

**Keywords:** Equivalent, vitiating a limitation, “all limitations” rule, limitation-by-limitation basis, subtle difference in degree, substantial difference, difference in kind

**General:** Claims for stowable seat that require use of support member having “movable end” that is “slidably mounted” to seat base are not infringed by accused folding seat that employs moveable end that is rotatably mounted to seat base using revolutes joints, since finding of equivalence would vitiate “slidably mounted” limitation.

*Freedman Seating Co. v. American Seating Co.*  
76 U.S.P.Q. 2d 1001 (Fed. Cir. 2005)  
Decided August 11, 2005

## I. Facts

Freedman Seating Co. (“Freedman”) brought an action against American Seating Co. and Hi-Tech Seating Products Inc., d/b/a Kustom Fit (collectively “American Seating”) for infringement of U.S. Patent No. 5,492,389 (“the ‘389 patent”) in the United States District Court of the Central District of California. American Seating counterclaimed for declaratory judgment of patent invalidity by reason of obviousness. The district court granted summary judgment in favor of Freedman both on the issue of infringement under the doctrine of equivalents and invalidity by reason of obviousness. Accordingly, American Seating appealed.

Freedman manufactures seats used in public transportation vehicles. Its product lines include 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 owns the ‘389 patent, titled “Stowable Seat,” which relates to stowable seats in a vehicle. The ‘389 patent discloses a stowable seat that acts as a passenger seat in a horizontal position (i.e., deployed position) and is stowed in a vertical position to open up interior space. The stowable seat uses a diagonal truss for cantilevering rather than an aisle leg to support the seat when it is in the horizontal position.

In addition to providing aisle support, the diagonal truss allows for transitional movement of the seat base between the horizontal and vertical positions. The truss has a fixed end that is attached to a seat frame at a pivot point and a moveable end that is “slidably mounted” in a runner track. Claim 1 of the ‘380 patent, which is a representative claim, recites “a support member ... including a moveable end *slidably mounted* to said seat base and a fixed end journaled with said frame.” (Emphasis added). When stowing the seat, the moveable end slides on the runner track toward the middle of the seat base, while the fixed end rotates upward until the seat is in the vertical position. When deploying the seat, the moveable end slides toward the aisle end of the seat base, while the fixed end rotates downward until the seat is in a 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.”

American Seating also manufactures and markets seating products for the transportation industry. One particular seat is the Horizon EZ Fold (“EZ fold”), which is a stowable seat. Like the seat of the ‘389 patent, the EZ Fold also utilizes cantilevering rather than an aisle leg to support the seat in a horizontal position. Additionally, the EZ Fold utilizes a four bar mechanism referred to as a “fourth link.” Like the slider crank described in the ‘389 patent, the fourth link provides the seat base with fluid translational motion, and thereby allows the seat to fold between the deployed and stowed positions. However, unlike the slider crank of the ‘389 patent, the fourth link does not

slide or otherwise move along the seat base. Rather, the fourth link's only range of motion consists of rotation throughout its revolute joints.

It is undisputed that a prior art reference, the C.E. White reference, disclosed all of the limitations of the claimed invention in the '389 patent except for the cantilevered seat base. The C.E. White reference used an aisle leg instead of a cantilever. American Seating showed evidence that cantilevered seats were in the prior art. Additionally, American Seating showed evidence that the invention of the '389 patent occurred only after one of the inventors was given the specific assignment of modifying the seat set forth in the C.E. White reference to eliminate the aisle leg.

## **II. Issues**

- A. Was the summary judgment with respect to infringement under the doctrine of equivalence proper because the '389 patent's support member and movable end are equivalent to that found in the accused device?
- B. Was the summary judgment with respect to invalidity improper because there was a genuine issue of material fact with respect to obviousness of the '389 patent?

## **III. Discussion**

- A. No. According to the "all limitations" rule, an accused product or process is not infringing unless it contains each limitation of a claim, either literally or by an equivalent. First, this requires that equivalence be assessed on a limitation-by-limitation basis, as opposed to from a perspective of the invention as a whole. 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. If a difference is subtle in degree, rather than a clear, substantial difference or difference in kind, the difference does not vitiate a claim limitation.

The district court's finding of infringement entirely vitiated the "slidably mounted" limitation of the '389 patent. The parties agree that all of the claims require a support member having "a moveable end slidably mounted to" the seat base. It is also undisputed that the moveable end of the EZ Fold's support member has the ability to rotate. It cannot slide or otherwise move along the seat base. Indeed, it is confined to a fixed location. This structural difference in the mounting of the moveable end to the seat base is not a subtle difference in degree, but rather, a clear, substantial difference or difference in kind.

- B. No. The district court improperly placed the burden of proof on American seating, the non-moving party. Further, the district court applied an incorrect obviousness standard. The record does not clearly and convincingly demonstrate obviousness of the '389 patent. However, the record is sufficient to create a genuine issue of material fact as to whether one of ordinary skill in the art would have been motivated to combine the C.E. White reference with a suitable cantilever device from the prior art.

## **IV. Conclusion**

- A. The court's grant of summary judgment was reversed and remanded with instructions to enter judgment of non-infringement in favor of American Seating.
- B. The district court's grant of Freedman's motion for summary judgment against American Seating's defense of invalidity was reversed and remanded for further proceedings.