

United States District Court,
D. Massachusetts.

DOW CORNING WRIGHT CORPORATION,
Plaintiff.

v.

OSTEONICS CORPORATION,
Defendant.

Civil Action No. 91-10962-GAO

Aug. 16, 1996.

Patentee brought infringement action against competitor, alleging competitor had infringed its patent relating to a method and apparatus to prepare a human femur to receive an artificial knee. The district court entered judgment in favor of competitor pursuant to jury verdict, and patentee appealed. The Court of Appeals vacated and remanded. On remand, competitor moved for summary judgment. The District Court, O'Toole, J., held that: (1) federal circuit's mandate, vacating decision and remanding for new trial because district court submitted issue of claim interpretation to jury, did not prevent district court from disposing of case on summary judgment; (2) patent claim requiring intramedullary rod to "closely fit in and extend through" the intramedullary canal required rod that, as closely as possible, filled up entire intramedullary canal, and was not infringed by competitor's system, which sought only to approximate central long access of femur and did not aim to duplicate it; and (3) claim requiring that rod handle be "adapted to receive at least one femoral surface modifying instrument in proper alignment with respect to said handle" made cutting guides entirely dependent on their alignment to handle in rod, and was not infringed by competing system which used both internal and external geometry of femur to set proper alignment.

Motion granted.

4,474,177. Not Infringed.

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William L. Mentlik, Joseph S. Littenberg, Keith E. Gilman, Paul H. Kochanski, Lerner, David, Littenberg, Krumholz & Mentlik, Westfield, NJ, John Egan, Posternak, Blankstein & Lund, Boston, MA, for Osteonics Corp.

MEMORANDUM AND ORDER

O'TOOLE, District Judge.

The plaintiff Dow Corning Wright Corporation ("DCW") brought suit against Osteonics Corporation alleging that Osteonics infringed a patent held by DCW relating to a method and apparatus to prepare a human femur to receive an artificial knee. After a trial in which a jury found for Osteonics, DCW appealed to the Federal Circuit. DCW argued that the issue of claim interpretation, which the Court had submitted to the jury, should have been decided by the trial judge. The Federal Circuit agreed, vacated the decision, and remanded for a new trial. Osteonics now moves for summary judgment on the basis that a proper interpretation of the claim by the Court would require a verdict in its favor. The Court agrees and grants Osteonics' motion.

I. FACTUAL BACKGROUND

By assignment from inventor Dr. Leo Whiteside, DCW owns U.S. Patent No. 4,474,177, describing a set of instruments and a methodology used in knee-replacement surgery (the "Whiteside patent"). Knee-replacement surgery typically involves attaching an artificial knee directly to the end of the femur (the thigh bone). As explained in both parties' briefs, a surgeon must be very precise in performing this procedure, not only so that the knee fits well but also so that the new knee is properly aligned with the leg bones. If the correct alignment is not achieved, the patient may develop an improper gait or other complications.

The process by which the alignment is achieved involves cutting and preparing the distal femoral surface (the lower surface of the femur) so that it can receive the knee implant. The proper preparation of this surface is the key to realizing the desired alignment.

A primary difficulty in aligning an artificial knee arises because the femur does not typically extend vertically from the hip downward but is instead at an angle offset a few degrees from vertical. The angle between the imaginary line running through the central shaft of the femur, called the central long axis of the femur, and the vertical axis is known as the varus/valgus angle. The portion of the knee implant attached to the femur needs to duplicate this angle in order to sit properly. Approximating the varus/valgus angle is naturally simplified if one can identify the central long axis of the femur.

None of the above is claimed under the Whiteside patent; as stated in the background section of the patent itself, "It is a common practice to use the long central axis of the femur as a guide in determining the manner in which the distal femoral surfaces should be shaped to receive a properly aligned distal femoral prosthesis." Column 1, lines 22-25. Rather, the Whiteside patent provides a way of identifying the central long axis by relying on the femur's internal geometry. The human femur is not solid but has an internal cavity, known as the intramedullary canal, that extends the length of the shaft of the femur. In most persons, the central long axis runs approximately through the middle of this canal.

The Whiteside patent employs a rod that the surgeon can insert into the canal at the knee and press upwards toward the hip. The rod, which in its preferred embodiment is 10 inches long (the average human femur is about 15 inches), passes through the intramedullary canal to its narrowest portion, called the canal's isthmus. The rod is consequently called an "intramedullary rod." The object is that, once fully inserted, the center of the intramedullary rod and the central long axis of the femur are collinear. To secure the rod in place, the physician impacts the rod with a mallet that drives locking fins on the rod into the bone. The rod has an angled handle on its end that projects from the end of the femur when the rod is inserted in the canal. The angle corrects for the patient's varus/valgus angle. Each Whiteside system comes with a set of rods with handles angled at 3, 5, 7 and 9 degrees to account for the varus/valgus angles of different patients.

Once the rod is in place, different femoral surface shaping instruments can be placed on the handle to make the proper cuts in the distal femoral surface. The Whiteside patent system employs three such guides—an anterior-posterior cutting guide, a distal femoral condyle cutting guide, and a bevel cutting guide—to make the cuts, as well as a plateau planar to flatten the distal femoral surface.

The Whiteside patent's procedure also employs a reamer prior to the use of the rod. Before anything can be inserted into the intramedullary canal, a hole must be drilled into the femur to allow access to it. After drilling, the reamer is inserted into the hole and pressed through the canal. The reamer is used to correct any error as to the location of the entry hole and to file away deformities in the canal that might throw off the alignment of the rod. As described in claim 1 of the patent, the reamer is comprised of "a rod having a portion which is intended to enter the intramedullary canal and ... has a plurality of cutting ridges situated about its circumference, the remaining portion of said rod having a means for imparting a twisting motion to said reamer...." Column 11, lines 48-55. The Whiteside patent was issued on October 2, 1984.

Prior to 1989, Osteonics, a manufacturer of medical instruments, was selling a surgical knee instrument, called the OMNIFIT system, but was not satisfied with its system. In the summer of 1989, Osteonics enlisted the aid of two orthopedic surgeons, Dr. Phillip Merritt and Dr. Bradford Hack, to develop an improved set of instruments. These surgeons, who were both familiar with the Whiteside instruments and method and who had observed Dr. Whiteside use them in surgery, designed their own knee-replacement instrument system.

According to Dr. Merritt, his goal was to design a system that also relied on the internal geometry of the femur but that avoided some of the problems of the Whiteside system, especially for average orthopedic surgeons who were not necessarily expert in knee replacement surgery. Mentlik Declaration, Ex. C at 501, 576-77. First, they wanted to use thinner and shorter rods. They thought that the larger and thicker ones risked fracturing the femur or shaft of older patients who had more fragile bones. Second, they thought that the Whiteside system, by fixing the rotational alignment of the cutting blocks on the guide handle, required too much "eyeballing"; the surgeon using the Whiteside system visually determines the rotational alignment by sighting equal amounts of the posterior portions of the femoral condyles behind the lower edge of one of the cutting guides. *See* Whiteside patent at column 9.

The system Drs. Merritt and Hack designed for Osteonics, called the "STAT-IM" rod system, consequently also uses a series of intramedullary rods with angled handles. The Osteonics rods are slightly shorter (about 8.3 inches in length) and slightly thinner (0.33 inches in diameter as opposed to 0.38 inches) than the preferred embodiment of the Whiteside rods. FN1 The Osteonics system does not employ a reamer. Rather, after a hole is drilled, the rod is simply inserted. The system does, however, employ a mallet and locking fins on the rod to secure the rod in the canal, and available Osteonics rods are angled like the Whiteside rods.

FN1. The Whiteside patent description does make allowance for the use of a shorter rod when a deformity of the femur so requires, but it notes that proper alignment may be sacrificed. Column 8, lines 54-65. Additionally, Osteonics has subsequently revised its rod to make it tapered. It is now 0.33 inches at its base and 0.25 inches at its tip.

With regard to the attachments, Osteonics uses similar cutting guides that accept similar cutting blades. The primary difference is that the guides, when initially placed on the handle, are not fixed in their rotational orientation by the handle but are free to move around even after the rod has been locked in place. To

achieve proper rotational and anterior/posterior orientation, the Osteonics cutting block has skids that come out from the bottom of the block and fit behind the posterior femoral condyles on the exterior of the femur, as well as a sliding block within the larger block to permit anterior/posterior adjustments. These skids thus make use of the femur's external geometry to set the proper cuts. *See* Mentlik Declaration, Ex. C at 358.

II. DISCUSSION

Summary judgment is appropriate wherever "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); *Woodman v. Haemonetics Corp.*, 51 F.3d 1087, 1091 (1st Cir.1995). The non-moving party, here DCW, is entitled to all reasonable inferences that may be derived from the evidence submitted, and the evidence must be viewed in the light most favorable to him. *Woodman*, 51 F.3d at 1091.

A. *Need for New Trial*

[1] [2] DCW argues that two factors prevent the Court from disposing of this case on summary judgment regardless of the merits of the claim infringement issue. First, DCW contends that a motion for summary judgment is inappropriate because the federal circuit's mandate requires that a new trial be held. The Court disagrees. Although a district court is obliged to obey the mandate of an appellate court, *see In re Roberts*, 846 F.2d 1360, 1363 (Fed.Cir.1988), that proposition does not bar disposition of the issues on summary judgment where that disposition is justified. In this case, remand was ordered because the Court submitted to the jury an issue it should have decided itself. It would be an odd interpretation to say that the remand forbids a legal ruling on a motion for summary judgment. As the Seventh Circuit has stated, "Where no material factual issues are present, a summary judgment proceeding is the functional equivalent of a new trial." *Publishers Resource v. Walker-Davis Publications*, 762 F.2d 557, 559 (7th Cir.1985).

The Supreme Court's recent decision in *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996), makes clear that claim construction is a question of law for the court to answer. Although DCW contends that certain credibility questions regarding Osteonics' witnesses remain, *Markman* seems to place such determinations, insofar as they relate to claim construction, entirely within the province of the trial judge. *Id.* at 1395-96. The Court is thus presented with a situation where the question of literal infringement, as a practical matter, "collapses to one of claim construction and is thus amenable to summary judgment." *Athletic Alternatives, Inc. v. Prince Mfg., Inc.*, 73 F.3d 1573, 1578 (Fed.Cir.1996). FN2

FN2. This fact presents the converse probability that if the claims were to be construed as DCW asks, summary judgment in its favor would be appropriate.

[3] [4] Second, DCW asserts that even if the remand order does not by its terms strictly require a new trial, one is nevertheless required here because DCW's claim of infringement under the doctrine of equivalents must be resubmitted to a jury. The doctrine of equivalents provides that a patent may be infringed where differences between the claimed and accused products or processes are insubstantial. *Hilton Davis Chemical Co. v. Warner-Jenkinson Co.*, 62 F.3d 1512 (Fed.Cir.1995), *cert. granted*, 516 U.S. 1145, 116 S.Ct. 1014, 134 L.Ed.2d 95 (1996). Thus, a copier cannot avoid an infringement by the expedient of not literally duplicating everything in a patent claim, a formality that would otherwise "place the inventor at the mercy of verbalism." *Graver Tank & Mfg. Co. v. Linde Air Prods. Co.*, 339 U.S. 605, 607, 70 S.Ct. 854, 856, 94

L.Ed. 1097 (1950). DCW relies heavily on *Hilton Davis*, in which the Federal Circuit held that a court had to consider the doctrine where relevant and could not choose, in its own discretion, whether to apply it at all. 62 F.3d at 1521.

[5] The doctrine of equivalents, however, is not relevant to this case. DCW admitted to the Federal Circuit that if Osteonics' claim interpretation arguments were correct, there would be no infringement at all, whether literal or pursuant to the doctrine of equivalents, a fact noted by the Federal Circuit in its remand to this Court. *See Dow Corning Wright Corp. v. Osteonics Corp.*, 57 F.3d 1082 (Fed.Cir.1995) (table, text in WESTLAW at 1995 WL 250991). Even without the concession, however, that seems to be an appropriate assessment of the situation at hand. "[T]he doctrine of equivalents is not a license to ignore or 'erase ... structural and functional limitations of the claim' limitations 'on which the public is entitled to rely in avoiding infringement.' " *Athletic Alternatives*, 73 F.3d at 1582 (quoting *Perkin-Elmer Corp. v. Westinghouse Elec. Corp.*, 822 F.2d 1528, 1532 (Fed.Cir.1987)). If Osteonics is correct in its claim construction arguments, there is nothing in its system that is the functional equivalent of those claims.

B. Claim Interpretation

The claim interpretation questions that form the heart of the present dispute all derive from claim 6 of the Whiteside patent. Claim 6 reads:

As an article of manufacture, a distal femoral surface shaping guide comprising the combination of

(A) an intramedullary alignment guide comprising (1) an intramedullary rod portion *adapted to closely fit in and extend through the narrowest portion of a human femur such that the central long axis of said femur passes through the central long axis of said intramedullary rod portion*, (2) a guide handle attached to and set at a preselected angle with respect to said axis of the intramedullary rod portion and *being adapted to receive at least one femoral surface modifying instrument in proper alignment with respect to said handle* and (3) a means for securing the combination of (1) and (2) in a fixed position in the femur with

(B) a[t] least one femoral surface modifying instrument which is adapted to cooperatively engage said handle and to assume an appropriate fixed relationship with respect to the distal femoral surface and to the central long axis of the femur, said instrument being further designed to aid in shaping the distal femoral surface in such a manner that a preselected femoral knee prosthesis can be attached to said surface.

Column 13, lines 13-36 (emphasis added). DCW asserts that the Osteonics product copies claim 6 in its entirety, while Osteonics replies that there are two key differences between the instruments described in the claim and its own. First, Osteonics maintains that its product is not designed to "closely fit and extend through the intramedullary canal" in the way described by the patent claim. Second, Osteonics says that its shaping instruments are not "in proper alignment with respect to [the] handle" the way DCW's are.

[6] In order to establish infringement, the patentee must show that the alleged infringer copied each and every relevant limitation set forth in the patent claim. *Laitram Corp. v. Rexnord, Inc.*, 939 F.2d 1533, 1535 (Fed.Cir.1991). "[T]he failure to meet a single limitation is sufficient to negate infringement of the claim." *Id.* Thus, Osteonics' claim interpretation argument will succeed if it prevails on either one of its assertions.

1. "Closely Fit In and Extend Through"

[7] Osteonics first contends that the "closely fit" language of the patent claim indicates that the Whiteside

patent requires a rod that, as closely as possible, fills up the entire intramedullary canal, i.e., that it fits snugly. This, according to Osteonics, comports with the general desire of the Whiteside system that its intramedullary rod be collinear with the central long axis. Osteonics, on the other hand, asserts that its system relies on no such close fit because it seeks only an approximation of the central long axis and does not aim to duplicate it.

The Court agrees with Osteonics. The language in claim 6, especially when viewed in conjunction with the general methodology described in claims 1 through 5, indicates that "closely fit" means what it says. DCW attempts to avoid this common meaning of the words by pointing out that a tight fit is not often achieved because the people on whom knee replacements are most commonly performed, the elderly, tend to have canal spaces 1/2 inches or more in diameter at their narrowest parts. But whatever the practice might be, the patent claim is what matters. Moreover, the drawings submitted in the Whiteside patent specification certainly show a rod that is snugly fit into the intramedullary canal. *See* Whiteside patent, Fig. 16; *see also* Standard Oil Co. v. American Cyanamid Co., 774 F.2d 448, 452 (Fed.Cir.1985) ("The descriptive part of the specification aids in ascertaining the scope and meaning of the claims inasmuch as the words of the claims must be based upon the description."). The fact that the Whiteside patent description envisions the use of a smaller rod when a larger one is not practical does not loosen the meaning of the description "closely fit."

[8] Similarly, the whole nature of the reaming process, which is absent in Osteonics' product, points toward Osteonics' suggested interpretation. The reamer's main purpose, according to Dr. Whiteside's own testimony, "is to clear the contents of the bone. So when you put the rod in, you don't push those [intra]medullary contents into the patient's veins." Exhibits to DCW's Oppos. to Osteonics' Mot. for Partial Summ. J., Ex. 2 at 305. That process makes more sense-and is more necessary-in the context of a rod designed to "closely fit" than in one merely inserted into the femur shaft.FN3

FN3. DCW complains that relying on the reamer improperly reads a claim limitation from an earlier claim into claim 6, thereby violating the doctrine of claim differentiation. *See* D.M.I. Inc. v. Deere & Co., 755 F.2d 1570, 1574 (Fed.Cir.1985). While a limitation may not be read from one claim into another, different claims within the same patent may certainly be used to shed light on how other claims are best construed. *Minnesota Mining & Mfg. Co. v. Johnson & Johnson*, 976 F.2d 1559, 1566 (Fed.Cir.1992).

The parties also disagree about the meaning of "extend through." Osteonics maintains that extend through must mean that the rod passes the entire length of the isthmus of the femur. DCW replies that it need not extend all the way through. This particular dispute is harder to resolve; definitions of "through" typically imply the "penetration" or "passage within" another object, *see Webster's Third New International Dictionary* 2384 (G. & C. Merriam Co. 1981) and, in conjunction with the word "extend," would probably admit of either interpretation. Yet when viewed in conjunction with the claim's requirement that the central long axis of the femur passes through the central long axis of the inserted rod portion, the claims seem best understood along the lines Osteonics suggests.

2. "In Proper Alignment with Respect to Said Handle"

[9] Osteonics also differentiates its product from the patent claim because the claim requires that the rod handle be "adapted to receive at least one femoral surface modifying instrument in proper alignment with respect to said handle." The question is, to what sort of alignment the claim is referring? Osteonics asserts that this statement implies that the Whiteside system foresees the cutting guides (and the cuts made from the

cutting guides) as dependent entirely on their alignment to the handle of the rod. In other words, once the rod has been set in place, nothing else makes a difference; the positioning of the cutting guides has been effectively set as well and no other feature of the femur is really relevant for the Whiteside system at this point. Osteonics contrasts this limitation with its own system, which, as described earlier, uses both the internal and external geometry of the femur to set the proper alignment. With the Osteonics system, according to Osteonics, the surgeon has not limited himself once the rod is in place. At the very least, Osteonics asserts, this is clear from the fact that its system allows for cutting guides to rotate freely around the handle, whereas the DCW system uses a handle with flattened sides that would specifically prevent such rotation.

DCW responds that the alignment described in claim 6 refers to the angle of the handle, which in turn permits the bone cuts to be made at the proper varus/valgus angle, and that nothing more is meant. DCW notes that although the preferred embodiment of handling the Whiteside patent has flat edges that do align the blades, that embodiment is not required in the patent. To read the "proper alignment" as referring also to the rotational alignment of the blades, as Osteonics does, is therefore to limit improperly the scope of the claims by the scope of the preferred embodiment. *See SRI International v. Matsushita Elec. Corp. of America*, 775 F.2d 1107, 1121-22 (Fed.Cir.1985) (*en banc*).

DCW buttresses its argument by noting that claim 9, which depends on claim 6, describes a planar that fits on the guide handle and rotates on the handle to file down the femur. The planar cannot be fixed rotationally; otherwise, it would not work as a planar. Accordingly, claim 6 would not establish a rule of rotational alignment that claim 9 necessarily breaks.

Osteonics replies that claim 9, read properly, proves DCW wrong. Claim 9 indicates that the planar must have "a passage therethrough adapted to cooperatively engage said guide handle and to allow the planar abrading surface to be transversely rotated about the central axis of said guide handle while it is in contact with the distal femoral surface to flatten said distal femoral surface transversely with respect to the central long axis of the guide handle...." FN4 Column 14, lines 22-25. Osteonics asserts that this language expressly excludes claim 9 from claim 6's alignment limitation for this one purpose, the implication being that the limitation applies to all the cutting instruments.

FN4. The language used for the claims describing the cutting guides, claims 7, 8, and 10, each use the following (or almost identical) language: "The article as claimed in claim 6 wherein at least one of the instruments employed in said (B) is a[] ... cutting guide ... having a passage passing through said cutting guide and designed to cooperatively engage said guide handle and a means for fixing said cutting guide in proper alignment with respect to said handle...." *See* columns 13 & 14.

Osteonics again has the better of the argument. The Whiteside patent discloses a system that depends entirely on the handle alignment once the handle is in place. Claim 6 makes that point explicitly. The handle's being "adapted to receive" an instrument "in proper alignment with respect to said handle" implies what the preferred embodiment makes clearer-that any rotation alignment is fixed by the handle. Whether such alignment is absolutely necessary as a practical matter to achieve certain results does not change what the patent claim itself contains. Finally, Dr. Whiteside's testimony on the subject at the first trial, in which he seems to have conceded the difference, clearly supports Osteonics' interpretation. *See Mentlik Declaration*, Ex. C at 381-82. Accordingly, the Court agrees with Osteonics' construction of claim 6 on this point too.

C. Summary Judgment

Given the construction of claim 6 of the Whiteside patent outlined above, the Court finds that there is no genuine issue of material fact left to present to a jury as to whether Osteonics has infringed DCW's patent either literally or under the doctrine of equivalents; it did not. Consequently, Osteonics' motion for summary judgment is GRANTED.

SO ORDERED.

D.Mass.,1996.

Dow Corning Wright Corp. v. Osteonics Corp.

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