

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 26

**UNITED STATES PATENT AND TRADEMARK OFFICE**

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

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Ex parte CHARLES O. TOWNLEY

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Appeal No. 2002-2198  
Application No. 09/408,409

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ON BRIEF

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Before FRANKFORT, McQUADE, and NASE, Administrative Patent Judges.  
NASE, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 2 to 14 and 19 to 25, which are all of the claims pending in this application.<sup>1</sup>

We REVERSE.

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<sup>1</sup> Claims 2, 19, 20 and 23 were amended subsequent to the final rejection. The rejection of claim 23 under 35 U.S.C. § 112 set forth in the final rejection was not set forth in the examiner's answer. We assume that this ground of rejection has been withdrawn by the examiner. See Ex parte Emm, 118 USPQ 180, 181 (Bd. App. 1957).

### BACKGROUND

The appellant's invention relates to a prosthetic joint implant having a tissue-integratable rough surface and as a special example a porous coating on a surface other than that which may be commonly provided for the intramedullary prosthetic-bone interface (specification, p. 1). A copy of the claims under appeal is set forth in the appendix to the appellant's brief.

Claims 2 to 14 and 19 to 25 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,702,483 to Kwong.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellant regarding the above-noted rejection, we make reference to the answer (Paper No. 22, mailed April 12, 2002) for the examiner's complete reasoning in support of the rejection, and to the brief (Paper No. 21, filed March 15, 2002) and reply brief (Paper No. 23, filed May 20, 2002) for the appellant's arguments thereagainst.

### OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellant's specification and claims, to the Kwong patent, and to the respective positions articulated by the appellant and the examiner. As a consequence of our

review, we will not sustain the rejection of claims 2 to 14 and 19 to 25 under 35 U.S.C. § 102(b) since all the claimed limitations are not found in Kwong.

Kwong's invention relates generally to a prosthetic hip joint assembly, and more particularly to a prosthetic hip joint assembly which has been adapted to promote the formation of a fibrous capsule of tissue which seals and encapsulates the prosthetic hip joint. Referring to Figure 1A, there is shown an exemplary preferred embodiment of a prosthetic hip joint assembly 10. The hip joint assembly 10 is a two component assembly comprising an acetabular component 12 and a femoral component 54. The acetabular component 12 comprises a shell 14 and a bearing insert 26 disposed within the hollow of the shell 14. The femoral component 54 comprises a spherically shaped head 56, a neck 58, an elongated stem 60 joined to the head 56 by the neck 58, and a collar 62 around the neck 58 near its juncture with the stem 60.

The marginal end of the shell 14 defines a base region 20. The base region 20 of the shell 14 terminates at an annular rim 21 which defines a surface 22. Preferably, the surface 22 of the annular rim 21 includes a groove 23 for containing a surface treatment 24 as best shown in Figure 1B. Kwong teaches that the groove 23 can be omitted depending on the type of surface treatment employed. In any event, a surface treatment 24 is provided on or in the surface 22 of the annular rim 21 for the purpose of

promoting the attachment of fibrous tissue to the annular rim 21 of the shell 14. As best seen in Figure 1A, the collar 62 defines a surface 64. Preferably, the surface 64 of the collar 62 is arranged in a manner similar to surface 22 of the acetabular component as just described. Thus, the surface 64 of the collar 62 preferably includes a groove 66 for containing a surface treatment 68 as shown in Figure 1C. This groove 66 can be omitted, however, depending on the type of surface treatment employed as long as the surface treatment 68 is provided on or in the surface 64 of the collar 62. The surface treatment 68 is provided for the purpose of promoting the attachment of fibrous tissue to the femoral component. Kwong describes in detail the surface treatments provided on both the acetabular and femoral components at column 5, lines 6-53.

As shown in Figure 4, the implanted femoral 54 and acetabular 12 components are situated such that the rim surface 22 of the acetabular cup is oriented in opposing relation with the surface 64 of the collar 62 of the femoral component 54. The surface treatments on the opposing surfaces promote the attachment of fibrous tissue to the acetabular and femoral components. The fibrous tissue, when fully developed, extends between the surface of the collar or base of the neck of the femoral component and the surface of annular rim of the acetabular cup thereby forming a substantially sealed capsule 82. Any wear debris 83 resulting from the rubbing together of the aforesaid articulating surfaces is confined within the capsule 82 and away from the boundary of

the bone preparation. Thus, wear debris is substantially prevented from migrating toward the interfaces between the implant components and their associated bone tissues. Accordingly, wear debris promoted osteolysis and its resulting trauma, pain and potential for implant loosening is reduced. The capsule 82 further operates to substantially prevent metal and cement debris 84, remaining at the interfaces between the components and their associated bones, from migrating into the capsule and toward the articulating surfaces of the components.

Kwong states (column 6, lines 35-50) that this is in marked contrast to the prior art prosthetic hip joint assembly shown in Figure 5, which shows the formation of a normal capsule 85 of fibrous tissue. Since the prior art acetabular and femoral components lack the surface treatments of Kwong's invention, the fibrous tissue tends to attach within the boundary of the bone preparation circumscribing the acetabular component and the femoral component. Consequently, any wear debris 86 from the bearing insert can easily migrate toward the preparation boundary into the interfaces between the implants and adjacent bone producing osteolysis and eventual implant loosening. Moreover, metal and cement debris 88, remaining at the interfaces between the components and their associated bones, can easily migrate into the capsule and toward the articulating surfaces of the components and cause premature bearing wear and additional wear debris.

Kwong teaches (column 6, lines 56-60) that "[m]oreover, the surface treatments may be located anywhere on the acetabular and femoral components as long as the fibrous capsule of tissue formed therebetween extends within the preparation boundary between the implants and adjacent bone thereby forming a sealed enclosure."

The appellant argues (brief, pp. 3-8) that all the claims under appeal recite that the prosthetic component include a non-bone-interfacing rough surface on the peripheral side faces of the platform and that such is not taught by Kwong. We agree.

To anticipate a claim, a prior art reference must disclose every limitation of the claimed invention, either explicitly or inherently. In re Schreiber, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997). As stated in In re Oelrich, 666 F.2d 578, 581, 212 USPQ 323, 326 (CCPA 1981) (quoting Hansgirk v. Kemmer, 102 F.2d 212, 214, 40 USPQ 665, 667 (CCPA 1939)) (internal citations omitted):

Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient. If, however, the disclosure is sufficient to show that the natural result flowing from the operation as taught would result in the performance of the questioned function, it seems to be well settled that the disclosure should be regarded as sufficient.

Thus, a prior art reference may anticipate when the claim limitation or limitations not expressly found in that reference are nonetheless inherent in it. See In re Oelrich, 666

F.2d at 581, 212 USPQ at 326; Verdegaal Bros., Inc. v. Union Oil Co., 814 F.2d 628, 630, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Under the principles of inherency, if the prior art necessarily functions in accordance with, or includes, the claimed limitations, it anticipates. See In re King, 801 F.2d 1324, 1326, 231 USPQ 136, 138 (Fed. Cir. 1986). However, inherency is not necessarily coterminous with the knowledge of those of ordinary skill in the art. See Mehl/Biophile Int'l Corp. v. Milgraum, 192 F.3d 1362, 1365, 52 USPQ2d 1303, 1305-06 (Fed. Cir. 1999); Atlas Powder Co. v. Ireco Inc., 190 F.3d 1342, 1347, 51 USPQ2d 1943, 1946-47 (Fed. Cir. 1999).

Kwong does teach providing a non-bone-interfacing rough surface on the top/obverse face of the collar/platform 62. Kwong does not specifically teach providing a non-bone-interfacing rough surface on the peripheral side faces of the collar/platform 62 and such is not inherent in the teachings of Kwong. While Kwong does teach that the surface treatments may be located anywhere on the acetabular and femoral components as long as the fibrous capsule of tissue formed therebetween extends within the preparation boundary between the implants and adjacent bone thereby forming a sealed enclosure, Kwong does not teach that providing a non-bone-interfacing rough surface on the peripheral side faces of the collar/platform would permit a fibrous capsule of tissue to be formed between the acetabular and femoral components with the fibrous capsule extending within the preparation boundary

between the implants and adjacent bone thereby forming a sealed enclosure.<sup>2</sup> Thus, the claimed subject matter is not a necessary consequence of what was disclosed by Kwong.

Since the claimed limitation that the prosthetic component include a non-bone-interfacing rough surface on the peripheral side faces of the platform is not disclosed in Kwong for the reasons set forth above, the decision of the examiner to reject claims 2 to 14 and 19 to 25 under 35 U.S.C. § 102(b) is reversed.

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<sup>2</sup> No rejection under 35 U.S.C. § 103 based on the teachings and suggestions of Kwong is before us in this appeal. When obviousness is based on a single prior art reference there must be a showing of a suggestion or motivation to modify the teachings of that reference to arrive at the claimed invention. See In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1316-17 (Fed. Cir. 2000).

CONCLUSION

To summarize, the decision of the examiner to reject claims 2 to 14 and 19 to 25 under 35 U.S.C. § 102(b) is reversed.

REVERSED

CHARLES E. FRANKFORT  
Administrative Patent Judge

JOHN P. McQUADE  
Administrative Patent Judge

JEFFREY V. NASE  
Administrative Patent Judge

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CHRISTOPHER JOHN RUDY  
209 HURON AVENUE  
PORT HURON, MI 48060-3860

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