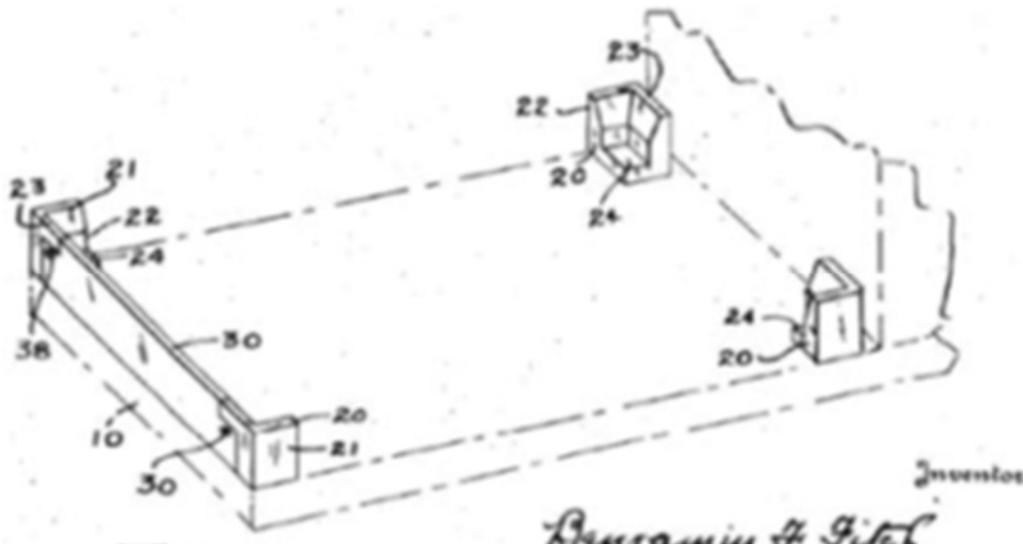


Fig. 5

The examiner stated that the corner brackets in the Fitch patent met claim 1's limitation in the amended '551 patent application. *Id.* at 10. The examiner described the brackets in the Fitch patent as having "inner surfaces which incline upwardly and outwardly from the bed." *Id.* at 10; Doc. No. 31-4 at 3.

The Board of Patent Appeals and Interferences (Board) overturned the examiner's rejection. Doc. No. 52 at 11. The Board stated that the brackets at issue in the Fitch patent did not incline upwardly and outwardly from the perimeter edge of the bed. Doc. No. 52 at 11-12. Instead, the brackets only had inclined walls within the perimeter edge of the bed. *Id.*; Doc. No. 31-9 at 17-18. Friesen was thus issued the '551 patent that is now owned by Meridian and is the subject of this action.

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.” *Kammueler 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

Determining whether a patent claim has been infringed is a two-step analysis. *Freedman Seating Co. v. Am. Seating Co.*, 420 F.3d 1350, 1356 (Fed. Cir. 2005). First, the court must construe the claim to determine its meaning. *Id.* When doing so, the

court must first consider intrinsic evidence such as the claims of the patent themselves, the specification and the prosecution history, which includes arguments and amendments made during the patent application. *General Mills, Inc. v. Hunt-Wesson, Inc.*, 103 F.3d 978, 981 (Fed. Cir. 1997); *Southwall Techs., Inc. v. Cardinal IG Co.*, 54 F.3d 1570, 1576 (Fed. Cir. 1995). Prosecution history may also limit a claim’s meaning to exclude any interpretation that was disclaimed during the prosecution. *Southwall Techs.*, 54 F.3d at 1576.

Second, the court must determine whether the accused product “contains each limitation of the properly construed claims, either literally or by a substantial equivalent.” *Id.* To prove literal infringement, the plaintiff must show that every limitation in the claim is found in the accused product, exactly. *Advanced Steel Recovery, LLC v. X-Body Equip., Inc.*, 808 F.3d 1313, 1319 (Fed. Cir. 2015).

Summary judgment is just as appropriate in patent cases as in other cases. *Nike Inc. v. Wolverine World Wide, Inc.*, 43 F.3d 644, 646 (Fed. Cir. 1994). In a patent infringement case, when the parties do not dispute relevant facts such as the physical characteristics of a product, the question becomes one of claim construction and is appropriate for summary judgment. *General Mills*, 103 F.3d at 983.

In this case, the parties dispute whether claim 1¹ and claim 3 of the ‘551 patent have been infringed by the Travis Seed Cart. The relevant dispute in claim 1 is whether the Travis Seed Cart’s guide plates² incline upwardly and outwardly *from the perimeter*

¹ Meridian contends that if it establishes literal infringement as to claim 1, then it has also established literal infringement as to claims 2, 10 and 11, and infringement of claim 9 under the doctrine of equivalents. Doc. No. 57 at 20. While HitchDoc denies infringement as to claim 1, it does not contest Meridian’s position that a finding of infringement of claim 1 would require a finding of infringement on claims 2, 9, 10 and 11. *See* Doc. No. 63-1; Doc. No. 72 at 20.

² The parties dispute the labeling of HitchDoc’s box guides as “guide plates.” Doc. No. 63-2 at 6–7. However, they agree that the box guides “facilitate centering of bulk seed boxes,” just as the ‘551 patent’s guide plates do. *Id.* In the *Markman* order, I construed “guide plates” to mean “the plates that guide the seed boxes into position onto the bed.” Doc. No. 52 at 32. The

edge of the bed. Specifically, the parties disagree as to what “perimeter edge” means. The relevant dispute in claim 3 is whether the Travis Seed Cart’s lock bars are “on” the bed and whether they “overlappingly engage” the flange of the seed box. Both of these disputes center on the construction of claim terms, as those terms are applied to the undisputed physical characteristics of an accused product, and so are appropriately resolved by summary judgment.

A. Claim 1 (Guide Plates)

1. Meridian’s Argument

Meridian claims that HitchDoc’s guide plates literally infringe on claim 1 in that they “incline upwardly and outwardly from the perimeter edge of the bed,” because the plate extends outwardly beyond the outer boundary of the bed. Doc. No. 57 at 8. Meridian points to my *Markman* conclusion that “perimeter edge” should be given its plain and ordinary meaning, rather than the narrower construction argued by HitchDoc. Under the broader construction, Meridian argues that the perimeter edge is the vertical plane at the edge of the bed. *Id.* at 12. Meridian contends that there is no requirement that the inclined portion of the guide plate be in contact with the physical point on the bed where the vertical and horizontal planes intersect. *Id.* at 13. Rather, the word “from” in this case means extending *beyond* the vertical plane at the edge of the trailer bed. *Id.* at 9–10. Even though HitchDoc’s guide plates extend straight upward for about five inches, they are still in contact with the perimeter edge of the bed and do eventually extend outwardly away from the vertical plane. *Id.* Meridian contends that a guide plate cannot extend upwardly and outwardly from itself, and can only extend from the thing it is connected to. Doc. No. 64 at 12. Essentially, Meridian argues that the claim should be construed as pictured in Figure 6.

distinction between “box guides” and “guide plates” is immaterial and thus, for the purposes of this opinion, I will refer to both as guide plates.

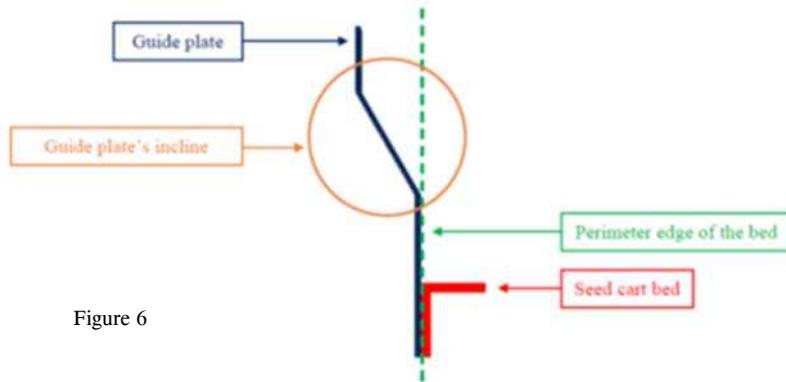


Figure 6

To support its construction and prove that HitchDoc has literally infringed claim 1, Meridian cites to the deposition of Wyman Travis, inventor of the Travis Seed Cart. Travis testified that the HitchDoc guide plate “is angled out from the frame” and “slopes out.” Doc. No. 57 at 12; Doc. 60 at 47. Meridian also cites the deposition of Brad Mohns, HitchDoc’s CEO, who testified that the guide plates incline upwardly and outwardly from the bed. Doc. No. 57 at 12; Doc. No. 59 at 153; Doc. No 60 at 12.

Meridian contends that the prosecution history regarding the Roth and Fitch patents also supports its construction of “perimeter edge” as a vertical plane. Doc. No. 57 at 13. Meridian argues that when Friesen added the phrase “from the perimeter edge” to the ‘551 patent, he meant to specify that the guide plates were not “contained wholly inside the perimeter,” as seen in the Fitch patent, not that the incline started at a particular, physical point on the bed. *Id.* at 13-14.

Meridian argues that the different starting points of the incline between the Fitch patent and the ‘551 patent did not distinguish the two designs. The distinguishing factor was whether the incline extended beyond the bed perimeter. *Id.* Thus, the different starting points of the incline between the Travis Seed Cart guide plates and the ‘551 patent guide plates is immaterial and cannot distinguish the two designs. *Id.* Like the ‘551 Patent, the Travis Seed Cart guide plates are one whole piece that inclines upwardly and outwardly from the perimeter edge. *Id.* at 15. The point at which the guide plates start to incline does not affect the ability to guide the bulk seed boxes onto the bed, so even with the vertical section, HitchDoc’s guide plate literally infringes the ‘551 patent. *Id.*

2. *HitchDoc's Argument*³

HitchDoc argues that the guide plates do not slope upwardly and outwardly from the perimeter edge of the bed. Doc. No. 55-1 at 6. HitchDoc describes its plates as having a “first section that extends straight vertically from the perimeter edge of the bed, to a point about five inches above the bed; then a second section that inclines upwardly and outwardly from the top of the first section; and finally a third section that extends straight vertically.” *Id.* at 7. HitchDoc notes that in the *Markman* order, I stated that the incline “starts at the perimeter edge of the bed.” *Id.* at 9; Doc. No. 52 at 39. HitchDoc argues that “from the perimeter edge of the bed” should mean starting at the point where the vertical plane and horizontal plane of the bed intersect (i.e., the corner). Doc. No. 63-1 at 6, 12. HitchDoc argues that under this construction, the Travis Seed Cart box guides extend only upwardly from the perimeter edge of the bed, not both upwardly and outwardly. Doc. No. 55-1 at 9.

HitchDoc cites to testimony from both Friesen and Mohns to show that the perimeter edge was understood to be the point at which the top surface of the frame intersected with the outer side surface of the frame. Doc. No. 63-1 at 7–8. Friesen stated that the guide plates were “sitting on the perimeter edge.” Doc. No. 30-5 at 3. Mohns stated that where the top surface of the frame intersects with the outer side surface was the perimeter edge. Doc. No. 63-4 at 34. HitchDoc also cites to Travis’ deposition testimony. Doc. No. 63-1 at 15. It claims that Travis, by stating that the plate goes up five inches before sloping outward, shows that the perimeter edge is the intersection point of the side and top surfaces. *Id.* Essentially, HitchDoc contends that the perimeter edge must be part of the physical bed, as pictured in Figure 7. *Id.* at 10.

³ HitchDoc also presents arguments that the guide plates do not infringe the ‘551 patent under the doctrine of equivalents. However, Meridian advances only a literal infringement argument. Doc. No. 64 at 14. As such, Meridian has limited its claim and I will address only the potential literal infringement of claim 1. *See Serverside Group Ltd. v. Tactical 8 Techs., L.L.C.*, 985 F. Supp. 2d 900, 926–27 (N.D. Iowa 2013).

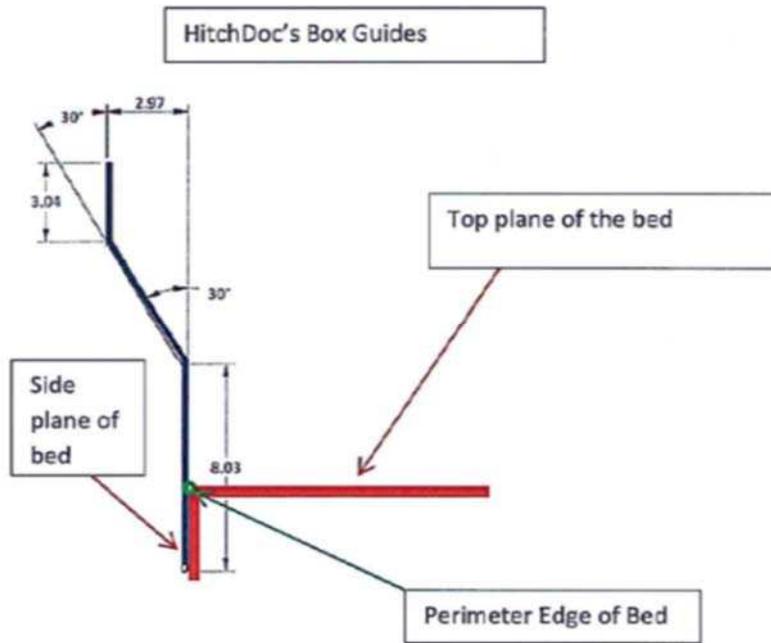


Fig. 7

3. Analysis

Three terms are relevant to claim 1: perimeter edge, bed, and inclining upwardly and outwardly. In the *Markman* order I found that “perimeter edge” should be given its plain and ordinary meaning. Doc. No. 52 at 28. I did not adopt HitchDoc’s construction of perimeter edge as the point “where the top surface and the outer side surface of the bed meet.” *Id.* Nor did I adopt Meridian’s proposed construction as the “edge around the perimeter of the bed.” *Id.* I also concluded that the term “bed” has a definable edge. *Id.* at 25.

When defining “inclining upwardly and outwardly” I rejected Meridian’s definition of “deviating from the horizontal plane of the bed toward a higher position and extending outside the perimeter edge of the bed” because it added a confusing statement about the horizontal plane and eliminated the clear statement that the incline starts at the perimeter edge of the bed. *Id.* at 39. I adopted only the first portion of HitchDoc’s construction so that the final construction was “sloping upwardly and outwardly in a direction that is neither vertical nor horizontal, from the perimeter edge of the bed to facilitate centering of the box on the bed.” *Id.* at 40.

Here, the parties dispute what “from the perimeter edge” means. When there is a fundamental dispute regarding the scope of a claim term, the court must resolve it. *02 Micro International, Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008). Interpretation and construction of a patent claim is a matter of law. *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 390 (1996). The analysis of what a term means begins with the language of the claim itself. *Hockerson-Halberstadt, Inc. v. Avia Group Int’l, Inc.*, 222 F.3d 951, 955 (Fed. Cir. 2000). For the reasons that follow, I find that HitchDoc’s box guides do, in fact, incline upwardly and outwardly from the perimeter edge.

HitchDoc claims I rejected Meridian’s definition of perimeter edge as a boundary in the *Markman* order. HitchDoc would prefer “perimeter edge” to mean the physical point where the horizontal surface and vertical surface of the trailer bed intersect. However, Meridian’s proposed construction was simply “the edge around the perimeter of the bed,” which I rejected as being unhelpful. I also rejected HitchDoc’s definition of “perimeter edge” as the point where the top and outer surfaces meet. Ultimately, I found the plain and ordinary meaning of “perimeter edge” controlled, which means the “ordinary and accustomed meaning as understood by one of ordinary skill in the art.” *Hockerson-Halberstadt*, 222 F.3d at 955.

“[T]o construe claim language, the court should also consider the patent’s prosecution history.” *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 980 (Fed Cir. 1995), *aff’d*, 517 U.S. 370 (1996). The relationship between the Fitch patent and the amendments made to the application for the ‘551 patent provides helpful context to the ordinary meaning of “perimeter

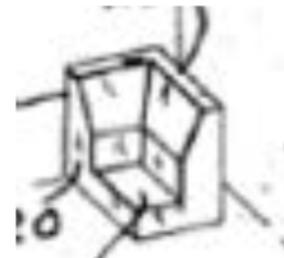


Fig. 8

edge.” The Fitch patent had corner plates that rose vertically from the truck bed, with the inside surfaces of those plates sloping upwardly first, and then outwardly, as shown in Figure 8. In the Fitch patent, those brackets were described as “inwardly beveled from their upward edges to enable the body to be readily centered as it is put into

position.” Doc. No. 59 at 13. James Keenan, the primary examiner, described these as having “inner surfaces which incline upwardly and outwardly from the bed to enable a load to be ‘readily centered as it is put into position’ on the bed.” *Id.* at 18.

The examiner first rejected the ‘551 patent because he stated that it would have been obvious for someone of ordinary skill in the art at the time to use guide plates that inclined outwardly. *Id.* Even though the Fitch plates had a vertical portion connected to the bed while the ‘551 patent plates did not, the patent was still rejected. It was then that Friesen changed “inclining upwardly and outwardly from the bed” to “inclining upwardly and outwardly from *the perimeter edge* of the bed.” *Id.* at 28.

When the Board overturned the examiner’s rejection, it made a point to state that Fitch had inclined walls within the perimeter edge, but not inclining outwardly from the perimeter edge. Doc. No. 52 at 12. The Fitch plates did extend upwardly and outwardly from the bed, but they did not extend from the perimeter. As viewed from above, no portion of the Fitch plates crossed the vertical plane of the perimeter of the bed. It appears that whether the inclined edge extended beyond the perimeter, not where the incline began, was the key distinction the Board made in overturning the rejection and granting the ‘551 patent. Based on the context of the Fitch patent and the amendments to the ‘551 patent, “perimeter edge” was meant to define a planar boundary rather than the physical point where the side and top surfaces of the bed intersect.

Under HitchDoc’s proposed construction, a plate that extended vertically for even a millimeter before sloping outwardly and upwardly would not literally infringe on the ‘551 Patent. Such a result would create a limitation not contemplated by the claim. For example, as Meridian pointed out in oral arguments, even Meridian’s own guide plate, as depicted in the ‘551 patent, does not follow that construction, as the piece is not attached at the exact intersection point of the side and top surfaces of the trailer bed. *See* Fig. 3. I find that the plain and ordinary meaning of “perimeter edge” is not limited to the precise intersection point.

HitchDoc points out that I rejected Meridian’s construction in the *Markman* order because it, in part, eliminated “the clear statement that [the] incline starts at the perimeter edge of the bed.” Doc. No. 52 at 39. However, contrary to HitchDoc’s position, that statement does not preclude a finding that the perimeter edge is the planar boundary, or a finding that the Travis Seed Cart’s guide plates extend upwardly and outwardly from the perimeter edge. Rather, it simply means that I declined to adopt Meridian’s definition and instead found that the plain and ordinary meaning of “perimeter edge” controlled.

HitchDoc also argues that Meridian is precluded from arguing that “from the perimeter edge” means “beyond the perimeter edge” because of prosecution history disclaimer. Doc. No. 63-1 at 13. Prosecution history disclaimer occurs when a patentee has “unequivocally disavowed a certain meaning” in order to obtain the patent. *Omega Eng’g, Inc., v. Raytek Corp.*, 334 F.3d 1314, 1324 (Fed. Cir. 2003). In *Norian Corp. v. Stryker Corp.*, 432 F.3d 1356 (Fed. Cir. 2005), cited by HitchDoc, the patentee made an express statement as to the meaning of the amended claim in the prosecution history that foreclosed a particular interpretation in a later infringement action. *Id.* at 1362.

If the alleged disavowal is ambiguous, prosecution history disclaimer does not apply. *Omega Engineering*, 334 F.3d at 1324. The only statements HitchDoc points to as support for applying the doctrine are the amendments themselves. *See* Doc. No. 63-1 at 13–15. This is not enough to invoke prosecution history disclaimer. There was no express statement that “beyond the perimeter edge” was disavowed in order to secure the patent. In any event, exchanging “from the perimeter edge” for “beyond the perimeter edge” is not necessary for finding that the perimeter edge is the planar boundary around the edge of the bed.

As noted above, both parties cite deposition testimony to support their respective positions. While intrinsic evidence, such as the prosecution history, is the most significant source of meaning for disputed claim language, extrinsic evidence, such as inventor testimony, may sometimes be used to resolve a lack of clarity. *Dow Chem. Co. v. Sumitomo Chemical Co., Ltd.*, 257 F.3d 1364, 1372 (Fed. Cir. 2001). Extrinsic

evidence may only be used to assist in a proper understanding of the term. *Id.* at 1373. However, “if the meaning of the claim limitation is apparent from the intrinsic evidence, it is improper to rely on extrinsic evidence other than that used to ascertain the ordinary meaning of the claim limitation.” *Id.*

I find that the intrinsic evidence discussed above is sufficient to determine the meaning of the phrase “from the perimeter edge.” In any event, the deposition testimony is unhelpful. Travis’ cited testimony simply shows that the HitchDoc plate extends upward from the edge of the frame first, and then outwardly and upwardly. Doc. No. 63-1 at 15. It does not establish what the “perimeter edge” is. Mohns, the CEO of HitchDoc, confirmed that his own understanding of the “perimeter edge” is where the top surface of the frame intersects with the outer side surface. Doc. No. 63-4 at 34. However, his understanding is of little relevance and, in any event, too narrow.

Having concluded that “perimeter edge” was meant to define a planar boundary, rather than the exact physical point where the side and top surfaces of the bed intersect, the next step is to determine if every limitation in the claim is found in the accused product. The limitation disputed in claim 1 is “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.” Neither the physical structure of the Travis Seed Cart guide plates, nor the purpose of those guide plates, is in dispute. I find that the guide plates of the Travis Seed Cart incline upwardly and outwardly from the perimeter edge of the bed. Thus, even when viewing the facts in the light most favorable to HitchDoc for purposes of Meridian’s motion for summary judgment of infringement, I find no genuine issue of material fact that claim 1 has been literally infringed. As noted above, HitchDoc agrees that if claim 1 has been infringed, then so too have dependent claims 2, 9, 10 and 11. Therefore, Meridian is entitled to summary judgment of infringement with regard to claims 1, 2, 9, 10 and 11 of the ‘511 patent.

B. Claim 3 (Lock Bars)

1. Meridian's Argument

As stated above, the relevant dispute regarding claim 3 is whether the Travis Seed Cart's lock bars are "on" the bed and whether they "overlappingly engage" the flange of the seed box. Meridian argues that the Travis Seed Cart lock bars are designed to secure the seed box to the bed. Doc. No. 57 at 19. These lock bars are "on the bed" and "overlappingly engage in the flange of the seed box" in order to do so. *Id.* Meridian cites the *Markman* order, in which I rejected HitchDoc's construction that "on the bed" should mean "attached to with direct physical contact" and found that "overlappingly engage the flange of the seed box" should mean that the bars need only "come down onto, or to have contact with" the box rather than interlock. *Id.* at 19–20. Meridian also cites to Mohns' deposition, during which he described the bars on the Travis Seed Cart as sitting "an inch above the flange of the seed box." *Id.* at 20. He also testified that in order to remove the seed box the bar must first be removed or the box would hit it. Doc. No. 59 at 154–55. Meridian contends that continuous direct contact with the flange of the seed box is not necessary, only that contact occurs at some point. Doc. No. 57 at 20–21; Doc. No. 72 at 19. The purpose, to keep the seed boxes in place, remains the same no matter how long the contact may last. Doc. No. 72 at 19.

2. HitchDoc's Argument

HitchDoc argues that the Travis Seed Cart has rods that run through holes in the box guides, but they do not overlappingly contact the flange of the seed box. Doc. No. 63-1 at 18. Instead, the bars run an inch above the flange of the boxes. *Id.* HitchDoc contends that any contact with the box would be brief and occur only in the case of "a rare catastrophic event," thus the bars do not infringe claim 3. *Id.*

3. *Analysis*

In the *Markman* order, I construed “lock bars on the bed” to mean lock bars “attached to or near the bed.” Doc. No. 52 at 44. I also found that “overlappingly engage” should be construed as “to come down onto, or to have contact with,” not that it must interlock with the seed box. *Id.* at 46–47. I found that an interlocking requirement would preclude “an embodiment of mere contact.” Doc. No. 52 at 47.

I agree with Meridian that there is no requirement in the construction of the claim that the contact be constant or of a certain duration. The purpose of both the ‘551 patent’s lock bars and the Travis Seed Cart’s lock bars is to keep the seed box in place on the trailer. Doc. No. 63-2 at 13. The ‘551 patent itself describes the lock bar as “extend[ing] over the perimeter flange . . . of the seed box . . . so as to secure the box . . . to the bed.” Doc. No. 30-2 at 8. HitchDoc describes the Travis Seed Box lock bars as “runn[ing] about an inch above the flange of the seed boxes,” and states the bars will only come into contact with the flange of the box for a brief moment if a catastrophic event occurs. Doc. No. 63-2 at 12; Doc. No. 63-1. These descriptions are essentially identical. The claim describes the bar as running *over* the perimeter flange and the Travis Seed Cart lock bar is described as running above the flange. There is no indication in the claim itself that the contact must be constant. I find that “overlappingly engage” does not require the bar to be in constant contact with the flange of the seed box, and that brief contact necessary to keep the seed box in place is sufficient.

The parties do not dispute the location of the bars with respect to the trailer bed. Pursuant to the construction of the claim, it is clear the bars are attached “near” the bed, as they run through holes in the guide plates, which are themselves attached to the bed. Doc. No. 63-2 at 12. Further, it is clear that the bars will contact the flange of the seed box in order to fulfill the purpose of keeping the seed boxes in place on the trailer. Therefore, even when viewing the facts in the light most favorable to HitchDoc for purposes of Meridian’s motion for summary judgment of infringement, I find there is no

genuine issue of material fact that the Travis Seed Cart literally infringes claim 3 of the '511 patent.

V. CONCLUSION

For the reasons set forth herein:

1. HitchDoc's motion (Doc. No. 55) for summary judgment of noninfringement is **denied in its entirety**.

2. Meridian's motion (Doc. No. 56) for summary judgment of infringement is **granted in its entirety**. As a matter of law, the Travis Seed Cart infringes claims 1, 2, 3, 9, 10 and 11 of United States Patent No. 6,964,551 B1.

3. I will conduct a telephonic status conference with counsel on **November 9, 2017**, at **9:30 a.m.**, to discuss further proceedings and deadlines. To participate in the call, counsel are directed to call into the bridge conference line as follows: Dial 1-877-402-9753; Enter Access Code 4189501#; Press # to enter as a participant; Enter Security Code 1230#. The call will become active upon the "host" (the court) entering the conference bridge.

IT IS SO ORDERED.

DATED this 27th day of October, 2017.



Leonard T. Strand, Chief Judge