

Keywords: relative term (i.e., readily); means plus function; equivalents

General: The Federal Circuit holds that the claim recitation “readily installed” is not indefinite, and that an interference fit (in a hearing aid) is equivalent to a threaded joint, ball and socket joint, and adhesive joint for purposes of interpreting means-plus-function claims.

Hearing Components Inc. v. Shure Inc.

94 U.S.P.Q.2d 1385 (Fed. Cir. 2010)

Decided April 1, 2010

I. Facts

Hearing Components Inc. (hereinafter, “Hearing”) owns several patents relating to hearing aids. U.S. Patent No. 5,002,151 (hereinafter, “the ‘151 patent”) and U.S. Patent No. 4,880,076 (hereinafter, “the ‘076 patent”) both use means plus function language (e.g., attaching or fastening means) in all of the claims. For example, claim 1 of the ‘151 patent is directed toward a hearing aid with a means for attachment to a user-disposable sleeve, which includes foam secured to a duct. These patents disclosed screw threads, ball and socket joints, and adhesives as means for attachment. U.S. Patent No. 5,401,920 (hereinafter, “the ‘920 patent”) is directed toward a sound transmitting tube that fits in an ear canal, wherein a wax guard is “readily installed and replaced by a user.”

Hearing sued Shure Inc. (hereinafter, “Shure”) for patent infringement by Shure’s straight nozzle hearing aids and barbed nozzle hearing aids. During claim construction, the court found the “readily installed and replaced” claim language indefinite, suggesting that the “readily” term was too subjective and difficult to define. As a result, the court found claims 1 and 2 of the ‘920 patent invalid. Regarding the means plus function claims, Shure asserted that its hearing aids used an interference fit, rather than any sort of positive attachment structure. Thus, Shure asserted that its hearing aids did not fall within the scope of the means for attachment disclosed by the ‘151 and ‘076 patents, i.e., threads, ball and socket, or adhesive. However, the jury found the ‘076 and ‘151 patents not invalid and infringed by Shure’s hearing aids.

Shure then moved for JMOL of invalidity and non-infringement of the ‘076 and ‘151 patents. The court denied Shure’s motion for JMOL of invalidity of both patents, granted Shure’s motion for JMOL of non-infringement by Shure’s straight nozzle hearing aids, and denied Shure’s motion for JMOL of non-infringement by Shure’s barbed nozzle hearing aids. The court reasoned that the straight nozzle hearing aids relied only on an interference fit with no type of protuberance or adhesive. In contrast, the court reasoned that the barbed nozzle hearing aids relied on an interference fit as well as a protuberance, i.e., barbs. Both parties appealed.

II. Issues

- A. Does “readily installed and replaced by a user” render a claim indefinite?
- B. Is an interference fit (with or without barbs) equivalent to a threaded joint, a ball and socket joint, or an adhesive joint?

III. Discussion

- A. No - the “readily installed and replaced by a user” claim language is sufficiently defined in the specification.

The Federal Circuit noted that not all terms of degree are indefinite, but the specification must provide some standard for measuring that degree. In the ‘920 patent, the wax guard was described as being removed and installed without tools. Although the specification

mentioned older persons, the Federal Circuit found that the specification was not limited to easy installation and removal by older persons, but rather it was inclusive of older persons. For example, the Federal Circuit noted that the '920 patent disclosed "It is simple to install, easy to remove, and convenient to replace, *even* for older persons." As a result, the Federal Circuit reversed the holding of indefiniteness of the '920 patent, as the specification clearly provides a tool-free installation and removal standard for the "readily installed and replaced by a user" claim language.

- B. Yes - the Federal Circuit found both the straight nozzle hearing aids and the barbed nozzle hearing aids to have equivalent attaching means as those disclosed in the '076 and '151 patents.

The Federal Circuit explained that the claimed attaching means does not require a protuberance, snap connection, adhesion, or any other positive attachment with the duct. Although both the threaded joint and the ball and socket joint disclosed by the '076 and '151 patents provide some sort of positive attachment, the disclosed adhesive does not require any positive attachment. The Federal Circuit further reasoned that the adhesive disclosed in the '076 and '151 patents merely provides increased friction at the connection. In addition, the Federal Circuit noted that evidence of known interchangeability is an important factor in finding equivalence, and Hearing Components provided evidence of such known interchangeability. In particular, one of the inventors testified that the inventors considered an interference fit, a screw thread, a barb, a ball and socket, and adhesives as different ways of putting the sleeve on the nozzle. Shure asserted that Hearing should not be entitled to extend the equivalents to cover an interference fit, because Hearing was aware of interference fits but failed to disclose them in the '076 and '151 patents. In response, the Federal Circuit stated "that is necessarily the case with known interchangeability, which nevertheless can support a finding of equivalence." Accordingly, the Federal Circuit found that both Shure's straight nozzle hearing aid and Shure's barbed nozzle hearing aid, using an interference fit with and without barbs, provide an equivalent attaching means to those of the '076 and '151 patents. As a result, the Federal Circuit reversed the court's grant of JMOL of non-infringement by Shure's straight nozzle hearing aids, and affirmed the court's denial of JMOL of non-infringement by Shure's barbed nozzle hearing aids.

IV. Conclusion

A relative term or a term of degree, such as "readily," can potentially be found indefinite without a sufficient standard in the specification. A means plus function claim must have sufficient structure in the specification, but equivalents can expand the scope of the disclosed structures (absent prosecution history estoppel) even if the equivalents are known to be interchangeable yet are not disclosed in the specification.