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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte MIGUELANGELO J. PEREZ-CRUET

Appeal 2011-007030
Application 11/756,274
Technology Center 3700

Before ERIC GRIMES, STEPHEN WALSH, and
JACQUELINE WRIGHT BONILLA, *Administrative Patent Judges*.

WALSH, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134(a) from the rejection of claims directed to a method for providing an in vivo model of disc degeneration. The Patent Examiner rejected the claims for obviousness. We have jurisdiction under 35 U.S.C. § 6(b). We affirm.

STATEMENT OF THE CASE

Claims 1-15 and 17-20 are on appeal. Claim 1 illustrates the subject matter on appeal and reads as follows:

1. A method for providing an InVivo model of disc degeneration, said method comprising:
providing a non-human animal; and
percutaneously inserting a needle into the animal so that the needle ruptures an annulus of a disc between vertebrae in the animal where the rupture induces disc degeneration.

The Examiner rejected the claims as follows:

A. claims 1-9 and 11-13 under 35 U.S.C. § 103(a) as unpatentable over Masuda[1] and Sluijter[2] (Ans. 4-6); and

B. claims 10, 14, 15 and 17-20 under 35 U.S.C. § 103(a) as unpatentable over Masuda, Sluijter, and Crevensten[3] (Ans. 6-8).[4]

A

Principles of Law

"Two criteria have evolved for determining whether prior art is analogous: (1) whether the art is from the same field of endeavor, regardless

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[1] Koichi Masuda et al., *A Novel Rabbit Model of Mild, Reproducible Disc Degeneration by an Anulus Needle Puncture: Correlation Between the Degree of Disc Injury and Radiological and Histological Appearances of Disc Degeneration*, 30 SPINE 5-14 (2004).
[2] Menno E. Sluijter et al., US 5,433,739, issued July 18, 1995.
[3] Gwen Crevensten et al., *Intervertebral Disc Cell Therapy for Regeneration: Mesenchymal Stem Cell Implantation in Rat Intervertebral Discs*, 32 ANNALS OF BIOMEDICAL ENGINEERING 430-434 (2004).
[4] Although the Examiner separated these claims into two groups, we group them together because the rejections are the same, and Appellant addresses them together.

of the problem addressed, and (2) if the reference is not within the field of the inventor's endeavor, whether the reference still is reasonably pertinent to the particular problem with which the inventor is involved." *In re Clay*, 966 F.2d 656, 658-9 (Fed. Cir. 1992). "'A reference is reasonably pertinent if, even though it may be in a different field from that of the inventor's endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his problem.' *In re Clay*, 966 F.2d 656, 659 (Fed. Cir. 1992). In other words, 'familiar items may have obvious uses beyond their primary purposes.' *KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. 398, [402], 127 S.Ct. 1727, 1742 (2007)." *In re ICON Health and Fitness, Inc.*, 496 F.3d 1374, 1379-80 (Fed. Cir. 2007) (finding a reference describing a folding bed analogous to appellant's folding treadmill).

Analysis

It is undisputed that Masuda described an in vivo model of disc degeneration comprising inserting a needle into a disc so that the needle ruptures an annulus of a disc and the rupture induces disc degeneration. Masuda, however, described first exposing the disc by surgery, rather than inserting the needle percutaneously. The Examiner cited Sluijter as evidence that percutaneous insertion of a needle into a disc was a skill known in the art. The rejection concluded that simplifying Masuda's needle model by eliminating the surgical step of exposing the disc, and inserting the needle through the skin and into the disc, would have been obvious "to provide a means of not having to surgically expose tissue prior to insertion of a needle." (Ans. 4.)

Appellant contends that Sluijter is not analogous art because "there must be a structural or functional similarity or overlap between the reference and the claimed invention for the reference to be analogous." (App. Br. 6.) We find this argument unpersuasive for several reasons. First, the "percutaneous injection of chemicals into the intervertebral disc" (Sluijter, col. 1, ll. 8-18) necessarily requires percutaneously inserting a needle into a disc, as recited in claim 1. Inserting a needle into a disc between vertebrae in the animal is done in both the known method Sluijter described and the claimed method. Thus, structural or functional similarity or overlap exists between Sluijter and the claimed method, which meets Appellant's test. Second, because inserting a needle into a disc is the same step, a person of ordinary skill in Masuda's art would have found Sluijter's information reasonably pertinent, which meets the *Clay* test. Third, dependent claim 10 adds a step of injecting stem cells into the ruptured disc "to regenerate the disc." Sluijter's col. 1 discussion concerned methods of treating a disc and rehabilitation therapy. Claim 1 must be interpreted as open to that subject matter, and Sluijter is again reasonably pertinent to that problem.

Appellant also argues that Sluijter is not analogous art because Sluijter particularly discloses relieving back pain using an electrode. (App. Br. 6-7.) This argument is unpersuasive because the rejection relied on Sluijter's disclosure that percutaneous insertion of a needle into a disc was known.

Appellant waived arguing that the invention would not have been obvious even if Sluijter were analogous art. On the evidence of record, we affirm, as the Examiner's reasoning is consistent with precedent:

> While the omission of an element in a combination may constitute invention if the result of the new combination be the same as before, yet, if the omission of an element is attended by

> a corresponding omission of the function performed by that element, there is no invention if the elements retained perform the same function as before.

Richards v. Chase Elevator Co., 159 U.S. 477, 486 (1895). *See also*, *In re Karlson*, 311 F.2d 581, 584 (CCPA 1963) ("It is well settled, however, that omission of an element and its function in a combination is an obvious expedient if the remaining elements perform the same functions as before."); *In re Luce*, 304 F.2d 899, 901 (CCPA 1962) (similar, citing *Richards*); *In re Miller*, 197 F.2d 340, 341 (CCPA 1952) (similar, citing *Richards*).

Claims 2-9 and 11-13 have not been argued separately and therefore fall with claim 1. 37 C.F.R. § 41.37(c)(1)(vii).

B

The Examiner entered rejection B, combining the Masuda, Sluijter, and Crevensten disclosures, to address the additional step "injecting stem cells" recited or included in claims 10, 14, 15, and 17-20. Appellant argues only that Crevensten does not induce disc degeneration, and "cannot provide the teaching missing from Masuda and Sluijter." (App. Br. 8.) As explained in part A above, we do not agree that there is a teaching missing from the underlying rejection based on Masuda and Sluijter, and we therefore affirm rejection B as well.

SUMMARY

We affirm the rejection of claims 1-9 and 11-13 under 35 U.S.C. § 103(a) as unpatentable over Masuda and Sluijter.

We affirm the rejections of claims 10, 14, 15 and 17-20 under 35 U.S.C. § 103(a) as unpatentable over Masuda, Sluijter, and Crevensten.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

AFFIRMED

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