

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. 21

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte SUMANJIT SINGH, STUART E. BLACKET,  
TREVOR B. JONES and HOWARD J. LITHERLAND

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Appeal No. 2000-0084  
Application No. 08/619,672

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ON BRIEF

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

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 9, 11-13 and 15-18, which are all of the claims pending in this application.

We REVERSE and enter a new rejection under 37 CFR 1.196(b).

BACKGROUND

The appellants' invention relates to a self-penetrating fastening device. An understanding of the invention can be derived from a reading of exemplary claim 9, which appears in the appendix to the appellants' Brief.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Bray	203,815	May 21, 1878
Cummings	414,682	Nov. 12, 1889
Schleicher	5,621,961	Apr. 22, 1997
South Africa Published Patent Application (Ariel)	918,340	Oct. 18, 1991

Claims 9 and 11-13 stand rejected under 35 U.S.C. § 102(a) as being anticipated by Ariel.

Claims 15, 16 and 18 stand rejected under 35 U.S.C. § 103 as being unpatentable over Ariel in view of Schleicher.

Claim 17 stands rejected under 35 U.S.C. § 103 as being unpatentable over Ariel in view of either Cummings or Bray.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejections, we make reference to the Answer (Paper No. 18) for the examiner's complete reasoning in support of the rejections, and to the Brief (Paper No. 17) and Reply Brief (Paper No. 19) for the appellants' arguments thereagainst.

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.

*The Rejection Under 35 U.S.C. § 102(a)*

Independent claim 9 stands rejected as being anticipated by Ariel. Anticipation is established only when a single prior art reference discloses, either expressly or under the principles of inherency, each and every element of the claimed invention. See In re Paulsen, 30 F.3d 1475, 1480-1481, 31 USPQ2d 1671, 1675 (Fed. Cir. 1994) and In re Spada, 911 F.2d 705, 708, 15 USPQ2d 1655, 1657 (Fed. Cir. 1990).

Claim 9 requires, inter alia, that the rivet include "a substantially rounded transition region having a radius and extending from said shank [of the rivet] to a bottom of said rivet head." The examiner is of the view that this is disclosed in Ariel by virtue of the curved portion that the examiner believes is shown at the point of joinder between the rivet head and shank in Figures 2-5. While it is our view that a problem exists with regard to the definiteness of this language of the claim, in the interest of judicial economy we shall pass judgement on the propriety of the examiner's rejection. In this regard, the issue of indefiniteness arises with regard to the manner in which the rounded transition region is

set forth in the claim. However, it is present in the claim, and this feature can be evaluated in view of the teachings of the applied prior art.

We begin our analysis by pointing out that there is no explicit description in Ariel of the portion of the rivet that is located at the intersection of the head and the shank. We thus are left only to the drawings to determine whether it is curved, as the examiner has urged. As we view the drawings, in which the rivets are shown in side elevation, the juncture between the rivet head and the shank appears to be rounded in Figures 2, 3, 7, and 8, not to be rounded in Figures 4, 10, 11, and rounded on one side and not rounded on the other side in Figures 13 and 14. In Ariel's description of the drawings, it is stated that Figure 2 illustrates a rivet in accordance with the invention and that the rest of the Figures illustrate the same rivet (for example, Figures 3, 4 and 5 illustrate "the self-piercing rivet of Figure 2"). Since a multitude of the Figures illustrate the rivet shown in Figure 2, and they differ in their presentation of this particular portion, it is our conclusion that it cannot be determined with certainty that Ariel teaches that there is a substantially rounded transition region having a radius extending from the shank to the head. This being the case, the rejection of independent claim 9 and dependent claims 11-13 under Section 102 cannot be sustained.

*The Rejections Under 35 U.S.C. § 103*

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).

The first of the rejections under this section of the statute is that claims 15, 16 and 18 are unpatentable over Ariel and Schleicher. As we concluded above, Ariel does not establish that it was known in the art at the time of the appellants' invention to provide a substantially rounded transition section having a radius between the rivet head and the stem. Moreover, we fail to perceive any teaching, suggestion or incentive in Ariel which would have led one of ordinary skill in the art to provide the rivet disclosed therein with such a construction. Nor do we find such in Schleicher, which

was cited by the examiner for its showing of a particular counterpressure tool structure. The combined teachings of these two references therefore fail to establish a prima facie case of obviousness with regard to claims 15, 16 and 18 which, of course, incorporate all of the limitations of claim 9, from which they depend. This rejection will not be sustained.

We reach the same conclusion with regard to the rejection of claim 17 on the basis of Ariel in view of either Cummings or Bray, for the secondary references also do not alleviate the shortcoming in Ariel.

*New Rejection Made By The Board*

Pursuant to our authority under 37 CFR 1.196(b), we enter the following new rejection:

Claims 9, 11-13 and 15-18 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite in that they fail to particularly point out and distinctly claim the subject matter which the appellants regard as their invention.

While we are mindful that the appellants are free to claim their invention in broad terms and are entitled to the broadest reasonable interpretation of the claim language, because a patentee has the right to exclude others from making, using and selling the invention covered by the patent (35 U.S.C. §154), the public must be apprised of exactly what the patent covers, so that those who would approach the area

circumscribed by the claims of a patent may more readily and accurately determine the boundaries of protection involved and evaluate the possibility of infringement and dominance. It is to this that the second paragraph of 35 U.S.C. § 112 is directed. See In re Hammack 427 F.2d 1378, 166 USPQ 204 (CCPA 1970).

It is our opinion that two instances of indefiniteness appear in claim 9. The first is that it is not clear as to which of the three elements named in the opening lines are intended to be covered by the claim. The claim states that the invention is “[a] self-penetrating fastening device including a rivet impacted by a punch and a counterpressure tool” (lines 1 and 2, emphasis added). It goes on to recite only the structure of the rivet. Claim 9 thus could be interpreted as not positively reciting the punch and the counterpressure tool. However, the rivet has been described in the specification as “a component of the self-penetrating fastening device” (page 3, line 10), which would imply that the “device” includes all three elements. This conclusion is supported by the fact that details of “said counterpressure tool” are recited in dependent claims 13-16 and 18. Consideration should be given to changing “device” to “system” in appropriate places in the specification and claims, and deleting “impacted by” from claim 9.

The second instance is in regard to the closing lines of claim 9, which recite:

a substantially rounded transition region having a radius and extending from said shank to a bottom of said rivet head.

The rivet head is not defined with particularity in the claim. We therefore look to the specification for clarification, for deciding whether the claims set out and circumscribe a particular area with a reasonable degree of precision and particularity requires that the language employed in the claims be analyzed, not in a vacuum, but in light of the teachings of the prior art and of the particular application disclosure as it would be interpreted by one possessing the ordinary level of skill in the pertinent art. See In re Johnson, 558 F.2d 1008, 1015, 194 USPQ 187, 193 (CCPA 1977). In the present case, the specification states in line 7 at page 4 that the bottom of the rivet head is denoted by the numeral 11, the lead line of which appears to point to the intersection between radius R1 and radius R2. However, in the next sentence the specification informs the artisan that the “rivet head” has a height “H” (see Figure 1), which is “determined from the beginning of the transition from rivet shank 6 to outwardly directed radius R1” (lines 9 and 10). From this it would appear that the “transition region” recited in claim 9 actually is part of the rivet head, for it falls within height “H.” This flies in the face of the language of the claim, which states that the transition region extends from the shank to “a bottom of the head,” thus indicating that the transition region is not part of the head. The situation is further complicated by relating the transition region in the claim to “a bottom of said head” (emphasis added) rather than the bottom of the head, for the former implies that there is more than one bottom of the head.

For these reasons, the metes and bounds of the claim are indeterminable, in our view, and form the basis for a rejection under the second paragraph of Section 112.

#### CONCLUSION

The three rejections made by the examiner are not sustained, and therefore the decision of the examiner is reversed.

However, a new rejection of all of the pending claims under 35 U.S.C. § 112, second paragraph, has been entered by the Board under 37 CFR 1.196(b).

This decision contains a new ground of rejection pursuant to 37 CFR § 1.196(b)(amended effective Dec. 1, 1997, by final rule notice, 62 Fed. Reg. 53,131, 53,197 (Oct. 10, 1997), 1203 Off. Gaz. Pat. & Trademark Office 63, 122 (Oct. 21, 1997)). 37 CFR § 1.196(b) provides that, "A new ground of rejection shall not be considered final for purposes of judicial review."

37 CFR § 1.196(b) also provides that the appellants, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options

with respect to the new ground of rejection to avoid termination of proceedings (§ 1.197(c))  
as to the rejected claims:

(1) Submit an appropriate amendment of the claims so rejected or a showing of facts relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the application will be remanded to the examiner. . . .

(2) Request that the application be reheard under § 1.197(b) by the Board of Patent Appeals and Interferences upon the same record. . . .

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

NEAL E. ABRAMS	)	
Administrative Patent Judge	)	
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	)	
	)	BOARD OF PATENT
JOHN P. McQUADE	)	APPEALS
Administrative Patent Judge	)	AND
	)	INTERFERENCES
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JEFFREY V. NASE	)	
Administrative Patent Judge	)	

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