# **United States Court of Appeals for the Federal Circuit**

01-1268,-1269

# TRANSCLEAN CORPORATION, JAMES P. VIKEN, JON A. LANG and DONALD E. JOHNSON,

Plaintiffs-Appellants,

V.

# BRIDGEWOOD SERVICES, INC.,

Defendant-Cross Appellant.

<u>Alan M. Anderson</u>, Fulbright & Jaworski L.L.P., of Minneapolis, Minnesota, argued for plaintiffs-appellants. With him on the brief was <u>Christopher K. Larus</u>.

<u>Warren E. Olsen</u>, Fitzpatrick, Cella, Harper & Scinto, of Washington, DC, argued for defendant-cross appellant. With him on the brief were <u>Brian L. Klock</u> and <u>Stephen E. Belisle</u>.

Appealed from: United States District Court for the District of Minnesota

Judge Raymond L. Erickson

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TRANSCLEAN CORPORATION, JAMES P. VIKEN, JON A. LANG, and DONALD E. JOHNSON,

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V.

BRIDGEWOOD SERVICES, INC.,

Defendant/Cross-Appellant.

DECIDED: May 21, 2002

Before NEWMAN, LOURIE, and CLEVENGER, Circuit Judges.

Opinion for the court filed by <u>Circuit Judge</u> LOURIE. Opinion dissenting-in-part filed by <u>Circuit</u> <u>Judge</u> CLEVENGER.

LOURIE, Circuit Judge.

Transclean Corporation, James P. Viken, Jon A. Lang, and Donald E. Johnson (collectively "Transclean") appeal from a judgment of the United States District Court for the District of Minnesota (1) reversing entry of a portion of a jury's damages award for infringement of Transclean's U.S. Patent 5,318,080, <u>Transclean Corp. v. Bridgewood Serv.</u>, Inc., No. 97-2298, slip op. at 28 (D. Minn. Jan. 8, 2001) ("<u>Damages Opinion</u>"); (2) denying its motion for enhanced damages under 35 U.S.C. §284, <u>id.</u> at 66, as well as attorney fees under 35 U.S.C. §285 and Minn. Stat. § 8.31, <u>Transclean Corp. v. Bridgewood Serv.</u>, Inc., 134 F. Supp. 2d 1049, 1061 (D. Minn. 2001) ("<u>Attorney Fees Opinion</u>"); and (3) granting summary judgment of noninfringement on its claim of trademark infringement, <u>Transclean Corp. v. Bridgewood Serv.</u>, Inc., 000, v. Bridgewood Serv., Inc., 77 F. Supp. 2d 1045, 1094-95 (D. Minn. 1999) ("<u>Summary Judgment Opinion</u>"). Bridgewood cross-appeals from the court's grant of summary judgment

that the '080 patent is not invalid for anticipation and that Bridgewood infringed claims 1-4 and 12. <u>Id.</u> at 1081, 1083, 1063. Bridgewood also cross-appeals from the court's denial of its motion for summary judgment of noninfringement of claim 13. <u>Id.</u> at 1087. For the reasons set forth below, we affirm-in-part and vacate-in-part.

### BACKGROUND

Transclean is the assignee of the '080 patent, which is directed to an automatic transmission fluid changing apparatus. The fluid circulates from an automobile's automatic transmission case to a radiator and back via circulation lines. '080 patent at col. 1, II. 6-12. The invention of the patent is designed to tap into a fluid circulation line and become part of the circulation system for the duration of the fluid changing procedure. Id. at col. 3, Il. 8-19. In that configuration, the invention collects used fluid as it circulates around and into the machine, while supplying new fluid into the circulation system. Id. Prior to the invention, such machines were not capable of matching the supply rate of new fluid to the outflow rate of used fluid. Id. at col. 2, II. 56-68. As a result, one of two problems was likely to occur. First, if the supply rate was less than the outflow rate, the transmission could become starved of fluid, which could lead to excessive heating and damage to the transmission. Id. Second, if the supply rate exceeded the outflow rate, a buildup of internal fluid pressure could stress and damage seals in the transmission. Id. The invention aimed to solve these problems by balancing the supply rate to the outflow rate. Id. at col. 3, II. & 19. Claim 1, the only independent claim, reads as follows:

1. In a fluid replacing apparatus for an automatic transmission an improvement having fluid circulation inlet and outlet ports comprising:

a fluid receiver adapted to be connected to the fluid circulation output port on said automatic transmission; a source of fresh transmission fluid adapted to be connected to the fluid circulation inlet port on said automatic transmission so that fluid circulates therethrough; and

<u>means</u> connected to said fluid receiver and said source of fresh fluid, <u>for</u> <u>equalizing the fluid flow into said fluid receiver and out of said source of fluid</u>.

Id. at col. 8, Il. 10-23 (emphases added).

As can be seen, the claims recite a "means ... for equalizing the fluid flow" in the manner authorized by 35 U.S.C. § 112, ¶ 6. The specification discloses several structures corresponding to the claimed "means." According to one structure, the fluid receiver and source of fresh transmission fluid are segregated portions of the same tank, and the means for equalizing is a flexible diaphragm that defines the boundary dividing the tank into two segregated portions. Id. at figure 3. A structure with those characteristics is the subject of claim 13, which reads as follows:

13. The apparatus of claim 1 in which the means for equalizing the flow is comprised of means disposed intermediate the fluid receiver and source, said means <u>exhibiting resilient characteristics</u> for exerting a force, related to the pressure existing in the fluid circulation circuit of said transmission and said receiver, upon the fluid in said source.

<u>Id.</u> at col. 8, II. 55-61 (emphasis added). Another structure corresponding to the means for equalizing in claim 1 is a pair of tanks, one for used fluid and one for fresh fluid charged by pressurized air. <u>Id.</u> at figs. 4,6.

Bridgewood is a competing distributor of transmission service equipment to automobile service businesses. Bridgewood's accused device is the embodiment described

in its own U.S. Patent 5,522,474. Briefly, Bridgewood's device consists of a reservoir divided into two chambers by a free floating piston. '474 patent, abstract. The reservoir above the piston is initially filled with fresh fluid, and the reservoir below the piston is initially empty and compressed. Id. Extending from each chamber is a line for connection to an automobile's automatic transmission fluid circulation system at a point where a technician breaks the fluid circult. Id. Thereafter, operation of the transmission pump sends used fluid into the bottom chamber, thereby forcing the piston to expel fresh fluid from the top chamber into the transmission's fluid circulation system. Id. When the technician can see fresh fluid being pumped into the bottom chamber, the procedure is halted, as the fluid has been essentially completely replaced, id., even though not all of the used fluid could possibly be expelled, <u>Attorney Fees Opinion</u> at 1056.

Bridgewood is no longer in business, having sold all of its assets, including goodwill, to Century Manufacturing Company for a total of \$7,744,000, which was \$6,522,000 above and beyond the book value of Bridgewood's tangible net worth. Century subsequently took a license under the '080 patent from Transclean, agreeing to a royalty rate of nine percent.

Transclean sued Bridgewood for infringement of the '080 patent and its TOTAL FLUID EXCHANGE and TOTAL FLUID X-CHANGE trademarks, as well as false advertising by Bridgewood's promotional claims that its device replaced "100%" or "every drop" of fluid. Before trial, both parties filed motions for partial summary judgment, Transclean seeking summary judgment on the issues of patent infringement and validity, and Bridgewood seeking summary judgment of noninfringement of claim 13 as well as Transclean's trademarks. The court granted all of those motions except that relating to claim 13. More specifically, the court granted summary judgment that the '080 patent was not anticipated by either U.S. Patent 3,513,941, issued to N.J. Becnel, or Japanese Patent 2-72299. <u>Summary Judgment Opinion</u> at 1081. Furthermore, the court granted Transclean's motion for summary judgment that

Bridgewood infringed claims 1-4 and 12 of the '080 patent, after precluding Bridgewood from arguing noninfringement of those claims as a sanction for Bridgewood's failure to answer an interrogatory seeking its bases for arguing noninfringement. <u>Id.</u> at 1062-63. Finally, the court granted Bridgewood's motion that Bridgewood had not infringed Transclean's trademarks. <u>Id.</u> at 1094-95.

The case was then tried to a jury, which found that Bridgewood willfully infringed claim 13 and engaged in false advertising. The jury awarded Transclean three types of damages for the patent infringement. <u>Damages Opinion</u> at 3. The first was a reasonable royalty based on Bridgewood's sales of infringing devices; the second was additional damages for the infringement; and the third was a reasonable royalty based on Bridgewood's sale of its business. <u>Id.</u>

In a post-trial motion, Bridgewood sought to overturn the jury's damages awards. The court partly agreed and held that as a matter of law Transclean was not entitled to more than \$1,874,500 for patent infringement. <u>Id.</u> at 65-66. Transclean also filed a post-trial motion seeking enhanced damages and attorney fees pursuant to 35 U.S.C. §§ 284 and 285 in light of the jury's finding of willful infringement, but the court denied both requests. <u>Id.</u> at 66. Additionally, Transclean filed a post-trial motion pursuant to Minnesota's private attorney general statute, Minn. Stat. § 8.31, seeking attorney fees it incurred in pursuing the false advertising claim, but the court denied that request as well. Id.

Transclean appeals and Bridgewood cross-appeals from the decisions of the district court. We have jurisdiction pursuant to 28 U.S.C. § 1295(a)(1).

## DISCUSSION

We review a district court's grant of summary judgment <u>de novo</u>, reapplying the same standard used by the district court. <u>Ethicon Endo-Surgery, Inc. v. United States Surgical</u> Corp., 149 F.3d 1309, 1315, 47 USPQ2d 1272, 1275 (Fed. Cir. 1998). Summary judgment is appropriate "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). "The evidence of the nonmovant is to be believed, and all justifiable inferences are to be drawn in his favor." <u>Anderson v. Liberty Lobby, Inc.</u>, 477 U.S. 242, 255 (1986). When both parties move for summary judgment, the court must evaluate each motion on its own merits, resolving all reasonable inferences against the party whose motion is under consideration. McKay v. United States, 199 F.3d 1376, 1380 (Fed. Cir. 1999).

We review a district court's grant of judgment as a matter of law ("JMOL") <u>de novo</u>, reapplying the JMOL standard used by the district court. <u>Sextant Avionique, S.A. v. Analog</u> <u>Devices, Inc.</u>, 172 F.3d 817, 824, 49 USPQ2d 1865, 1869 (Fed. Cir. 1999). JMOL is appropriate when "a party has been fully heard on an issue and there is no legally sufficient evidentiary basis for a reasonable jury to find for that party on that issue." Fed. R. Civ. P. 50(a)(1). To prevail, an appellant "must show that the jury's findings, presumed or express, are not supported by substantial evidence or, if they were, that the legal conclusion(s) implied from the jury's verdict cannot in law be supported by those findings." <u>Perkin-Elmer Corp. v.</u> <u>Computervision Corp.</u>, 732 F.2d 888, 893, 221 USPQ 669, 673 (Fed. Cir. 1984) (citation omitted).

A determination that a patent is invalid as being anticipated under 35 U.S.C. § 102 requires a finding that "each and every limitation is found either expressly or inherently in a single prior art reference." <u>Celeritas Techs. Ltd. v. Rockwell Int'l Corp.</u>, 150 F.3d 1354, 1360, 47 USPQ2d 1516, 1522 (Fed. Cir. 1998). To anticipate, the reference must also enable one of skill in the art to make and use the claimed invention. <u>In re Donohue</u>, 766 F.2d 531, 533, 226 USPQ 619, 621 (Fed. Cir. 1985). Because a patent issued by the U.S. Patent and Trademark Office is presumed to be valid, 35 U.S.C. § 282 (1994), the evidentiary burden to

show facts supporting a conclusion of invalidity is clear and convincing evidence, <u>WMS</u> <u>Gaming Inc. v. Int'l Game Techs.</u>, 184 F.3d 1339, 1355, 51 USPQ2d 1385, 1396-97 (Fed. Cir. 1999).

A determination of infringement requires a two-step analysis. "First, the court determines the scope and meaning of the patent claims asserted . . . [Second,] the properly construed claims are compared to the allegedly infringing device." <u>Cybor Corp. v. FAS</u> <u>Techs., Inc.</u>, 138 F.3d 1448, 1454, 46 USPQ2d 1169, 1172 (Fed. Cir. 1998) (en banc) (citations omitted). Step one, claim construction, is an issue of law, <u>Markman v. Westview</u> <u>Instruments, Inc.</u>, 52 F.3d 967, 970-71, 34 USPQ2d 1321, 1322 (Fed. Cir. 1995) (en banc), <u>aff'd</u>, 517 U.S. 370 (1996), that we review <u>de novo</u>, <u>Cybor</u>, 138 F.3d at 1456, 46 USPQ2d at 1172 (Fed. Cir. 1998). Step two, comparison of the claim to the accused device, requires a determination that every claim limitation or its equivalent be found in the accused device. <u>Warner-Jenkinson Co. v. Hilton Davis Chem. Co.</u>, 520 U.S. 17, 29 (1997). Those determinations are questions of fact. <u>Bai v. L & L Wings, Inc.</u>, 160 F.3d 1350, 1353, 48 USPQ2d 1674, 1676 (Fed. Cir. 1998).

The choice of methodology for calculating damages is within the discretion of the district court. <u>SmithKline Diagnostics, Inc. v. Helena Labs. Corp.</u>, 926 F.2d 1161, 1164, 17 USPQ2d 1922, 1925 (Fed. Cir. 1991). In any event, the patent owner bears the burden of proving by a preponderance of the evidence the quantum of damages, an issue of fact for which we review the jury's decision for substantial evidence. <u>Id.</u> at 1164 n.2, 17 USPQ2d at 1925 n.2.

A decision to sanction a litigant pursuant to Fed. R. Civ. P. 37 is one that is not unique to patent law, <u>DH Tech, Inc. v. Synergystex Int'l, Inc.</u>, 154 F.3d 1333, 1343, 47 USPQ2d 1865, 1873 (Fed. Cir. 1998), and we therefore apply regional circuit law to that issue, <u>Midwest</u> Indus., Inc. v. Karavan Trailers, Inc., 175 F.3d 1356, 1359, 50 USPQ2d 1672, 1675 (Fed. Cir.

1999) (en banc in relevant part). Because the Eighth Circuit, the pertinent regional circuit in this case, reviews the imposition of sanctions under Rule 37 for an abuse of discretion, <u>Givens v. A.H. Robins Co.</u>, 751 F.2d 261, 263 (8th Cir. 1984), we will do the same.

On appeal Transclean raises a number of issues concerning damages and trademark infringement. First, Transclean argues that the court erred in disallowing the jury's award of a reasonable royalty on Bridgewood's proceeds from the sale of its business. Second, Transclean argues that the court abused its discretion by not awarding it enhanced damages and attorney fees for patent infringement under 35 U.S.C. §§ 284 and 285. Third, Transclean argues that the court erred in not awarding it attorney fees for pursuing the false advertising claim. Finally, Transclean argues that the court erred in granting summary judgment of noninfringement of its trademarks.

Bridgewood cross-appeals the court's judgments of patent validity and infringement. In particular, Bridgewood argues that the court erred in granting summary judgment that the '080 patent is not invalid for anticipation under 35 U.S.C. § 102. As to infringement, Bridgewood argues that the court abused its discretion when it estopped Bridgewood from contesting infringement of claims 1-4 and 12 as a discovery sanction and when it denied Bridgewood's motion for summary judgment of noninfringement of claim 13. We address each issue in turn.

#### A. Patent Validity

Bridgewood asserts in its cross-appeal that the court erred when it granted summary judgment that neither the Becnel patent nor the Japanese patent anticipates the claims of the '080 patent. Although this is a cross-appealed issue, as is that on patent infringement, we deal with them first because they logically precede damages issues, which are the principally appealed issues. Bridgewood contends that the court misconstrued the phrase "means for equalizing the fluid flow" appearing in claim 1 by requiring that the fluid flow rate, rather than just the volume of fluid, be equalized. Based on its erroneously narrow construction of the claimed function, the court, according b Bridgewood, included extraneous structure in that corresponding to the "means for equalizing" limitation. Bridgewood asserts that the proper corresponding structure is a fresh fluid tank connected to a fresh fluid tube with a valve, a used fluid tank connected to a used fluid tube, and a source of pressurized air. Bridgewood contends that either the Becnel or Japanese patent discloses all of the minimum corresponding structure, and that the dependent claims recite well-known features that are also disclosed by the Becnel or Japanese patents.

Transclean responds that the court properly interpreted the term "flow" to mean a rate, not a volume, as the specification discloses that equalization of flow rates is the objective of the invention. Transclean further contends that the invention disclosed in the Becnel patent does not necessarily equalize flow rates, and that the Japanese patent discloses an apparatus that equalizes fluid weights, not flow rates.

We agree with Transclean that the claim phrase "equalizing the fluid flow" refers to a rate, not just a volume. To construe that phrase, we look to the specification for guidance, <u>Vitronics Corp. v. Conceptronics, Inc.</u>, 90 F.3d 1576, 1582, 39 USPQ2d 1573, 1577 (Fed. Cir. 1996), and the specification clearly refers to the equalization of flow rates. For example, the patent describes problems that can occur in the prior art when the input flow rate of added fluid does not match the output flow rate of used fluid:

[I]n the event fluid is allowed to drain <u>faster than the rate of addition</u> of fluid, the pump or torque converter in a transmission is likely to be starved and then will become excessively hot under which conditions a transmission will self-destruct if permitted to continue in operation. On the other hand, should excessive fluid be added to build up an internal pressure within the transmission, there is a strong likelihood that seals for shafts and/or valves, bearings, or the like or other internal components, within the transmission, may be irreparably damaged with a resulting failure of the transmission under subsequent operating conditions.

'080 patent at col. 2, II. 56-68 (emphasis added). Furthermore, the "Summary of the Invention" states that the invention solves those problems:

Briefly, my invention is comprised of a fluid receiver for used fluid, a source of supply of fresh fluid, and a means for coordinating the introduction of fresh fluid with the draining of used fluid. With this in mind, it then only remains necessary to separate the fluid flow in a line that is external from the transmission so that the used fluid is drained into a suitable fluid container and the new fluid is introduced at the same rate that the used fluid exits. This can be accomplished in a number of ways, some of which will be described in more detail below.

<u>Id.</u> at col. 3, II. 8-17 (emphasis added). Other passages in the patent echo the same idea. <u>E.g.</u>, <u>id.</u> at col. 5, II. 51-53; col. 8, II. 1-8. Because the specification is clear as to the meaning of the phrase "equalizing the fluid flow," and no other intrinsic evidence suggests a different meaning for the phrase, we affirm the district court's construction of that phrase to require equalization of flow rate.

As the parties agree, the phrase "means for equalizing fluid flow" is a means-plusfunction limitation governed by 35 U.S.C. § 112, ¶ 6, and the recited function is "equalizing fluid flow." To anticipate a claim reciting a means-plus-function limitation, the anticipatory reference must disclose the recited function identically. <u>Cf. Wenger Mfg., Inc. v. Coating</u> <u>Mach. Sys., Inc.</u>, 239 F.3d 1225, 1238, 57 USPQ2d 1679, 1689 (Fed. Cir. 2001) ("Literal infringement of a means-plus-function claim requires that the accused device have structure for performing the identical function recited in the claim."). In this case, neither the Becnel nor the Japanese patent contains such a disclosure.

The Becnel patent is described in the '080 patent as equalizing overall fluid volume, not flow rate. '080 patent at col. 1, I. 38 - col. 2, I. 68. Bridgewood presented testimony from Becnel, the inventor, that his invention could be operated in such a manner as to equalize flow rates. However, as the district court found, that manner is not disclosed in the Becnel patent itself, nor is it inherent in the operation of Becnel's invention. <u>Summary Judgment Opinion</u> at 1081 ("Becnel was able to read the fluid gauges, and then manually adjust the flow of fresh fluid so as to equalize the fluid flows, but neither his declaration, nor [Bridgewood's patent expert's] opinion, offer any explanation as to how a person of ordinary skill would read the Becnel Patent specification, and recognize that this method of flow equalization is necessarily present in the embodiment disclosed in Fig. 5."). We conclude, as did the district court, that Bridgewood did not raise any genuine issue of material fact regarding anticipation of claim 1 by the Becnel patent. Accordingly, we affirm the court's conclusion that Transclean is entitled to summary judgment of non-anticipation as to the Becnel patent.

The Japanese patent likewise discloses equalization of fluid amount, but not necessarily fluid flow rates. Broadly speaking, the Japanese patent describes an "ATF [automatic transmission fluid] exchanger device," Jap. Pat. 2-72299, abstract (English translation), which, like the invention described in the '080 patent, comprises a supply of fresh fluid, a receptacle for used fluid, and hoses for connection to a transmission's fluid circulation system. <u>Id.</u> However, the Japanese apparatus also includes scales for measuring the weights of the fresh fluid supplied and used fluid removed, as well as a "detection means so that the difference between the amount of fluid drained and the amount of fluid supplied is maintained within an indicated range; and which automatically balances the amount of fluid drained and fluid supplied within an indicated range." Thus, the Japanese patent explicitly

discloses that fluid weight is equalized, not necessarily fluid flow rate. Although it is possible that the detection means could under some circumstances (e.g., if the response time for the feedback loop is sufficiently fast) effectively equalize the flow rates as well, it is also possible for that not to be the case. Because anticipation by inherent disclosure is appropriate only when the reference discloses prior art that must <u>necessarily</u> include the unstated limitation, <u>Cont'l Can Co. v. Monsanto Co.</u>, 948 F.2d 1264, 1268-69, 20 USPQ2d 1746, 1749 (Fed. Cir. 1991) (emphasis added), the Japanese patent cannot inherently anticipate the claims of the '080 patent. We conclude, as did the district court, that Bridgewood did not raise any genuine issue of material fact regarding anticipation of claim 1 by the Japanese patent, and we therefore affirm the court's conclusion that Transclean is entitled to summary judgment of non-anticipation as to the Japanese patent. Thus, we affirm the court's conclusion that the claims of the '080 patent are not invalid under 35 U.S.C. § 102 as being anticipated by the Becnel or Japanese prior art patents.

## B. Patent Infringement

Bridgewood argues that the court abused its discretion when, as a discovery sanction, it precluded Bridgewood from asserting that it did not infringe claims 1-4 and 12, and when it denied Bridgewood's motion for summary judgment of noninfringement of claim 13. Regarding the first point, Bridgewood argues that the court impermissibly invoked an extreme discovery sanction without notice to Bridgewood, that Transclean was not prejudiced by Bridgewood's lack of response to Transclean's interrogatory, and that the court avoided its duty to construe the claim and relieved Transclean of its burden to prove infringement. Transclean responds that it was prejudiced by the lack of discovery and that the sanction was consistent with precedent.

We conclude that the district court acted within its discretion when it granted summary judgment of infringement as a discovery sanction. Because the imposition of a discovery

sanction is not a matter substantially related to patent law, we apply the law of the regional circuit, in this case the Eighth Circuit. See Midwest Indus., 175 F.3d at 1359, 50 USPQ2d at 1675. Although the entry of judgment is an extreme sanction in the Eighth Circuit (and elsewhere), Givens, 751 F.2d at 264, we are not convinced that the district court abused its discretion. Transclean legitimately sought to discover Bridgewood's grounds for its defense of noninfringement and was entitled to a reply to its interrogatory. When Bridgewood chose not to respond before the closing of discovery other than to voice its belief that the '080 patent was invalid and unenforceable, Summary Judgment Opinion at 1059-60, 1060-61, the court was within its discretion to impose a sanction. The court found clear prejudice to Transclean, as it was precluded from conducting discovery on the infringement issues. Id. at 1063. To hold that the district court abused its discretion would be to disarm the court of its important power to police its proceedings to ensure transparency and predictability and to discourage mischievous conduct by litigants. It will be a rare case in which we take such an action. Moreover, even if a lesser sanction such as exclusion of evidence may have been more closely tailored to the misconduct, see Givens, 751 F.2d at 263 (characterizing evidence exclusion as the "normal sanction" for failure to comply with a discovery deadline), the practical result would have been the same. Transclean's motion for summary judgment of infringement presented evidence sufficient to show infringement, and, in light of Bridgewood's non-response, that evidence was uncontradicted. Accordingly, we affirm the district court's grant of summary judgment of infringement of claims 1-4 and 12 of the '080 patent.

As for the second alleged abuse of discretion, denial of Bridgewood's motion for summary judgment of noninfringement of claim 13, Bridgewood argues that the court misconstrued the phrase "exhibiting resilient characteristics" to mean "returning to an original shape after being deformed" or "returning to its original position after being compressed." Summary Judgment Opinion at 1087. Bridgewood contends that initial deformation of shape is inherent in the meaning of the expression and cites technical dictionary definitions in support of that contention. Under the correct construction of that expression, according to Bridgewood, the free-floating piston in its device does not "exhibit[] resilient characteristics." Moreover, Bridgewood contends that prosecution history estoppel and the all-limitations rule bar Transclean from asserting infringement under the doctrine of equivalents for that claim limitation because claim 13, in which it appears, was added during prosecution, whereas the originally submitted claims did not contain that limitation, and because vitiation of the "exhibiting resilient characteristics" limitation would result. Transclean responds that claim 13 requires only that "said means exhibit[] resilient characteristics," not that the means itself be "resilient." Transclean also cites common dictionary definitions and expert testimony in support of its view that the term "resilient" does not require initial deformation. Moreover, Transclean contends that claim 13 itself was never narrowed during prosecution and that Bridgewood's prosecution history estoppel argument was not raised in the district court and has therefore been waived.

Because we affirm the judgment of infringement of claims 1-4 and 12, we need not review the court's ultimate conclusion regarding infringement of claim 13. Bridgewood has already been held to be an infringer, and infringement of another claim does not increase its liability. <u>See Pall Corp. v. Micro Separations, Inc.</u>, 66 F.3d 1211, 1220, 36 USPQ2d 1225, 1231 (Fed. Cir. 1995). However, to put to rest any doubts regarding the proper construction of claim 13, because the patent has not been shown to be invalid and the issue has been fully ventilated by the parties, we will address that issue. We agree with Bridgewood that the court misconstrued the term "resilient." Dictionaries, both general and technical, define the adjective "resilient" or its noun form "resilience" as encompassing that which returns to its original shape following a deformation in shape. <u>See, e.g., McGraw-Hill Dictionary of Scientific and Technical Terms</u> 1693 (5th ed. 1994) (defining the term "resilience" as the

'[a]bility of a strained body, by virtue of high yield strength and low elastic modulus, to recover its size and form following deformation"); American Heritage Dictionary 1535 (3rd ed. 1992) (defining the term "resilient" as "returning to an original shape or position, as after having been compressed"). The dissent, as did the district court, focuses on the word "or" in the preceding definition to support its view that the term "resilient" encompasses the returning to a position alone, without any shape deformation. We do not think that the use of the word "or" in that definition can overcome the meaning attributed to the term "resilient" by the patent's disclosure of only a flexible diaphragm dividing a tank into two chambers. See '080 patent; fig. 3; col. 4, II. 54-55 (depicting and describing "a flexible rubber-like diaphragm"). Furthermore, to the extent there is a difference between the common and technical meanings of the terms, the term "resilient" is used in the '080 patent in a technical context to describe a component of a mechanical apparatus, and a technical dictionary is therefore a better source to inform the meaning of the term to a skilled artisan in this case. Moreover, we do not share the dissent's view that the phrase "exhibiting resilient characteristics" describes a function in a means-plus-function limitation. On the contrary, the means-plus-function limitation further defined in claim 13 is the "means for equalizing the flow" previously set forth in claim 1. Id. at col. 8, II. 20-23, II. 55-61. According to the claim language, the only function performed by that "means" is "equalizing the flow." The phrase "exhibiting resilient characteristics" is not a second function performed by that "means"; rather, the phrase further defines characteristics of that "means." It is therefore, appropriate, indeed mandatory under 35 U.S.C. § 112, ¶ 6, to look to the corresponding structure in the specification to ascertain the meaning of the phrase. As already noted, that corresponding structure, "a flexible rubber-like diaphragm," '080 patent, col. 4, II. 54-55, is "resilient" in the sense that it tends to return to its original shape, not just its original position. We therefore conclude that the phrase "exhibiting resilient characteristics" in the '080 patent requires initial shape deformation. Because the jury's finding of infringement of claim 13 was premised on a construction of that phrase at odds with ours, we vacate the judgment of infringement of claim 13.

## C. Patent Infringement Damages

The jury awarded three types of damages for patent infringement: (1) \$934,618 as a reasonable royalty on Bridgewood's sales of infringing devices; (2) \$1,874,500 as "additional damages . . . necessary to adequately compensate for Bridgewood's infringement"; and (3) \$2,708,225 as a reasonable royalty based upon Bridgewood's proceeds from the sale of its business to Century. <u>Damages Opinion</u> at 3. The court reversed the third award, holding that Transclean was not entitled to such an award as a matter of law. <u>Id.</u> at 65. As to the first and second, the court granted Bridgewood's motion for a new trial or remittitur in the amount of \$1,874,500, the highest amount, based on the evidence, that the jury could have properly awarded for patent infringement. <u>Id.</u> at 61, 66. Transclean apparently accepted the remittitur.

Transclean appeals from the court's decision concerning the third award only. Transclean cites <u>Minco, Inc. v. Combustion Eng'g, Inc.</u>, 95 F.3d 1109, 40 USPQ2d 1001 (Fed. Cir. 1996) in support of its argument that, because Bridgewood's sole source of revenue was an infringing product and Bridgewood generated \$6,500,000 in goodwill from the sale of its business to Century, Transclean is entitled to recover the value of that goodwill. Transclean asserts that to allow Bridgewood to retain that windfall would create an incentive for others to infringe a patent and then sell their businesses.

Bridgewood responds that this case is distinguishable from <u>Minco</u> because that case involved lost profits, not a reasonable royalty, and a reasonable royalty must be based on sales of infringing articles. Bridgewood contends that payment for goodwill is not the sale of infringing goods, was attributable to many factors other than the technology of its fluid changing machines, and that Transclean did not prove a nexus between the patent infringement and the value of the goodwill.

We agree with Bridgewood that Minco does not control this case. As indicated, it was a lost profits case, not one based on a reasonable royalty. Although Minco acknowledged that "fashioning an adequate damages award depends on the unique economic circumstances of each case," 95 F.3d at 1118, 40 USPQ2d at 1007, we held that the patent owner in that case could not recover damages based on the infringer's sale of its business. Id. at 1121. More specifically, the patent owner sought lost profits calculated as the difference between the sales price of the infringer's business and its expert's valuation of the business without the infringing devices. Id. at 1120. The patent owner asserted that the purchaser would have purchased its business instead of the infringer's, had it not been for the infringement, id., and the excess sales price thus constituted part of the patent owner's lost profits. The district court did not accept that assertion, and we affirmed that decision. Id. at 1121. Furthermore, we explained that any award based on the infringer's sale of its business would be duplicative of the reasonable royalty the infringer had already received based on the infringer's sales of infringing goods. Id. ("The district court's reasonable royalty award already compensates [the patent owner] for any goodwill [the infringer] garnered by infringement."). Transclean's citation of Minco as controlling this case is thus unsound; it is an example of the unhelpful advocacy that is at times made to this court, in which counsel cites general language from a prior case, rather than its holding. In fact, the holding of Minco supports Bridgewood's position, not Transclean's.

We must analyze Transclean's claim for a percentage of Bridgewood's business sale proceeds as it was asserted, as a claim for a reasonable royalty, not for lost profits. Reasonable royalty damages for patent infringement arise from the fact of infringement, and the portion of the sales price consisting of intangible goodwill is not the sale of infringing goods. It is partial compensation for the sale of a business. Whether or not proceeds from the sale of a business including tangible assets such as infringing inventory would be compensable as a remedy for patent infringement we are not in a position to say; that case is not before us. What is clear is that the portion of a sales price consisting of goodwill, <u>i.e.</u>, compensation in excess of tangible assets, is not sales of infringing goods that can form the base for determination of a reasonable royalty. No such precedent exists, nor are we prepared to distort the statute to set one.

In addition, as a matter of proof, Transclean has not established the amount, if any, of a reasonable royalty on Bridgewood's sale of its business it is entitled to recover. Transclean had the burden of proving the amount of reasonable royalty damages it is entitled to recover. Id. The most relevant inquiry in that respect would seem to be the amount of the business's value that is attributable to the patent infringement. Transclean offered expert testimony that the entire goodwill above and beyond the value of Bridgewood's tangible assets was attributable to patent infringement because Bridgewood was a single product company and that product infringed Transclean's patent. Damages Opinion at 29-30. However, the district court disagreed, concluding that the opinion testimony was conclusory and belied by Bridgewood's arguments that Bridgewood's goodwill was attributable to other factors (e.g., customer lists, brand identity, product quality, and pricing). Id. at 30-31. We perceive no error in the district court's analysis or conclusion. Moreover, to the extent that Transclean argues that the goodwill was ultimately attributable to Bridgewood's sales of infringing machines, any award of reasonable royalty damages based on goodwill transferred when the business was sold would be a double recovery, as Transclean has already been awarded damages that fully compensate it for Bridgewood's past sales. See Minco, 95 F.3d at 1121, 40 USPQ2d at 1010 ("The district court's reasonable royalty award already compensates [the patent owner] for any goodwill [the infringer] garnered by infringement."). To the extent that the extra recovery Transclean seeks would be duplicative, we see no merit to Transclean's argument

that Bridgewood is retaining a windfall that would create an incentive for infringers to sell infringing businesses with impunity.

For the reasons stated above, we conclude that the court did not err when it ruled that, as a matter of law, Transclean was not entitled to a reasonable royalty on proceeds from Bridgewood's sale of its business.

#### D. Enhanced Damages

The jury found that Bridgewood's infringement was willful. Transclean argued to the jury that it made Bridgewood aware of the '080 patent, but that Bridgewood did not obtain an opinion of counsel and did not abate its manufacture or sale of the infringing machines. Bridgewood argued that the fact that it obtained its own patent on an automatic transmission fluid changing machine demonstrated a good faith belief that it was not an infringer. Bridgewood argued that when it received advice from its patent attorney concerning the patentability of its invention over the '080 patent, it received an implicit opinion of noninfringement. Although the jury agreed with Transclean that Bridgewood had willfully infringed the '080 patent, the court, after applying the factors set forth in <u>Read Corp. v. Protec</u>, <u>Inc.</u>, 970 F.2d, 816, 826-27, 23 USPQ2d 1426, 1435-36 (Fed. Cir. 1992) (listing nine factors), declined to enhance the patent infringement damages. <u>Damages Opinion</u> at 13-22.

Transclean contends that the court abused its discretion by not enhancing the damages in light of the jury's finding of willfulness. Transclean also asserts that the court erroneously assumed that the only way it could enhance the damages was by trebling them, misunderstanding that an enhancement of less than trebling was a permissible option. Bridgewood responds that a finding of willful infringement does not mandate enhancement of damages, that the court did not misunderstand the law on enhancement, and that the court properly considered the <u>Read</u> factors.

We agree with Bridgewood that the court acted within its discretion in not enhancing the damages award. Enhancement of damages under 35 U.S.C. § 284 involves the factfinder determining that the infringer engaged in culpable conduct and the court exercising its discretion to determine whether and to what extent to enhance the damages. Jurgens v. CBK, Ltd., 80 F.3d 1566, 1570, 38 USPQ2d 1397, 1399 (Fed. Cir. 1996). The jury's finding of willfulness satisfies the first step, see id., and is also one of the factors the court assesses in performing the second step, see Read, 970 F.2d at 827, 23 USPQ2d at 1435. However, there are other factors relevant to the second step. See id. (listing as factors: (1) deliberate copying; (2) infringer's investigation and good-faith belief of invalidity or non-infringement; (3) litigation conduct; (4) infringer's size and financial condition; (5) closeness of the case; (6) duration of the misconduct; (7) remedial action by the infringer; (8) infringer's motivation for harm; and (9) concealment). A finding of willful infringement "authorizes but does not mandate an award or increased damages." Modine Mfg. Co. v. Allen Group, Inc., 917 F.2d 538, 543, 16 USPQ2d 1622, 1625 (Fed. Cir. 1990). In this case, the court considered the pertinent Read factors carefully, Damages Opinion at 13-22, and although we may or may not have reached a different conclusion if we had been in the district court's shoes, we wear our own shoes. We review the court's analysis for an abuse of discretion, and we are satisfied that such an abuse did not occur.

We also agree with Transclean that the court did not erroneously assume that its only options were to treble the patent infringement damages or not enhance the damages at all. The court's opinion states, "In exercising our discretion to enhance damages, however, we are limited 'to a trebling of the basic damage award." <u>Damages Opinion</u> at 10 (quoting <u>Signtech USA, Ltd. v. Vutek, Inc.</u>, 174 F.3d 1352, 1358-59, 50 USPQ2d 1372, 1376 (Fed. Cir. 1999)). We read that statement, as it was intended in <u>Signtech</u>, to simply recognize the upper range of the possible enhancement. <u>See Signtech</u>, 174 F.3d at 1358-59, 50 USPQ2d

at 1376 ("[T]he district court enjoys discretion to choose whether to award enhanced damages to the claimant <u>and in what amount</u>. This discretion, however is limited to a trebling of the basic damage award.") (citations omitted) (emphasis added). Elsewhere in the same opinion, the court makes statements recognizing that a range of enhancement is possible. <u>See Damages Opinion</u> at 8 ("[T]he court determines, exercising its sound discretion, whether, <u>and to what extent</u>, to increase the damages award . . . ") (quoting <u>Jurgens</u>, 80 F.3d at 1570, 38 USPQ2d at 1399) (emphasis added); <u>Damages Opinion</u> at 21 ("The paramount determination in deciding to grant enhancement <u>and the amount thereof</u> is . . .") (quoting <u>Read</u>, 970 F.2d, at 826, 23 USPQ2d at 1435) (emphasis added). <u>See also Modine</u>, 917 F.2d at 543 n.3, 16 USPQ2d at 1625 n.3 ("[T]he fact that the court's opinion focuses upon treble damages does not necessarily mean that the judge failed to <u>consider</u> lesser multiples of damages.").

## E. <u>Attorney Fees</u>

After the trial, Transclean filed a motion for attorney fees, and the court granted that motion in part, awarding Transclean its attorney fees arising from arguing two issues. First, pursuant to 35 U.S.C. § 285, the court awarded Transclean attorney fees for defense of a charge of inequitable conduct asserted by Bridgewood. <u>Damages Opinion</u> at 27. The court's opinion does not address attorney fees under 35 U.S.C. § 285 except in relation to the inequitable conduct issue. Second, pursuant to Minnesota's private attorney general statute, Minn. Stat. § 8.31, the court awarded Transclean attorney fees for its successful claim that Bridgewood engaged in false advertising by promoting its transmission fluid changing machine as replacing "100%" or "every drop" of transmission fluid. <u>Id.</u> However, the court later revoked that award for two reasons: Transclean had unclean hands by promoting its own service as a "total" fluid exchange, and Transclean did not object to Century's use of the same

advertisements after Century had purchased Bridgewood and taken a license to the '080 patent from Transclean.

Transclean now argues that the court abused its discretion by not awarding Transclean attorney fees under 35 U.S.C. § 285 for its entire patent infringement claim when the jury determined that Bridgewood's infringement was willful and by not stating its reasons for declining to award attorney fees apart from those related to inequitable conduct. Transclean further argues that the court abused its discretion by not ultimately awarding attorney fees under Minn. Stat. § 8.31 for its false advertising claim. Bridgewood responds that a finding of willful infringement does not mandate a determination that a case is exceptional, as that term is used in 35 U.S.C. § 285, and that not every exceptional case is deserving of an award of attorney fees. Bridgewood further responds that the court set forth legitimate reasons for not awarding attorney fees for the false advertising claim and thus acted within its discretion.

With regard to attorney fees for patent infringement, we agree with Bridgewood. Transclean is correct in stating the general rule that the district court must normally explain why it decides that a case is not exceptional under 35 U.S.C. § 285 when a factual finding of willful infringement has been established and, if exceptional, why it decides not to award attorney fees, <u>S.C. Johnson & Son, Inc. v. Carter-Wallace, Inc.</u>, 781 F.2d 198, 201, 228 USPQ 367, 369 (Fed. Cir. 1986). However, we have recognized an exception to that general rule in cases where the record adequately sets forth grounds for affirming the district court's actions. <u>Carroll Touch, Inc. v. Electro Mech. Sys. Inc.</u>, 15 F.3d 1573, 1584, 27 USPQ2d 1836, 1845 (Fed. Cir. 1993) (citing <u>Consol. Al. Corp. v. Foseco Int'l, Ltd.</u>, 910 F2d 804, 814, 15 USPQ2d 1481, 1488-89 (Fed. Cir. 1990)). In this case, the court's careful analysis of the <u>Read</u> factors regarding enhancement of damages suffices as grounds for affirming the court's implicit conclusion that the infringement case was not exceptional within the meaning of 35 U.S.C. §

285.

With regard to attorney fees for false advertising, we agree with Bridgewood. Transclean's claim for attorney fees arising from the false advertising cause of action was based on Minn. Stat. § 8.31. The purpose of that statute is to encourage private parties to police unlawful trade practices affecting the public interest. Ly v. Nystrom, 615 N.W.2d 302, 313-14 (Minn. 2000). The court determined that, while Transclean's cause of action against Bridgewood for false advertising was on its face one that qualified for attorney fees under the statue, <u>Attorney Fees Opinion</u> at 11, Transclean's own use of advertising that was arguably equivalent in falsity and Transclean's tolerance of Century's use of the same advertising when it licensed Transclean's patent erased any public benefit accruing from the successful action against Bridgewood, <u>id.</u> at 12-14. The district court's reasoning is sound, and we discern no abuse of discretion in its decision not to award Transclean attorney fees for its false advertising claim.

#### F. Trademark Infringement

Transclean brought a cause of action for trademark infringement, asserting that Bridgewood infringed Transclean's TOTAL FLUID EXCHANGE and TOTAL FLUID X-CHANGE unregistered trademarks under section 43(a) of the Lanham Act, 15 U.S.C. § 1125(a)(1), and Minnesota law. The court granted Bridgewood's motion for summary judgment of noninfringement on the ground that there was no genuine issue of material fact relating to Transclean's adequate usage of the marks in commerce. <u>Summary Judgment</u> <u>Opinion</u> at 1094-95. Transclean argues that a genuine issue of material fact regarding that issue was raised by an affidavit from James P. Viken, Transclean's CEO and inventor on the '080 patent, stating that Transclean had used the marks on its products and documents since 1994. <u>Id.</u> at 1093-94. Bridgewood responds that the affidavit is conclusory and does not designate specific facts concerning the marks' usage.

We agree with Bridgewood that Transclean failed to raise a genuine issue of material fact as to nondescriptive usage of the mark on the goods. We apply Eighth Circuit law to this issue, and the Eighth Circuit has recognized the universal requirement for actual usage of the mark in commerce, First Bank v. First Bank Sys., Inc., 84 F.3d 1040, 1044 (8th Cir.1996). Use of the mark on documents does not satisfy the usage requirement when the mark can be affixed to the goods themselves, Elec. Communications, Inc. v. Elec. Components for Industry Co., 443 F.2d 487, 492 (8th Cir. 1971), as is the case here, Summary Judgment Opinion at 1094. Furthermore, the usage of the marks must be as a source identifier rather than as a description of the goods' qualities. First Bank, 84 F.3d at 1044. In this case, the Viken affidavit is deficient in two ways, even if assumed to be accurate. First, the reference to documents is irrelevant, Elec. Communications, 443 F.2d at 492-93. Second, on its face, the affidavit does not purport to show that the use was as a source identifier. Indeed, the record evidence shows that the marks were used in a purely descriptive manner, e.g., "TFX TOTAL FLUID EXCHANGE SYSTEM FOR AUTOMATIC TRANSMISSIONS by Transclean Corp." Accordingly, the court did not err when it concluded that the Viken affidavit failed to raise a genuine issue of material fact regarding usage of the Transclean's marks, and we affirm the court's grant of summary judgment in favor of Bridgewood on the trademark claims.

### CONCLUSION

We commend the district court for its thorough and competent handling of a complex case involving a large number of difficult issues. We affirm all aspects of the court's decision except one. The court did not err in granting summary judgment that the '080 patent is not anticipated by either the Becnel or Japanese prior art patents. Nor did the court err in granting summary judgment that Bridgewood did not infringe Transclean's trademarks, or in granting Bridgewood's post-trial motion for reversal of the jury's award of damages based on a reasonable royalty of Bridgewood's sale of its business. Furthermore, the court did not

abuse its discretion in entering a judgment of infringement of claims 1-4 and 12 as a discovery sanction against Bridgewood. Nor did the court abuse its discretion when it declined to award Transclean enhanced damages and attorney fees under the patent statute or Minnesota law. However, the court did err when it construed the phrase "exhibiting resilient characteristics" in claim 13 of the '080 patent, and we therefore vacate the jury's determination, based on the court's erroneous claim construction, that Bridgewood infringed claim 13. Accordingly, we

## AFFIRM-IN-PART and VACATE-IN-PART.

# **United States Court of Appeals for the Federal Circuit**

01-1268, -1269

## TRANSCLEAN CORPORATION, JAMES P. VIKEN, JON A. LANG, and DONALD E. JOHNSON,

Plaintiffs-Appellants,

V.

## BRIDGEWOOD SERVICES, INC.,

Defendant-Cross Appellant.

CLEVENGER, Circuit Judge, dissenting in part.

I agree with the majority's resolution of the validity, damages, and attorney fees issues as well as its determination that the district court did not abuse its discretion in precluding Bridgewood from asserting noninfringement of claims 1-4 and 12 as a sanction for various discovery abuses. Furthermore, I agree with the majority that the district court properly granted summary judgment to Bridgewood on Transclean's trademark infringement claim. However, in my view the majority's construction of the term "resilient" in claim 13 is unduly narrow and departs from the term's ordinary meaning. Therefore, I respectfully dissent from that portion of the majority's opinion vacating the district court's claim construction and the jury's finding of infringement as to that claim.

This case asks us to decide the meaning of the word "resilient." That word is not defined in the specification. Indeed, "resilient" appears in the patent exactly once—in claim

13:

The apparatus of claim 1 in which the means for equalizing the flow is comprised of means disposed intermediate the fluid receiver and source, said means <u>exhibiting resilient characteristics</u> for exerting a force, related to the pressure existing in the fluid circulation circuit of said transmission and said receiver, upon the fluid in said source.

U.S. Patent No. 5,318,080, col. 8, lines 55-61 (emphasis added). Because the patentee has not chosen to be his own lexicographer in this instance, "resilient" should carry its ordinary meaning in the art. Transclean asserts that "resilient" encompasses the ability to return to an original shape <u>or</u> position after being compressed, while Bridgewood argues that a resilient means must be capable of returning to an original shape <u>and</u> position after being compressed—in other words, that it must be inherently elastic.

To help us divine the meaning of "resilient," Transclean has provided dictionary definitions of "resilient" as well as expert testimony regarding what one of skill in the art would understand the term to mean. In contrast, Bridgewood proffers definitions of "resilience" from technical dictionaries. The district court properly rejected Bridgwood's definitions of "resilience" and adopted instead the ordinary meaning of the actual claim term, resili<u>ent</u>. The majority, based on the supposed superiority of technical dictionaries over ordinary dictionaries, prefers Bridgewood's definition.

The district court gave the word "resilient" its ordinary dictionary meaning, possessing "the capability of 'returning to an original shape <u>or position</u>, as after having been compressed.'" <u>Transclean Corp. v. Bridgewood Services, Inc.</u>, 77 F. Supp. 2d 1045, 1087 (D. Minn. 1999) (quoting <u>American Heritage Dictionary</u> 1535 (3d ed. 1992) (emphasis added)). In other words, the broad term "resilient characteristics" can include a variety of different properties such as the ability to return to an original position after being exposed to a

force, or the ability to return to an original shape after having been deformed. This meaning is in accord with the definition found in other common dictionaries. <u>See, e.g.</u>, <u>Websters Third</u> <u>New International Dictionary (unabridged)</u> 1932 (defining resilient as "returning freely to a previous position, shape <u>or</u> condition: as a: moving swiftly back... b: capable of withstanding shock without permanent deformation or rupture...c: SPRINGY...." (first emphasis added); <u>Oxford English Dictionary</u> 714 (2d Ed. 1989) (defining resilient as "1. Returning to the original position; springing back, recoiling, etc." and "2. Resuming the original shape or position after being bent, compressed, or stretched"); <u>Random House</u> <u>Webster's Unabridged Dictionary</u> 1638 (2d ed. 1993) (defining resilient as "1. springing back; rebounding" and "2. returning to the original form <u>or</u> position after being bent, compressed, or stretched") (emphasis added). This meaning is in accord with the expert testimony proffered by Transclean, which explained that the patent uses the term resilient to mean "returning to the, some earlier position ... or shape."

To support its proposed definition, Bridgewood cites various technical dictionaries that, supposedly, define "'resilient' or 'resilience.'" A closer examination of these sources reveals, however, that the technical definitions provided by Bridgewood in fact relate the definition of "resilience" and not "resilient." And, unlike "resilient," "resilience" generally refers to the stored energy of a strained—and typically elastic—material. For example, <u>Van Nostrand's Scientific Encyclopedia</u> 2673 (8th ed. 1995) defines resilience as follows: "resilience of a body measures the extent to which energy may be stored in it by elastic deformation." The <u>Dictionary of Mechanical Engineering</u> 314 (4th ed. 1996) defines resilience as "[t]he stored energy of a strained or elastic material, such as in a compressed spring or in rubber dampers, which have inherent damping properties." <u>See also Chambers</u> <u>Dictionary of Science and Technology</u> 980 (1999) (defining resilience as the "[s]tored energy

of a strained material, or the work done per unit volume of an elastic material by a bending moment, force, torque or shear force, in producing strain").

The majority chooses to rely upon Bridgewood's proffered definitions of "resilience" rather than the ordinary meaning of the actual claim term, "resilient," for two reasons. First, the majority finds that technical dictionaries are generally superior to common dictionaries. While dicta in <u>Bell Atlantic Network Services, Inc. v. Covad Communications Group, Inc.</u>, 262 F.3d 1258, 1267, 59 USPQ2d 1865, 1870 (Fed. Cir. 2001), states the view that technical dictionaries are preferred to common dictionaries, neither that case nor the case upon which it relied, <u>Multiform Desiccants, Inc. v. Medzam, Ltd.</u>, 133 F.3d 1473, 45 USPQ2d 1429 (Fed. Cir. 1998), involved a conflict between a common dictionary definition and that found in a scientific treatise—and neither does this case. The technical definitions are simply inapt because they define the wrong word—resilience instead of resilient. Indeed, the "common dictionaries" rejected by the majority are the only sources before the court that define <u>both</u> resilient and resilience, and notably, they define resilience in the same way as the supposedly superior technical dictionaries. For example, <u>Webster's Third New International Dictionary</u> 1932 (1993) defines resilience as follows:

1a: an act of springing back: REBOUND, RECOIL, ELASTICITY b: capability of a strained body to recover its size and shape after deformation, esp. when the strain is caused by compressive stresses—called also <u>elastic resilience</u>
<u>2: the recoverable potential energy of an elastic solid body or structure due to its having been subjected to stress not exceeding the elastic limit.</u>

(Second emphasis added.) While it may often be preferable to look to a technical dictionary or treatise to provide the technical definition of a term as understood by practitioners of a particular art, I think that preference must fade when the technical dictionary does not provide a definition of the precise term used in the claim language. Therefore, I would hold that the trial court properly adopted the common dictionary definition of "resilient" as proffered by Transclean.

The majority shores up its view of the correct meaning for "resilient" by holding that the phrase "exhibiting resilient characteristics for exerting a force" does not describe part of the function of the "means for equalizing the flow" limitation. I disagree with that holding, for it is clear to me that the "exhibiting resilient characteristics" phrase does define function. If I am correct on this point, then of course it is impermissible to define the function by reference to structure disclosed in the written description. Function must be defined by reference to ordinary principles of claim interpretation, before proceeding to determine corresponding structure. <u>See Kemco Sales, Inc. v. Control Papers Co.</u>, 208 F.3d 1352, 1361, 54 USPQ2d 1308, 1313 (Fed. Cir. 2000). The majority does not disagree with me on this point: if the phrase in question defines function, then resort to the specification to find structure to define the function is simply wrong, and ordinary tools of claim interpretation apply.

Instead, the majority holds that the phrase in question is actually part of the means for equalizing the flow, and that resort to the specification is required to find the structure corresponding to the means limitation. Thus, from the specification the majority fetches the flexible rubber-like diaphragm, and thereupon concludes that "exhibiting resilient characteristics" must require initial shape deformation because that is the characteristic of the diaphragm.

The majority's rationale is self-destructive. If the diaphragm is indeed the structure that corresponds to the "means for equalizing the flow" limitation—as both parties and all the judges on the case agree—then the majority must come to grips with the stark fact that the jury found that the piston structure in Bridgewood's device is structurally equivalent, for § 112 ¶ 6 infringement purposes, to the diaphragm disclosed in Figure 3. Indeed, the case was

submitted to the jury precisely to resolve disputed issues of fact on the structural equivalence of the accused piston and the diaphragm structure. No question has been raised that substantial evidence does not support the jury's verdict. Consequently, if, as the majority holds, "exhibiting resilient characteristics for exerting a force" must be understood as merely "further defin[ing] the structure of [the] means, " <u>ante</u> at 16, there is no possible basis for disturbing the jury's verdict of infringement.

In short, the majority is wrong on any interpretation of the disputed phrase. If the phrase describes function, it must be interpreted by ordinary interpretative canons, as did the district court. If the phrase is to be interpreted as part of the means limitation, as the majority holds, then the jury verdict of infringement must stand. Either way, the jury verdict of infringement cannot properly be upset, and I respectfully dissent from the majority on this point.