

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte BRET A. FERREE

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Appeal No. 2006-1877  
Application 10/434,931

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HEARD: August 10, 2006

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Before FRANKFORT, OWENS and NAPPI, Administrative Patent Judges.

FRANKFORT, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1 through 4 and 6 through 8, all of the claims remaining in the application. Claim 5 has been cancelled.

As noted on page 1 of the specification, appellant's invention relates to artificial disc replacement (ADR) devices for the human spine including springs and other improvements. When asked at the oral hearing held on August 10, 2006, appellant's representative indicated that the claims on appeal were readable on embodiments such as those seen in Figures 21A, 21B, 25A, 25B and 25D of the application drawings. Independent claim 1 is representative of the subject matter on appeal and reads as follows:

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An artificial disc replacement (ADR), comprising;  
a pair of opposing plates;  
at least one spring disposed between plates to urge them apart; and  
a concave or convex surface on one of the plates where the spring contacts that plate, resulting in a joint having a center of rotation

The sole prior art reference of record relied upon by the examiner in rejecting the appealed claims is:

Harrington                    5,893,889                    Apr. 13, 1999

Claims 1 through 4 and 6 through 8 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Harrington.

Rather than attempt to reiterate the examiner's commentary with regard to the above-noted § 102 rejection and the conflicting viewpoints advanced by appellant and the examiner regarding that rejection, we make reference to the examiner's answer (mailed April 25, 2005) for the reasoning in support of the rejection, and to appellant's brief (filed March 24, 2005) for the arguments thereagainst.

### OPINION

In reaching our decision in this appeal, we have given careful consideration to appellant's specification and claims, to the applied prior art Harrington reference, and to the respective positions articulated by appellant and the examiner. As a consequence of our review, we

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have made the determination that the examiner's § 102(b) rejection will be sustained as to claims 1 through 4 and 6 through 8. Our reasons follow.

Generally, in the language of claim 1 on appeal, Harrington discloses an artificial disc replacement (ADR) comprising: a pair of opposing plate members (32, 34); at least one spring member (68) disposed between the plate members to urge them apart (col. 4, lines 1-3); a convex (i.e., frustoconical) surface defined on each of the plate members where the spring member contacts the plate members, resulting in a joint (ADR) having a center of rotation. Concerning dependent claim 2, Harrington discloses a "feature", i.e., the post and ball member (45, 46) and shock absorbing plug (69), that limits the load on the spring member (68) during axial compression of the ADR. Regarding dependent claims 3 and 4, the spring member (68) of Harrington is disposed in a cylinder (i.e., tubular shield 78) and is also disposed over a post (i.e., threaded post 45).

In another reading of claim 1 on Harrington, the examiner contends that this patent discloses a pair of opposing plate members (32, 34); at least one spring member (69) disposed between the plate members to urge them apart at least during axial compression of the ADR; a concave surface (51) defined on one of the plate members where the spring member contacts the plate member, resulting in a joint (ADR) having a center of rotation. Concerning claim 2, in this instance, the annular shock absorbing member or spring (68) constitutes a "feature" for limiting the load on the spring member (69). As for claim 3, the spring member (69) is disposed in a cylinder defined within tubular portion (50) of the base portion (49) and also is positioned within the cylinder defined by the tubular shield (78).

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Regarding claim 4, the spring member (69) is disposed “over,” i.e., above, the post and ball (45, 46).

Responsive to appellant’s argument bridging pages 2 and 3 of the brief, we share the examiner’s view that one of ordinary skill in the art would have perceived the ADR seen in Harrington as being configured to allow essentially the same natural movement as the disc it is replacing, and thus as being capable of vertical movement when subjected to axial compression forces, rotational movement about the longitudinal axis of the post (45), and pivotal movement about the pivot ball (46), thereby constituting a joint having a center of rotation. See page 4 of the answer for the examiner’s explanation of this aspect of the rejection.

As for appellant’s commentary regarding dependent claim 4, we agree with the examiner that the language of claim 4 requiring the spring to be “disposed over a post” is broad enough to encompass either of the examiner’s positions set forth above concerning Harrington.

Turning to dependent claim 6, we note that this claim sets forth the limitation that the joint of claim 1 is spherical. On page 4 of the answer, the examiner has stated that appellant has no clear support in the specification for this limitation, and concludes that such limitation should be given its broadest reasonable interpretation based on what is set forth in appellant’s disclosure. Thus, the examiner has concluded that to the extent the embodiments of appellant’s Figures 21A, 21B, 25A, 25B and 25D show a joint which is spherical, so too does the patent to Harrington. That is, since Harrington shows a pivot ball (46), it defines a joint which is broadly spherical. We agree with the examiner, especially

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since appellant has not provided any response on the record to the examiner's position.<sup>1</sup>

Accordingly, the rejection of claim 6 is sustained.

Regarding the rejection of claims 7 and 8 based on Harrington, the examiner indicates on page 5 of the answer that the ADR of Harrington includes a plurality of spring members (68, 69) which each form a joint having a center of rotation, and that those respective centers of rotation cooperate to form an overall center of rotation for the ADR. We agree, noting again that appellant has not provided any response on the record to the examiner's position, and has definitely not explained why the springs (68, 69) in the ADR of Harrington do not each broadly provide a joint having a center of rotation, and why those respective centers of rotation would not cooperate to form an overall center of rotation for the ADR. We again direct attention to page 4 of the answer for the examiner's position on the "center of rotation" issue. Thus, the rejection of claims 7 and 8 is also sustained.

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<sup>1</sup>During any further prosecution of this application, the examiner should consider whether a rejection of claim 6 under 35 U.S.C. § 112, first and/or second paragraphs, would be appropriate.

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Since we have sustained the examiner's rejection under 35 U.S.C. § 102(b) with regard to each of the claims on appeal, the decision of the examiner is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a)(1)(iv).

AFFIRMED

CHARLES E. FRANKFORT )  
Administrative Patent Judge )  
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TERRY J. OWENS ) BOARD OF PATENT  
Administrative Patent Judge ) APPEALS  
 ) AND  
 ) INTERFERENCES  
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ROBERT NAPPI )  
Administrative Patent Judge )

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