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. 19

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte WILFRIED VON CHAMIER and ERNST HOCH

Appeal No. 2003-1732
Application No. 09/646,703

HEARD: December 10, 2003

Before ABRAMS, FRANKFORT, and BAHR, Administrative Patent Judges.

ABRAMS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1 and 3-10, which are all of the claims pending in this application.

We REVERSE.

BACKGROUND

The appellants' invention relates to a joint prosthesis (claims 1 and 3-7) and to a method of forming a joint prosthesis (claims 8-10). An understanding of the invention can be derived from a reading of exemplary claim 1, which appears in the appendix to the Brief.

The single prior art reference of record applied by the examiner in the rejection of the claims is:

Doerre et al. (Doerre)	4,058,856	Nov. 22, 1977[1]

Claims 1 and 3-10 stand rejected under 35 U.S.C. § 103 as being unpatentable over Doerre.

The examiner's reasoning in support of the rejection can be found in the Answer (Paper No. 16), and the appellants' arguments in opposition thereto in the Brief (Paper No. 15) and the Reply Brief.[2]

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[1]On page 5 of the Answer, in responding to arguments raised by the appellants on page 9 of the Brief regarding the lack of disclosure or suggestion in Doerre of applying a coating by means of plasma spray, the examiner cited Taylor U.S. Patent No. 6,008,432 and Broemer et al. U.S. Patent No. 4,365,356 in support of her position that such a technique was well known in the art of prosthetic devices at the time of the appellants' invention. However, these references were not applied against the claims in the statement of the rejection and therefore we have not considered them. See Section 706.02(k) of the Manual Of Patent Examining Procedure.

[2]A reply brief was filed on May 30, 2003, along with a request for oral hearing (Paper No. 17). While the request for oral hearing was entered in the file, there is no indication that the reply brief was entered, considered, or acknowledged by the examiner. However, in the interest of judicial economy, we have considered this document in the course of making our decision. Upon return of the file to the examiner, the reply brief should formally be entered into the record.

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims, to the applied prior art references, and to the respective positions articulated by the appellants and the examiner. As a consequence of our review, we make the determinations which follow.

Independent apparatus claim 1 recites a joint prosthesis in which there is a first component comprising a metallic material to be anchored in a bone and a second component comprising a ceramic material or a biocompatible plastics material. The second component has a clamp surface to be press-fit to the first component, and the clamp surface is provided with a coating made from biocompatible metal or metal alloy and has a rough surface with a peak to valley height sufficient to produce a press-fit connection upon press-fitting the first component and the second component. Independent method claim 8 contains the same limitations.

The examiner is of the opinion that the subject matter recited in the claims would have been obvious in view of Doerre. We do not agree, and we therefore will not sustain the rejection. Our reasoning in arriving at this conclusion is as follows.

The test for obviousness is what the combined teachings of the prior art would have suggested to one of ordinary skill in the art. See, for example, In re Keller, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). In establishing a prima facie case of obviousness, it is incumbent upon the examiner to provide a reason why one of

ordinary skill in the art would have been led to modify a prior art reference or to combine reference teachings to arrive at the claimed invention. See Ex parte Clapp, 227 USPQ 972, 973 (Bd. Pat. App. & Int. 1985). To this end, the requisite motivation must stem from some teaching, suggestion or inference in the prior art as a whole or from the knowledge generally available to one of ordinary skill in the art and not from the appellant's disclosure. See, for example, Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1052, 5 USPQ2d 1434, 1439 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988).

Doerre discloses a joint prosthesis comprising first and second components which are pressed together to form a connection. The first component (3) is the male component and comprises a metal or metal alloy (column 3, lines 12-14). It is provided with “increased deformability” of its surface layer (column 2, lines 12-15) by means of circumferential grooves (4) therein or by heat treating the surface, or by placing a coating of suitable metal alloy on the surface which is soft and flexible when compared to the core of the metal component (column 2, lines 40 and 41). Doerre’s second component (2) is the female component and comprises a ceramic material (column 3, lines 5-7). The second component can be roughened to have a better connection with the first component, and can in addition be provided with ground circumferential grooves (column 2, lines 50-55; column 3, line 63-column 4, line 5).

A comparison of the structure recited in claim 1 and that of Doerre reveals that Doerre fails to disclose or teach that the second (the ceramic) component

> is provided with a coating made from a biocompatible metal or biocompatible metal alloy on the clamp surface, the coating having a rough surface in which a peak to valley height is sufficient to produce the press-fit connection upon press-fitting the first component and the second component.[3]

Recognizing this difference, the examiner has taken the position it would have been obvious to one of ordinary skill in the art to remove the coating from the first component and place it on the second component "since it has been held that a mere reversal of the essential working parts of a device involves only routine skill in the art" (Answer, page 3). We do not agree, for the following reasons.

Doerre seeks to avoid the problem of damage occurring in the ceramic second component is made after the metallic first component is press fit therein, and does so by providing the metallic first component with (1) a taper that is smaller than that of the ceramic second component, and (2) with a surface that has a lesser resistance to deformation than the metallic core (column 1). According to Doerre, this "ensures that the contact point of the female part always starts at the tapering end and, on any plastic deformation of the surface of the male part, progresses step-by-step towards the wider open sections of the joint parts," which prevents a premature contact at the wide ends of the two parts that could cause the joint head to break because of the relatively long

[3]The same limitation exists in independent claim 8, expressed in terms of a method step.

lever arm of the load acting thereon (column 2, lines 3-11). Thus, one of the features of the Doerre invention that overcomes the stated problem in the prior art is the providing of a coating of lesser resistance than the base component on the metallic first component, so that it reacts in a particular manner during the course of being press fit with the ceramic second component. In the absence of evidence to the contrary adduced by the examiner that reversing the parts would not destroy this objective, it is our view that the examiner's proposed change does not amount to "mere" reversal of working parts and thus the artisan would not have been motivated to do so.

Furthermore, Doerre teaches that the coating on the metallic first component be "a suitable metal alloy" (column 2, line 42) which provides the necessary "increased deformability of just the surface layer" (column 2, lines 12 and 13). In order for the examiner's theory to result in the coating required by the appellants' claims, this metallic coating would have to be placed on the ceramic second component, and it would have to be roughened. However, it must be noted that the extent of Doerre's teaching regarding the surface of the metallic first component is that it be grooved, <u>or</u> heat treated to make a porous surface region, <u>or</u> provided with a soft and flexible coating. Doerre does not teach that when the flexible coating alternative is chosen it also be roughened. Therefore, even if, <u>arguendo</u>, suggestion existed for taking the coating from the surface of the metallic first component and installing it on the surface of the ceramic second component, the result at best would be a metallic coating that is soft

and pliable with respect to the underlying component, and not one having the “rough surface” required by the appellants’ claims.

It thus is our view that the only suggestion for modifying the Doerre prosthesis in the manner proposed by the examiner is found in the hindsight afforded one who first viewed the appellants’ disclosure. This, of course, is not a proper basis for a rejection under Section 103. In re Fritch, 972 F.2d 1260, 1264, 23 USPQ2d 1780, 1784 (Fed. Cir. 1992). Such being the case, the teachings of Doerre fail to establish a prima facie case of obviousness with regard to the subject matter recited in independent claims 1 and 8, and we will not sustain the rejection of these claims or of those claims dependent from them.

CONCLUSION

The rejection is not sustained.

The decision of the examiner is reversed.

REVERSED

NEAL E. ABRAMS Administrative Patent Judge	)	
CHARLES E. FRANKFORT Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
JENNIFER D. BAHR Administrative Patent Judge	)	

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APPEAL NO. 2003-1732 - JUDGE ABRAMS
APPLICATION NO. 09/646,703

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APJ FRANKFORT

DECISION: **REVERSED**

Prepared By: Lesley Brooks Gordon

DRAFT TYPED: 14 Oct 04

FINAL TYPED:

OB/HD

GAU: 3700

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