

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte BRET A. FERREE

Appeal No. 2006-3014
Application No. 10/419,378
Technology Center 3700

Decided: November 29, 2007

Before WILLIAM F. PATE, III, TERRY J. OWENS and JENNIFER D. BAHR,
Administrative Patent Judges.

PATE, *Administrative Patent Judge.*

DECISION ON APPEAL

STATEMENT OF THE CASE

This is an appeal from the examiner's refusal to allow claims 1-6 as amended after final rejection. These are the only claims in the application. We have jurisdiction under 35 U.S.C. §§ 134 and 6.

The claimed invention is directed to an artificial disc replacement to be inserted in the spine. The disc replacement is characterized by one or more spacer bodies which are laterally movable between two plates that are secured to the

facing surfaces of two vertebrae. Claim 1, reproduced below, is further illustrative of the claim subject matter.

1. A mobile bearing artificial disc replacement (ADR) for use in the disc space between the inferior endplate of an upper vertebral body and the superior endplate of a lower vertebral body, the ADR comprising:

a first plate having an upper surface adapted to be attached to an inferior endplate of an upper vertebral body and a lower surface facing into a disc space;

a second plate having a lower surface adapted to be attached to a superior endplate of a lower vertebral body and an upper surface facing into the disc space; and

one or more spacers laterally moveable between the surfaces of the plates facing into the disc space.

The references of record relied upon by the examiner as evidence of anticipation and obviousness are:

Baumgartner	5,370,697	Dec. 6, 1994
Bryan	5,865,846	Feb. 2, 1999
Weber (as translated)	DE 30 23 353 A1	Oct. 3, 1979

Claims 1-3 and 6 stand rejected under 35 U.S.C. § 102 as anticipated by Weber.

Claim 4 stands rejected under 35 U.S.C. § 103 as unpatentable over Weber in view of Baumgartner.

Claim 5 stands rejected under 35 U.S.C. § 103 as unpatentable over Weber in view of Bryan.

FINDINGS OF FACT

Weber discloses a mobile bearing artificial disc replacement for use in the disc space between an inferior endplate of an upper vertebral body 3 and a superior endplate of a lower vertebral body 3. The bearing is composed of a first and second plate 4, 4 which are attached to the vertebral endplates with anchoring lugs 2. A spacer 5 is provided in a pan-like recess in the facing surfaces of the first and second plates. The translation states (with reference numerals added in brackets):

Given the prior-art design of these prostheses, which are predominantly used as cervical disk prostheses, there is the risk that, because of the relatively high mobility of the cervical disks, the spacer body [5], which conventionally is preferably shaped so as to be substantially convexly lenticular, is dislodged from the acetabula [7]; the spacer body can relatively easily slip rearwardly out of the prior-art bearing pans, especially when movement known as "nodding the head" are made. Thus, the problem to be solved by the present invention is to make available a total intervertebral disk prosthesis that provides increased certainty that the spacer body cannot slip out of the pan-like recesses of the bearing bodies.

According to the present invention, this problem is solved in that each bearing body has a depression [6] in one of its long sides when viewed from the level of the edge of its acetabulum [7] and a projecting lobe [8] on the long side parallel thereto, with the depression and the lobe being designed one relative to the other so that the lobe of one of the bearing bodies mates with the depression of the other bearing body when the spacer body [5] is inserted.

According to the new design, the dorsal and ventral sides of the two bearing bodies mate with each other. Thus, *their sliding movement on the spacer body is largely controlled* so that forward and rearward displacements of the prosthetic components relative to each other are rendered more difficult. Furthermore, the spacer body [5] is "captured" by the lobe [8] of one of the bearing bodies that overlaps the other bearing body in its depression [6] even when nodding movements are made, thus

ensuring that the spacer body [5] cannot slide out of the bearing pans [7].
Weber (as translated) p. 2, ll. 6-25 (emphasis supplied).

Thus, as Weber makes clear, the spacers 5 are allowed sliding movement between the surfaces of the plates, albeit the sliding movement is controlled.

Baumgartner has been cited by the examiner as showing an artificial disc replacement in which the upper and/or lower first and second plates can be made as a wedge for correcting lordosis or other anatomical problems. See particularly Figure 2 and wedge shaped endplates at 14 and 15 therein.

Bryan has been cited by the examiner to show an artificial disc replacement which is provided with a protective guard or seal member 110 in the form of a flexible sheet material. Once the flexible sheet material 110 is glued in place it performs a perfect waterproof guard, sealing the retaining structure therein. (See col. 4, ll. 33-54).

PRINCIPLES OF LAW

The prior art may anticipate a claimed invention, and thereby render it non-novel, either expressly or inherently. *In re Cruciferous Sprout Litig.*, 301 F.3d 1343, 1349, 64 USPQ2d 1202, 1206 (Fed. Cir. 2002), *cert. denied*, 538 U.S. 907 (2003). Express anticipation occurs when the prior art expressly discloses each limitation (i.e., each element) of a claim. *Id.*

A claimed invention is unpatentable if the differences between it and the prior art are “such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art.” 35 U.S.C. § 103(a) (2000); *KSR Int’l v. Teleflex Inc.*, 127 S.Ct. 1727 (2007); *Graham v. John Deere Co.*, 383 U.S. 1, 13-14 (1966).

In *Graham*, the Court held that that the obviousness analysis is bottomed on several basic factual inquiries: “[1] the scope and content of the prior art are to be determined; [(2)] differences between the prior art and the claims at issue are to be ascertained; and [(3)] the level of ordinary skill in the pertinent art resolved.” 383 U.S. at 17. *See also KSR Int'l v. Teleflex Inc.*, 127 S.Ct. at 1734. “The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *KSR*, at 1739.

“When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or in a different one. If a person of ordinary skill in the art can implement a predictable variation, § 103 likely bars its patentability.” *Id.* at 1740, 82 USPQ2d at 1396.

“For the same reason, if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill.” *Id.*

“Under the correct analysis, any need or problem known in the field of endeavor at the time of invention and addressed by the patent can provide a reason for combining the elements in the manner claimed.” *Id.* at 1742.

ANALYSIS

As noted above, Weber discloses the structure of Appellant’s claims 1-3 and 6. Appellant’s argument that Weber does not support spacers that are laterally moveable is clearly contradicted by the disclosure of Weber which expressly mentions the sliding movement of the plates on the spacer body in a controlled manner. Therefore, we find that Weber anticipates claims 1-3 and 6.

Turning to a consideration of claim 4, we note that Baumgartner clearly teaches using wedge shaped plates for the correction of lordosis or other posture problems. The use of such wedge shaped plates in the prosthesis of Weber is simply the combination of prior art elements according to known methods to yield predictable results. See *KSR* at 1739.

Likewise, Bryan discloses the use of a flexible guard around a prosthesis. It would have been obvious to include such a guard in the prosthesis of Weber as a combination of prior art elements yielding predictable results.

Appellant's arguments have been carefully considered. However, we agree with the examiner that the expressed disclosure of Weber, as translated, shows that Appellant's claims 1-3 and 6 lack novelty thereover.

With respect to Appellant's arguments in the brief and at oral hearing concerning when the Appellant received the English translation of Weber, we merely note that it is not in the Board's purview to act in a supervisory manner over the Examining Corps. We further note that there is nothing to preclude an Appellant from obtaining his or her own translation.

CONCLUSION

The rejections on appeal are affirmed.

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

AFFIRMED

JRG

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