

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte GUANQIANG JIANG and ATTILA ANTALFY

Appeal 2008-5722
Application 10/793,536
Technology Center 1700

Decided: December 15, 2008

Before EDWARD C. KIMLIN, PETER F. KRATZ, and
JEFFREY T. SMITH, *Administrative Patent Judges*.

KIMLIN, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 1, 3, and 5-10. We have jurisdiction pursuant to 35 U.S.C. §§ 6 and 134. Claim 1 is illustrative:

1. A biocompatible component assembly to be implanted in living tissue comprising:
 - a stainless steel part selected from the group consisting of 200, 300, and 400 series stainless steel;
 - a titanium part selected from the group consisting of titanium and titanium alloys; and
 - a substantially pure nickel filler for bonding said stainless steel part to said titanium part.

In addition to the admitted prior art, the Examiner relies upon the following reference as evidence of obviousness:

Sano et al 4,433,230 Feb. 21, 1984

Appellant's claimed invention is directed to a biocompatible component comprising stainless steel and titanium parts bonded by a pure nickel filler. The component finds utility as an implant in living tissue.

Appealed claims 1, 3, 5-10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Sano. Claim 10 also stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Sano in view of the admitted prior art.

We have thoroughly reviewed each of Appellant's arguments for patentability, as well as the declaration evidence relied upon in support

thereof. However, we are in complete agreement with the Examiner that the claimed subject matter would have been obvious to one of ordinary skill in the art within the meaning of § 103 in view of the applied prior art. Accordingly, we will sustain the Examiner's rejections for essentially those reasons expressed in the Answer, and we add the following primarily for emphasis.

As accurately set forth by the Examiner, Sano evidences that it was known in the art to hermetically seal titanium to stainless steel by a brazing process utilizing, like Appellants, a foil of nickel between the titanium and stainless steel sheets (see col. 1, ll. 40-46 and ll. 60 et seq.). The temperature of the prior art brazing process is about 950°C. Although, as emphasized by Appellants, Sano does not characterize the prior art component of titanium/stainless steel as biocompatible, we concur with the Examiner that, inasmuch as the prior art component disclosed by Sano comprises the same materials as the claimed component, it necessarily or inherently follows that the prior art component is also biocompatible. We note that Appellants have advanced no argument, let alone evidence, that the prior art component of Sano is not biocompatible.

Also, although Sano does not teach that the prior art component may be implanted in living tissue, we agree with the Examiner that the claim recitation is a statement of intended use that does not serve to distinguish the claimed structure from the component structure of the prior art. Whereas Appellants make the argument that it is known in the art that implanted components must have certain characteristics or properties, the Examiner properly points out that any such properties are not claimed, and Appellants

have not established on this record that the prior art components discussed by Sano do not share these properties. For instance, there is no reason to believe that the nickel brazed titanium/stainless steel component of the prior art, which is formed at the same brazing temperatures as Appellants' component, does not share the same or similar properties as the claimed component, e.g., not harming the living tissue, long-lived, graceful failure modes, hermetic, strong, etc.. Manifestly, these properties noted by Appellants are relative in nature and are not defined in any quantitative way. Indeed, we note again that such properties are not recited in the appealed claims.

Appellants contend that "Sano finds that the prior art bond is brittle, leaks, and is unadapted for practical application" (App. Br. 5 penultimate para.). However the portion of Sano referred to by Appellants is not directed to the prior art cited by the Examiner. Sano teaches that the conventional brazing temperature is about 950°C, whereas the titanium material became brittle for the reason that "the brazing material was fused for sealing at a higher temperature than about 900° to 950°C, namely," up to 995°C (see col. 2, ll. 19-31). Sano also teaches that the thinner the titanium material, the greater its tendency to be deformed. Accordingly, one of ordinary skill in the art would have recognized that the thickness of the titanium material and the temperature of brazing are result effective variables that would have been obvious to optimize to attain the desired bond strength. *In re Boesch*, 617 F.2d 272, 276 (CCPA 1980).

Appellants cite the Declaration of Jiang, one of the present inventors, as pointing out “the long term biocompatibility problem that leads to the specific materials teachings [sic] by Appellants” (App. Br. 4 penultimate para.). However, the Declaration offers no evidence that the prior art component disclosed by Sano is not biocompatible, and we note that the Declaration is primarily directed to a Morse patent not applied by the Examiner. The Declaration fails to address the prior art component disclosed by Sano. Indeed, there is no objective evidence of record that establishes that components within the scope of the appealed claims produce unexpected results.

As a final point, the Examiner has properly pointed out that Appellants do not address the separate § 103 rejection of claim 10 over Sano in view of the admitted prior art.

In conclusion, based on the foregoing and the reasons well stated by the Examiner, the Examiner’s decision rejecting the appealed claims 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

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