

# United States Court of Appeals for the Federal Circuit

04-1216, -1248

FREEDMAN SEATING COMPANY,

Plaintiff-Cross Appellant,

v.

AMERICAN SEATING COMPANY and  
HI-TECH SEATING PRODUCTS, INC. (doing business as Kustom Fit),

Defendants-Appellants.

Richard D. Harris, Greenberg Traurig, LLP, of Chicago, Illinois, argued for plaintiff-cross appellant. With him on the brief were Herbert H. Finn and Jeffrey P. Dunning.

Todd R. Dickinson, Fisher & Dickinson, of Ada, Michigan, argued for defendants-appellants. Of counsel on the brief were Conrad J. Clark and Christopher W. Brody, Clark & Brody, of Washington, DC.

Appealed from: United States District Court for the Central District of California

Judge R. Gary Klausner

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DECIDED: August 11, 2005

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Before MAYER, Circuit Judge, PLAGER, Senior Circuit Judge, and SCHALL, Circuit Judge.

SCHALL, Circuit Judge.

This is a patent infringement case. Freedman Seating Company (“Freedman”) sued American Seating Company and Hi-Tech Seating Products (doing business as Kustom Fit) (collectively, “American Seating”) in the United States District Court for the Central District of California for infringement of U.S. Patent No. 5,492,389 (issued Feb. 20, 1996) (“the ’389 patent”) and for unfair competition in violation of the Lanham Act, 15 U.S.C. § 1125 (2000). The district court granted summary judgment in favor of Freedman both on the issue of infringement under the doctrine of equivalents and on American Seating’s counterclaim of invalidity by reason of obviousness. Freedman Seating Co. v. Am. Seating Co., No. CV-02-5347 (C.D. Cal. Oct. 24, 2003) (“Summary

Judgment I”). The court granted summary judgment in favor of American Seating, however, on Freedman’s Lanham Act claim. Id. After American Seating filed a motion for reconsideration, the district court also granted summary judgment in favor of Freedman on American Seating’s affirmative defense of unenforceability based upon inequitable conduct. Freedman Seating Co. v. Am. Seating Co., No. CV-02-5347 (C.D. Cal. Nov. 18, 2003) (“Summary Judgment II”). A jury trial subsequently was held to determine damages, the jury ultimately awarding Freedman \$163,155.20 in lost profits from American Seating Company and \$14,800.00 in royalties from Kustom Fit. Freedman Seating Co. v. Am. Seating Co., No. CV-02-5347 (C.D. Cal. Jan. 12, 2004) (“Judgment on Jury Verdict”).

American Seating now appeals all aspects of the district court’s summary judgment decision that were unfavorable to it. Freedman, in turn, cross-appeals the district court’s ruling allowing American Seating to invoke the advice of counsel defense to Freedman’s charge of willful infringement, the jury’s finding of no willful infringement and its calculation of damages, and the district court’s refusal to award costs and prejudgment interest.<sup>1</sup> Because we conclude that the judgment of infringement under the doctrine of equivalents has the effect of vitiating a limitation of the claims of the ’389 patent, we reverse the judgment and remand the case to the district court with instructions to enter judgment of non-infringement in favor of American Seating. Because we conclude that genuine issues of material fact remain as to obviousness, we also reverse the district court’s grant of summary judgment of validity and remand for further proceedings. We do not reach the other issues raised on appeal.

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<sup>1</sup> Freedman does not appeal the district court’s ruling on its Lanham Act claim.

## BACKGROUND

I.

A.

Freedman manufactures seats used in public transportation vehicles. Its product line includes stowable seats, which are seats that have the ability to fold away in order to create more interior space in a vehicle. They are particularly useful for accommodating passengers with wheelchairs, but may be used whenever more interior space is needed.

Freedman also owns the '389 patent, titled "Stowable Seat." The figures shown below are representative of the stowable seat claimed in the '389 patent.

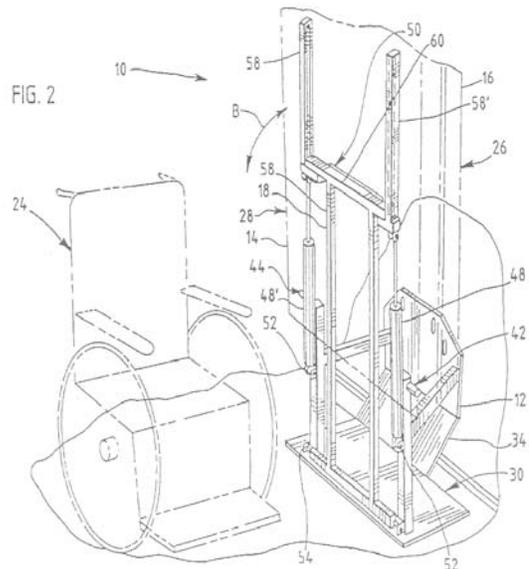
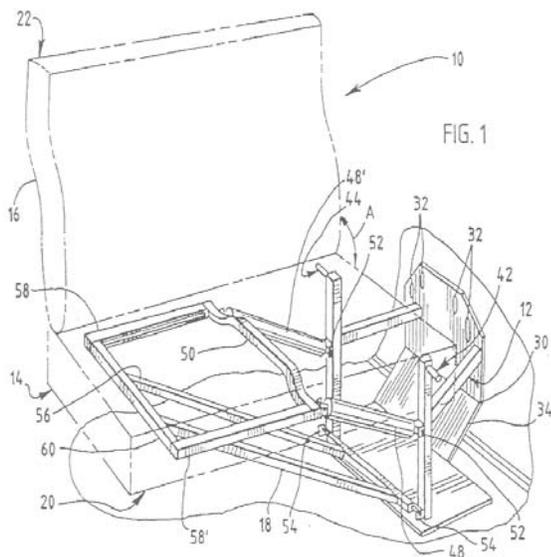


Figure 1 shows the stowable seat (10) in the horizontal (or deployed) position, while figure 2 shows the stowable seat in the vertical (or stowed) position. Moving the seat from its horizontal to vertical position involves "folding the seatback (16) flat against the seatbase (14), unlocking the seatbase from its horizontally deployed position and

raising the seatbase to its vertically stowed position where it is locked in place.” ’389 patent, col. 1, ll. 19-24 (numerals added).

As shown by figure 1, the invention of the ’389 patent does not use an aisle leg to support the seat when in the horizontal position. See id. col. 1, ll. 8-14; col. 3, ll. 32-34. Rather, the invention is based on a cantilever design, which uses a diagonal truss (18), also referred to as a support member, to support the aisle-end of the seat when in the horizontal position. This design, according to the ’389 patent, avoids difficulties attendant with stowing and deploying seats that have a separate aisle leg. Id. col. 1, ll. 25-35.

In addition to providing aisle support, the diagonal truss allows for translational movement of the seatbase between the horizontal and vertical positions. This is due to the truss having a fixed end that is attached to the seat’s frame (12) at a pivot point (54), and a movable end (56) that is “slidably mounted” in a runner track (58). Id. col. 3, ll. 40-47. When stowing the seat, the movable end of the diagonal truss slides on the runner track toward the middle of the seatbase, while the fixed end of the diagonal truss rotates upward until the seat is in the vertical position. Similarly, when the seat is deployed again, the movable end of the diagonal truss slides toward the aisle end of the seatbase, while the fixed end rotates downward until the seat is in the horizontal position. This folding mechanism created by the slidably mounted moveable end is known in the field of mechanical engineering as a “slider crank,” which is a particular type of “four bar mechanism.”

Claim 1 is representative of the claims asserted against American Seating; it reads:

A stowable seat for mounting to support member of a vehicle wherein a space may be selectively provided for positioning an article adjacent to the stowable seat, when stowed the seat comprising:

a frame attached to a support member;

a cantilevered seatbase having a free end, a pivotable end including a pivot mounted thereto for rotatably associating said pivotable end with said frame and for providing said seatbase with a range of motion extending from a horizontally deployed position to a vertically stowed position, a support member for supporting said seatbase in said deployed position including a moveable end **slidably mounted** to said seatbase and a fixed end journalled with said frame, and a first lock near said free end for releasably locking said movable end to maintain said seatbase in said deployed position; and

a seatback having a pivot for rotatably associating said seatback with said seatbase and for providing said seatback with a range of motion extending from an unfolded position to a folded position, said range of motion of said seatback being perpendicular to said range of motion of said seatbase, said seatback in said unfolded position adapted to be a predetermined angle with respect to said seatbase in said deployed position to provide seating and said seatback in said folded position adapted to be adjacent said seatbase for stowing to provide the space for the article.

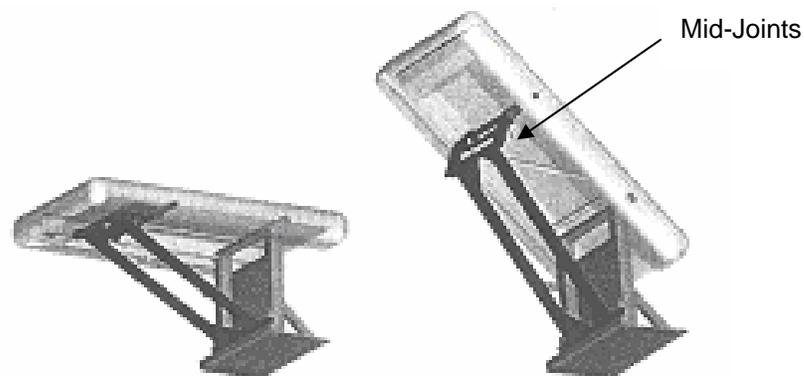
(Emphasis added).

## B.

American Seating Company and Kustom Fit also manufacture and market seating products for the transportation industry. One particular seat is the Horizon EZ Fold ("EZ Fold"), which is a stowable seat manufactured by Kustom Fit and sold by American Seating Company. The EZ Fold is in many respects similar, if not identical, to the invention claimed in the '389 patent. Most notably, neither device has an aisle leg. However, and important to this case, the two products use different types of support

structures in lieu of the aisle leg. The invention claimed in the '389 patent, of course, uses the slider crank, which is described in part by the “slidably mounted” limitation. The EZ Fold, on the other hand, uses what is known as a “fourth link.”

Like the slider crank, the fourth link is also a specific type of four bar mechanism. However, the two mechanisms differ in that, where the moveable end of the '389 patent's support member is slidably mounted to the seatbase, the moveable end of the EZ Fold's support member is rotatably mounted to the seatbase. Therefore, the moveable end of the EZ Fold's support member does not slide or otherwise move along the seatbase. Rather, its only range of motion consists of rotation throughout its revolute joints. That said, the EZ Fold's fourth link mechanism still provides the seatbase with fluid translational motion, and thereby allows the seat to fold between the deployed and stowed positions. It does this through an extra set of revolute joints located in the midsection of its support member (“mid-joints”). These mid-joints are shown below in two representative illustrations of the EZ Fold product.



The illustration on the left shows the seat in the fully deployed position, and the illustration on the right shows the device in transition between the deployed and stowed positions.

## II.

On July 5, 2002, Freedman sued both American Seating Company and Kustom Fit for patent infringement and unfair competition under the Lanham Act. With respect to the claim for patent infringement, Freedman alleged that American Seating Company's EZ Fold infringed the '389 patent. Freedman alleged that Kustom Fit also infringed as a result of its role in developing and manufacturing the EZ Fold for American Seating Company. In response to Freedman's complaint, American Seating denied Freedman's allegations of patent infringement and unfair competition, and also asserted a counterclaim of patent invalidity by reason of obviousness. After some discovery, American Seating requested leave to amend its answer. The district court granted this request on September 4, 2003, for the limited purpose of allowing American Seating to add an affirmative defense of unenforceability by reason of inequitable conduct.

In due course, both parties filed motions for summary judgment on the issue of infringement. Freedman also moved for summary judgment of validity of the '389 patent, and American Seating moved for summary judgment on Freedman's unfair competition claim. With respect to the issue of infringement, the court stated that there really was no dispute as to claim construction or the structure of the accused product. Summary Judgment I, slip op. at 9. In fact, the parties generally agreed that the EZ Fold literally meets all of the limitations of claim 1 except for the limitation requiring that the movable end of the support member be "slidably mounted" to the seatbase. Id. The accused product does not literally meet this limitation because the EZ Fold's support member is rotatably mounted, not slidably mounted, to the seatbase. Id. The district

court therefore identified the sole issue before it as “whether the ’389 Patent’s support member and movable end is equivalent to that found in the accused device.” Id.

American Seating argued that its support member and moveable end were not equivalent to the corresponding structure claimed by the ’389 patent because its system used a fourth link, which created a substantially different support structure than the slider crank of the ’389 patent. Id. at 10. In particular, American Seating argued that the support structures of the two devices created substantially different distribution forces. The district court disagreed. As an initial matter, the court stated that force distributions were not claimed in the ’389 patent and were therefore of minimal relevance. Id. at 11. In addition, the court found that any difference in force distributions was insubstantial, and that Freedman’s “slider-crank and [American Seating’s] fourth link perform substantially the same function in substantially the same manner to achieve substantially the same result.” Id. The court therefore granted Freedman summary judgment of infringement by equivalence. Id. at 11-12.

As to the issue of invalidity, American Seating opposed Freedman’s motion for summary judgment on the ground that, at a minimum, there were genuine issues of material fact as to whether the invention of the ’389 patent was obvious. Again, the district court disagreed. The court determined that the closest piece of prior art, U.S. Patent No. 5,489,141 (“the C.E. White reference”), which used an aisle leg, did not disclose or otherwise teach a folding chair having a cantilever design. Id. at 7. Furthermore, while other prior art references disclosed cantilever designs, the court found that American Seating did not “present information that clearly and convincingly demonstrates obviousness of the ’389 Patent resulting from the existence of ‘a reason,

suggestion, or motivation in the prior art or elsewhere that would lead one of ordinary skill in the art to combine” the C.E. White reference with prior art cantilever designs. Id. at 8. Therefore, the district court held that no reasonable juror could conclude that the '389 patent was invalid and, accordingly, granted Freedman summary judgment of validity. Id. The court also seemed to reject American Seating's unenforceability defense, finding that the subject matter taught by the C.E. White reference was adequately disclosed in the Background of the '389 patent. Id.<sup>2</sup> Finally, the district court granted American Seating summary judgment on Freedman's unfair competition claim. Id. at 12-13.

American Seating subsequently sought reconsideration on the grounds that the district court had improperly granted summary judgment on the issue of validity and had failed to consider American Seating's affirmative defense of inequitable conduct. Freedman Seating Co. v. Am. Seating Co., No. CV-02-5347, slip op. at 15-16 (C.D. Cal. Nov. 13, 2003). The district court denied the motion with respect to the issue of validity, but granted the motion with respect to inequitable conduct. Id. at 5. Nevertheless, after the parties submitted additional briefing, the court granted Freedman summary judgment of no inequitable conduct. Summary Judgment II, slip op. at 5.

Having concluded that American Seating infringed a valid and enforceable patent owned by Freedman, the district court held a jury trial to determine the amount of any resulting damages. The jury concluded that American Seating's infringement was not willful and awarded Freedman \$177,955.20 in damages, \$163,155.20 of which was

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<sup>2</sup> American Seating argued that the applicants for the '389 patent had engaged in inequitable conduct during prosecution by failing to disclose to the examiner the C.E. White reference.

computed based on lost profits from American Seating Company, and \$14,800 of which was based on a reasonable royalty from Kustom Fit. The district court subsequently denied Freedman's request for costs and attorney's fees and entered final judgment. Judgment on Jury Verdict.

American Seating timely appealed to this court and Freedman has cross-appealed. We have jurisdiction pursuant to 28 U.S.C. § 1295(a)(1).

#### DISCUSSION

In the main appeal, American Seating contends that the district court erred in granting summary judgment for Freedman on the issues of infringement, validity, and enforceability. Freedman responds that the district court properly granted summary judgment on these issues. However, in its cross-appeal, Freedman contends that the district court committed several errors at the damages phase of the litigation. In particular, Freedman contends that the district court erred in allowing American Seating to invoke the advice of counsel defense to the charge of willful infringement and in refusing to award costs and pre-judgment interest. Freedman also contends that the jury's finding of no willful infringement is not supported by substantial evidence and that the jury further erred by not awarding damages for all acts of infringement.<sup>3</sup>

We begin by addressing American Seating's appeal, for if American Seating is not liable for patent infringement, there is no reason to consider Freedman's cross-appeal regarding damages.

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<sup>3</sup> As noted above, Freedman does not appeal the district court's grant of summary judgment in favor of American Seating on the Lanham Act claim.

I.

We review summary judgment decisions de novo, reapplying the standard used by the district court. Frank's Casing Crew & Rental Tools, Inc. v. Weatherford Int'l, Inc., 389 F.3d 1370, 1376 (Fed. Cir. 2004); Ellison v. Robertson, 357 F.3d 1072, 1075 (9th Cir. 2004). Under that standard, summary judgment must be granted “if the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a judgment as a matter of law.” Fed. R. Civ. P. 56(c). In other words, summary judgment must be granted if no “reasonable jury could return a verdict for the nonmoving party.” Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 248 (1986). In making this determination, “[t]he evidence of the non-movant is to be believed, and all justifiable inferences are to be drawn in [the non-movant’s] favor.” Id. at 255.

II.

Patent infringement is a two step inquiry. First, the court must construe the asserted claim. RF Del., Inc. v. Pac. Keystone Techs., Inc., 326 F.3d 1255, 1266 (Fed. Cir. 2003). Second, the court must determine whether the accused product or process contains each limitation of the properly construed claims, either literally or by a substantial equivalent. Id. The first step is a question of law; the second step is a question of fact. Id.

A.

On appeal, American Seating contends that the district court’s grant of summary judgment of infringement had the effect of vitiating the claim limitation requiring that the

moveable end of the support member be “slidably mounted to said seatbase.” That, according to American Seating, is because while the claims of the ’389 patent unequivocally state that the moveable end is “slidably mounted,” the moveable end of the EZ Fold is rotatably mounted using revolute joints. In addition, American Seating argues that, at the time of filing for the ’389 patent, the interchangeability of four bar mechanisms was foreseeable to one of skill in the art. American Seating states that this is significant because, while Freedman could have chosen to claim a fourth link mechanism (or even all types of four bar mechanisms), it chose to narrowly claim a slider-crank mechanism. American Seating contends that competitors should therefore be entitled to rely on this clear structural limitation without risk of infringement under the doctrine of equivalents. American Seating further argues that, even if the district court’s finding of infringement would not vitiate the claim limitation, it presented evidence to the district court showing that the EZ Fold’s fourth link is substantially different from the slider crank claimed in the ’389 patent.

In response, Freedman contends that the district court properly granted summary judgment of infringement. Freedman states that, contrary to American Seating’s assertions, the district court did not read “slidably mounted” out of the claims. Rather, the district court merely concluded that the rotatably mounted support member (or fourth link) of the accused product was equivalent to a slidably mounted support member (or slider crank). Freedman asserts that the district court reached this conclusion by properly applying the function-way-result test for equivalence set forth in Graver Tank & Manufacturing Co. v. Linde Air Products Co., 339 U.S. 605, 608 (1950). First, Freedman asserts that in both the accused product and the ’389 patent, mounting the

support member to the seatbase serves the function of attaching the moveable end of the support member to the seatbase while still permitting the seatbase to move between the horizontal and vertical positions. Second, Freedman asserts that the '389 patent and the accused product perform this function in the same way, by providing the movable end of the support member with both translational and rotational motion relative to the seatbase. Finally, Freedman asserts that both devices achieve the same result, namely, "the repositioning of the movable end, from a first position near the midpoint of the seatbase when the seatbase is stowed, to a position near the aisle end of the seatbase when the seatbase is deployed."

#### B.

Under the doctrine of equivalents, "a product or process that does not literally infringe upon the express terms of a patent claim may nonetheless be found to infringe if there is 'equivalence' between the elements of the accused product or process and the claimed elements of the patented invention." Warner-Jenkinson Co. v. Hilton Davis Chem. Co., 520 U.S. 17, 21 (1997) (citing Graver Tank, 339 U.S. at 609). The doctrine evolved in recognition of the fact that

[t]he language in the patent claims may not capture every nuance of the invention or describe with complete precision the range of its novelty. If patents were always interpreted by their literal terms, their value would be greatly diminished. Unimportant and insubstantial substitutes for certain elements could defeat the patent, and its value to inventors could be destroyed by simple acts of copying.

Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 535 U.S. 722, 731 (2002); Graver Tank, 339 U.S. at 605 ("[T]o permit imitation of a patented invention which does not copy every literal detail would be to convert the protection of the patent grant into a

hollow and useless thing.”). At the same time, the doctrine of equivalents necessarily adds uncertainty to the scope of patent claims, and thereby detracts from the public-notice function of patent claims and risks deterring non-infringing and potentially innovative endeavors. See Festo, 535 U.S. at 727 (“If the range of equivalents is unclear, competitors may be unable to determine what is a permitted alternative to a patented invention and what is an infringing equivalent.”); Warner-Jenkinson, 520 U.S. at 29 (“There can be no denying that the doctrine of equivalents, when applied broadly, conflicts with the definitional and public-notice functions of the statutory claiming requirements.”). In recognition of this risk, and in an effort to strike the proper balance between protecting patentees while also providing sufficient notice to the public, various rules of law have emerged to constrain when and how the doctrine of equivalents is to be applied.

Of relevance to this case is the “all limitations” rule.<sup>4</sup> The rule holds that an accused product or process is not infringing unless it contains each limitation of the claim, either literally or by an equivalent. See, e.g., Warner-Jenkinson, 520 U.S. at 29; Kustom Signals, Inc. v. Applied Concepts, Inc., 264 F.3d 1326, 1333 (Fed. Cir. 2001). This principle has two primary implications for the doctrine of equivalents. First, the all limitations rule requires that equivalence be assessed on a limitation-by-limitation basis, as opposed to from the perspective of the invention as a whole. Warner-Jenkinson, 520 U.S. at 29 (“Each element contained in a patent claim is deemed material to defining the scope of the patented invention, and thus the doctrine of equivalents must be applied to

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<sup>4</sup> There are other constraints not relevant to this appeal, such as the doctrine of prosecution history estoppel, see generally Festo, 535 U.S. at 733-41, and the rule of subject matter dedication, see generally Johnson & Johnston Assocs. Inc. v. R.E. Serv. Co., 285 F.3d 1046 (Fed. Cir. 2002) (en banc).

individual elements of the claim, not to the invention as a whole.”); Pennwalt Corp. v. Durand-Wayland, Inc., 833 F.2d 931, 935 (Fed. Cir. 1987) (en banc). Second, an element of an accused product or process is not, as a matter of law, equivalent to a limitation of the claimed invention if such a finding would entirely vitiate the limitation. Warner-Jenkinson, 520 U.S. at 29 (“It is important to ensure that the application of the doctrine [of equivalents], even as to an individual element, is not allowed such broad play as to effectively eliminate that element in its entirety.”); Lockheed Martin Corp. v. Space Sys./Loral, Inc., 324 F.3d 1308, 1321 (Fed. Cir. 2003) (“[I]f a court determines that a finding of infringement under the doctrine of equivalents ‘would entirely vitiate a particular claim[ed] element,’ then the court should rule that there is no infringement under the doctrine of equivalents.” (citation omitted)); Bell Atl. Network Servs., Inc. v. Covad Communications Group, Inc., 262 F.3d 1258, 1279-80 (Fed. Cir. 2001) (same).

There is no set formula for determining whether a finding of equivalence would vitiate a claim limitation, and thereby violate the all limitations rule. Rather, courts must consider the totality of the circumstances of each case and determine whether the alleged equivalent can be fairly characterized as an insubstantial change from the claimed subject matter without rendering the pertinent limitation meaningless. See, e.g., Novartis Pharm. Corp. v. Abbott Labs., 375 F.3d 1328, 1338-39 (Fed. Cir. 2004) (“Permitting such an element in the accused product to come within the bounds of the claimed element would impermissibly extend the scope of the claim language beyond what the patentee actually claimed.”); Moore U.S.A., Inc. v. Standard Register Co., 229 F.3d 1091, 1106 (Fed. Cir. 2000) (“If our case law on the doctrine of equivalents makes anything clear, it is that all claim limitations are not entitled to an equal scope of

equivalents.”); Ethicon Endo-Surgery, Inc. v. U.S. Surgical Corp., 149 F.3d 1309, 1317-21 (Fed. Cir. 1998) (indicating that assessing infringement under the doctrine of equivalents is dependent on the facts of each case); Sage Prods., Inc. v. Devon Indus., Inc., 126 F.3d 1420, 1425 (Fed. Cir. 1997) (“Because th[e] issued patent contains clear structural limitations, the public has a right to rely on those limits in conducting its business activities.”).

Our decision in Ethicon provides a good example of the multi-factored analysis required by the doctrine of equivalents. In that case, Ethicon Endo-Surgery, Inc. (“Ethicon”) sued U.S. Surgical Corp. (“U.S. Surgical”) for infringement of claims 6 and 24 of U.S. Reissue Patent No. 34,519. 149 F.3d at 1311. The patent related to surgical staplers and, specifically, a “lockout mechanism” used to prevent the user from discharging the stapler without first inserting a new staple cartridge. Id. The claimed lockout mechanism was located within the staple cartridge and, in short, worked by blocking the stapler’s pusher bar from firing. See id. at 1313. Claims 6 and 24 differed in the specific location of the lockout mechanism. Claim 6 stated that the lockout mechanism was “connected to . . . [the] longitudinal slots” located in the cartridge, whereas in claim 24, the lockout mechanism was merely located somewhere in the path of the pusher bar. Id.

The accused product did not literally infringe claim 6 or claim 24, because its lockout mechanism did not “obstruct the pusher bars’ path into the cartridge, but rather, prevent[ed] the bars from being pushed from behind by obstructing the movement of the cam bar retainers.” Id. In addition, “the [lockout mechanism was] held out of the path of the pusher assembly . . . until just before the first staple [was] fired. . . . [B]y the time

the first staple [was] fired, the [lockout mechanism was] in contact with the cam bar retainer,” thereby preventing a second firing. Id. Based on these differences, the district court concluded that there was, as a matter of law, no infringement under the doctrine of equivalents, and therefore granted U.S. Surgical summary judgment of non-infringement of both claim 6 and 24. Id. at 1314-15.

On appeal, we affirmed summary judgment as to claim 6, but reversed the grant of summary judgment as to claim 24. Id. at 1321. With respect to claim 6, we agreed with the district court that the “connected to said longitudinal slots” limitation “ties the lockout mechanism to a specific place”—namely, to the slots, which were located inside of the chamber. Id. at 1318 (citation omitted). In U.S. Surgical’s product, however, the lockout mechanism was “located at the distal end of the [disposable loading unit,] nowhere near the longitudinal slots which [were] located in the staple cartridge at the front end of the stapler.” Id. Therefore, because U.S. Surgical’s lockout mechanism was located outside of the cartridge and nowhere near the longitudinal slots, we concluded that no reasonable juror could find equivalence, i.e., an insubstantial difference. Id. at 1318-19.

On the other hand, the pertinent limitation of claim 24 merely stated that the lockout mechanism was located somewhere in the path of the pusher assembly, id. at 1312-13, and the accused product’s lockout mechanism was located in the path of the pusher assembly. However, there could be no literal infringement because, where the claimed lockout mechanism always “contact[ed] the [pusher assembly] ‘during staple firing,’” the accused product’s lockout mechanism “los[t] contact with the [pusher assembly] just prior to staple firing,” and then regained contact after firing, thereby

preventing a second firing. Id. at 1321. Nonetheless, we found that “this physical difference translates into a ‘very slight,’ ‘very quick’ temporal difference, a period that is perhaps as short as a few thousandths of a second.” Id. We further concluded that this subtle difference left genuine issues of material fact as to infringement under the doctrine of equivalents. Id. at 1320-21. In doing so, we explained that our finding did not vitiate any limitations of claim 24 because the noted difference “is a subtle difference in degree, not a clear, substantial difference or difference in kind, as was the case regarding claim 6.” Id. at 1321 (emphases added); see also Wright Med. Tech., Inc. v. Osteonics Corp., 122 F.3d 1440, 1445 (Fed. Cir. 1997) (holding that a finding of infringement under the doctrine of equivalents would not vitiate the “closely fit” and “extend through” limitations of the asserted claims).

Conversely, in Sage Products we affirmed the district court’s grant of summary judgment of non-infringement under the doctrine of equivalents. 126 F.3d at 1421. One of the asserted patents described a container for discarding syringes and other like materials and claimed, among other things, “an elongated slot at the top of the container body” and a barrier means comprised of “a first constriction extending over said slot.” Id. at 1422. We agreed that the district court properly interpreted “top of the container body” to mean “highest point, level, or part of.” Id. at 1423. The accused product differed from the claimed invention in that the slot was located in the interior of the container rather than at the top of the container. Id.

We concluded that finding infringement under these circumstances would vitiate the “slot at the top of the container body” and “extending over said slot” limitations. Id. at 1424-26. We reached our conclusion based on several considerations, including the

simplicity of the structure, the specificity and narrowness of the claim, and the foreseeability of variations at the time of filing the claim with the PTO:

The claim at issue defines a relatively simple structural device. A skilled patent drafter would foresee the limiting potential of the “over said slot” limitation. No subtlety of language or complexity of the technology, nor any subsequent change in the state of the art, such as later-developed technology, obfuscated the significance of this limitation at the time of its incorporation into the claim. If [the patentee] desired broad patent protection for any container that performed a function similar to its claimed container, it could have sought claims with fewer structural encumbrances. . . . Instead, [the patentee] left the PTO with manifestly limited claims that it now seeks to expand through the doctrine of equivalents. However, as between the patentee who had a clear opportunity to negotiate broader claims but did not do so, and the public at large, it is the patentee who must bear the cost of its failure to seek protection for this foreseeable alteration of its claimed structure.

Id. at 1425 (citation and footnote omitted). Compare Hughes Aircraft Co. v. United States, 140 F.3d 1470, 1475 (Fed. Cir. 1998) (“This is a case in which a ‘subsequent change in the state of the art, such as later-developed technology, obfuscated the significance of [the] limitation at the time of its incorporation into the claim.’”).

In Tronzo v. Biomet, Inc., 156 F.3d 1154 (Fed. Cir. 1998), we similarly concluded that a finding of equivalence would vitiate the claimed limitation. The asserted claims related to an artificial hip socket and included a limitation requiring that the prosthesis’s body have “a generally conical outer surface.” Id. at 1156. In finding infringement, the jury concluded that the hemispherical shape of the accused product’s hemispherical cup was equivalent to the “generally conical outer surface” limitation. Id. We reversed, finding no infringement as a matter of law. We were particularly troubled by expert testimony submitted by the plaintiff, Tronzo, stating that “when either a hemispherical

cup or trapezoidal cup or any other shape cup is successfully implanted into the body, it functions almost exactly the same way.” Id. at 1160 (emphasis in original). We stated that, according to this theory of infringement, “any shape would be equivalent to the conical limitation.” Id. (emphasis added). “Such a result,” we concluded, “is impermissible under the all-elements rule of Warner-Jenkinson because it would write the ‘generally conical outer surface’ limitation out of the claims.” Id.; see also Asyst Techs., Inc. v. Emtrak, Inc., 402 F.3d 1188, 1195 (Fed. Cir. 2005) (holding that, under the “specific exclusion” principle, “the term ‘mounted’ can fairly be said to specifically exclude objects that are ‘unmounted’”); Moore U.S.A., 229 F.3d at 1106 (“[T]o allow what is undisputedly a minority (i.e., 47.8%) to be equivalent to a majority would vitiate the requirement that the ‘first and second longitudinal strips of adhesive . . . extend the majority of the lengths of said longitudinal marginal portions.’”).

In the instant case, we think the district court’s finding of infringement under the doctrine of equivalents had the effect of entirely vitiating the “slidably mounted” limitation. The parties agree that all of the claims require a support member having “a moveable end slidably mounted to” the seatbase. See, e.g., ’389 patent, claim 1 & claim 5.<sup>5</sup> It is also not disputed that the moveable end of the EZ Fold’s support member is rotatably mounted, not slidably mounted, to the seatbase. Therefore, while the moveable end of the EZ Fold’s support member has the ability to rotate, it cannot slide or otherwise move along the seatbase. It is confined to a fixed location. We think that this structural difference in the mounting of the moveable end to the seatbase is not a

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<sup>5</sup> Independent claim 16 uses slightly different language—“a diagonal support member . . . including a moveable end slidably received by a longitudinal guide member affixed to an underside of said seatbase”—but the parties do not argue that this difference is relevant to the disputed issue in the case.

“subtle difference in degree,” but rather, “a clear, substantial difference or difference in kind.” Ethicon, 149 F.3d at 1321.

Freedman argues that the slider crank claimed in the '389 patent and the fourth link mechanism used in the EZ Fold function in the same way to produce identical results. (Br. of Appellee at 17-21.) Freedman asserts that this is because “[b]oth the infringing seat and the claimed structure of the '389 patent provide the moveable end of the support member with both translational and rotational motion relative to the seatbase.” (Id. at 18.) The problem, however, is that taken to its logical conclusion, Freedman’s argument would mean that any support member capable of allowing translational and rotational motion would be equivalent to a support member “slidably mounted to said seatbase,” which reads “slidably mounted” completely out of the claims. This is the precise type of overextension of the doctrine of equivalents that the claim vitiation doctrine is intended to prevent. Indeed, we rejected this same type of argument in Tronzo. See 156 F.3d at 1160 (holding that finding all shapes to be equivalent structure would entirely vitiate the limitation requiring a “generally conical shape” (emphasis added)).

Freedman’s theory of infringement also suffers from some of the same problems we addressed in Sage Products. In particular, though elegant, the subject matter claimed by the '389 patent involves relatively simple and well-known technologies. The patentees also stated that they were aware of other types of four bar mechanisms. (See June 10, 2003 Dep. of Michael D. Moffa at 89-95; June 9, 2003 Dep. of Brian W. McClintock at 46-47.) Yet, they chose to specifically limit the claims to slider-crank mechanisms vis-à-vis the “slidably mounted” moveable end limitation. Members of the

public were therefore justified in relying on this specific language in assessing the bounds of the claim. Accordingly, we think that to now say the claims include other four bar mechanisms under the doctrine of equivalents would unjustly undermine the reasonable expectations of the public. See Sage Prods., 126 F.3d at 1425 (“Given a choice of imposing the higher costs of careful prosecution on patentees, or imposing the costs of foreclosed business activity on the public at large, this court believes the costs are properly imposed on the group best positioned to determine whether or not a particular invention warrants investment at a higher level, that is, the patentees.”); see also Conopco, Inc. v. May Dep’t Stores Co., 46 F.3d 1556, 1562 (Fed. Cir. 1994) (“The doctrine of equivalence cannot be used to erase ‘meaningful structural and functional limitations of the claim on which the public is entitled to rely in avoiding infringement.’” (citation omitted)).

In sum, we hold that the district court’s finding of infringement entirely vitiated the “slidably mounted” limitation of the ’389 patent. We therefore reverse the court’s grant of summary judgment and remand with instructions to enter judgment of non-infringement in favor of American Seating.

### III.

Although we have now determined that American Seating’s EZ Fold does not infringe the ’389 patent, we must nevertheless address the invalidity counterclaim per the Supreme Court’s decision in Cardinal Chemical Co. v. Morton International, Inc., 508 U.S. 83 (1993).<sup>6</sup> On appeal, American Seating makes two primary arguments as to

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<sup>6</sup> On the other hand, we need not address the issue of enforceability. American Seating asserted that issue not as a counterclaim for a declaratory judgment, but rather, as an affirmative defense to Freedman’s charge of infringement. Therefore,

why the district court erred in granting Freedman summary judgment of validity. First, American Seating contends the district court applied an incorrect obviousness standard by equating obviousness with “indistinguishable.” Second, American Seating contends that the district court improperly placed the burden of proving obviousness on American Seating, the nonmoving party. As the nonmoving party, American Seating argues that it only needed to show the existence of genuine issues of material fact in order to defeat Freedman’s motion for summary judgment, a burden that American Seating asserts to have satisfied. We agree with American Seating on both points.

Although at times the district court referred to the obviousness standard set forth in Graham v. John Deere Co., 383 U.S. 1, 17-18 (1966), at other times the court appeared to equate obviousness with “indistinguishable.” Summary Judgment I, slip op. at 7 (“A patent is ‘obvious,’ i.e., indistinguishable, ‘if the difference between it and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art.’” (citation omitted)); id. (“Defendants have not provided evidence that demonstrates the ’389 Patent is obvious and indistinguishable from prior art.”). This not the correct perspective from which to assess obviousness. Indeed, a claim that is obvious is, by definition, “distinguishable” from the prior art. See Graham, 383 U.S. at 17-18 (stating that an obviousness analysis requires, among other things, assessing the differences between the claimed invention and the prior art). The reason such a claim is nonetheless invalid

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(Cont’d. . . .)

having concluded that American Seating does not infringe the ’389 patent, and having further directed the district court to enter judgment of non-infringement, there is no reason for us to consider American Seating’s affirmative defense, as it would have no effect on the scope of the judgment. See TypeRight Keyboard Corp. v. Microsoft Corp., 374 F.3d 1151, 1156-57 (Fed. Cir. 2004).

is because its differences over the prior art are simply not sufficient to warrant a patent grant. Therefore, the district court erred to the extent it held that the '389 patent could only be invalid for obviousness if indistinguishable from the prior art.

In addition, it appears that the district court erred by treating American Seating, not Freedman, as the party moving for summary judgment. In particular, the court repeatedly stated that summary judgment for Freedman was appropriate because American Seating had failed to prove invalidity by clear and convincing evidence. For example, the court stated: “In light of Defendants failure to prove invalidity through obviousness or otherwise, this Court concludes that Plaintiff’s '389 Patent is valid.” Summary Judgment I, slip op. at 8; see also id. at 7 (“Defendants have not provided evidence that demonstrates the '389 patent is obvious and indistinguishable from prior art.”); id. at 8 (“Defendants do not present information that clearly and convincingly demonstrates obviousness of the '389 Patent . . . .”); id. (“In sum, Defendants fail to meet their burden of establishing validity.”). However, it was Freedman who moved for summary judgment. Therefore, American Seating only needed to show the existence of a genuine issue of material fact in order to preclude summary judgment for Freedman. Liberty Lobby, 477 U.S. at 252 (holding that once the moving party makes a prima facie showing in support of its motion for summary judgment, the nonmoving party must come forward with evidence sufficient to show a genuine issue of material fact). We think American Seating came forward with such evidence.

It is undisputed that the C.E. White reference disclosed all of the limitations of the claimed invention except for the cantilevered seatbase. (The C.E. White reference used an aisle leg instead of a cantilever.) However, American Seating presented evidence showing that cantilevered seats were in the prior art. (See June 10, 2003 Dep. of Michael D. Moffa at 89-95; June 9, 2003 Dep. of Brian W. McClintock at 46-47.) American Seating also offered evidentiary support for its assertion that the invention of the '389 patent occurred only after one of the inventors, Brian W. McClintock, was given the specific assignment of modifying the C.E. White seat to eliminate the aisle leg. (June 9, 2003 Dep. of Brian W. McClintock at 16-18.) We think that this record, although not clearly and convincingly demonstrating obviousness, was sufficient to create a genuine issue of material fact as to whether one of skill in the art would have been motivated to combine the C.E. White reference with a suitable cantilever device from the prior art. Accordingly, we reverse the district court's grant of Freedman's motion for summary judgment of validity and remand for further proceedings.

#### CONCLUSION

Because we hold that finding infringement under the doctrine of equivalents would have the effect of vitiating the "slidably mounted" limitation of the '389 patent, we reverse the district court's summary judgment of infringement in favor of Freedman and remand with instructions to enter judgment for American Seating of non-infringement. Because we hold that genuine issues of material fact exist as to obviousness, we reverse the district court's grant of Freedman's motion for summary judgment of validity and remand for further proceedings. Based on our finding of non-infringement as a

matter of law, we do not reach American Seating's affirmative defense of unenforceability or the issues related to damages raised in Freedman's cross-appeal.

#### COSTS

Each party shall bear its own costs.

REVERSED and REMANDED