THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 25

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ALFRED F. HERBERMANN

Appeal No. 97-2999
Application No. 08/338,714[1]

ON BRIEF

Before STAAB, 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 23 through 25, 33 and 35 through 40.[2]

[1] Application for patent filed November 14, 1994. According to the appellant, the application is a continuation of Application No. 08/177,091, filed January 3, 1994, now U.S. Patent No. 5,383,738, which was a continuation of Application No. 07/840,420, filed February 24, 1992, now abandoned.

[2] Claims 23, 33 and 35 have been amended subsequent to the final rejection.

Claims 26 through 32 are allowed. Claims 1 through 22 and 34 have been canceled.

We AFFIRM-IN-PART.

BACKGROUND

The appellant's invention relates to ball jointed links. An understanding of the invention can be derived from a reading of exemplary claims 23, 33 and 36, which appear in the appendix to the appellant's brief.

The prior art references of record relied upon by the examiner as evidence of obviousness under 35 U.S.C. § 103 are:

Haver	2,329,369	Sep. 14, 1943
Kujawski	2,439,009	Apr. 6, 1948
Wagenknecht	4,941,481	July 17, 1990

Claims 33 and 35 through 40 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the appellant regards as the invention.

Claims 23 through 25 stand rejected under 35 U.S.C. § 103 as being unpatentable over Kujawski in view of Haver.

Claims 33 and 35 through 40 stand rejected under 35 U.S.C. § 103 as being unpatentable over Kujawski in view of Wagenknecht.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellant regarding the § 103 and § 112 rejections, we make reference to the examiner's answer (Paper No. 22, mailed March 17, 1997) for the examiner's complete reasoning in support of the rejections, and to the appellant's brief (Paper No. 21, filed December 23, 1996) and reply brief (Paper No. 23, filed May 5, 1997) 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 applied prior art references, and to the respective positions articulated by the appellant and the examiner. As a consequence of our review, we make the determinations which follow.

The indefiniteness issues

We do not sustain the rejections of claims 33 and 35 through 40 under 35 U.S.C. § 112, second paragraph.

The second paragraph of 35 U.S.C. § 112 requires claims to set out and circumscribe a particular area with a reasonable degree of precision and particularity. In re Johnson, 558 F.2d 1008, 1015, 194 USPQ 187, 193 (CCPA 1977). In making this determination, the definiteness of the language employed in the claims must be analyzed, not in a vacuum, but always 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. Id.

Claims 33 and 35

We do not agree with the examiner that claim 33 infers that the male ball is formed of a material "harder" than the clamp. Claim 33 recites that the male ball is formed of a material that is "harder" than the female locking portion. The specification makes clear that the female locking portion

includes both the socket 30 and the clamp 28. The specification also clearly describes that the male ball 32 is formed of a material that is "harder" than the socket 30. In our opinion, claim 33, when read in light of the specification, is definite since the scope of the invention sought to be patented can be determined from the language of the claim with a reasonable degree of certainty. Furthermore, while the examiner is correct that the language of claim 33 is broad enough to read on the male ball being formed of a material "harder" than the clamp, the mere breadth of the claim does not in and of itself make the claim indefinite.

Claims 36 through 40

We do not agree with the examiner that claim 36 is indefinite. When considering claim 36 as a whole, it is clear to us that claim 36 is reciting the combination of a base, a mount structure, a tool and at least two links. We reach this conclusion based upon claim 36 reciting (1) "A structure . . . comprising: a mount structure mounted to a base; a tool mounted at a location remote from said base," and (2) that the at least two links connect "said tool to said base." While we

agree with the examiner, that the preamble of claim 36 is inconsistent with the recitations of the body of the claim, such inconsistency, in this case, does not render the claim indefinite since the scope of the invention sought to be patented can be determined from the language of the claim with a reasonable degree of certainty.[3]

[3] We encourage the appellant to correct this inconsistency by filing a suitable amendment, such as the deletion of "for supporting a tool" from line 1 of claim 36.

The obviousness issues

Claims 23 through 25

We sustain the rejection of claims 23 through 25 under 35 U.S.C. § 103.

Claim 23 recites a link element comprising, inter alia, a male ball, a female socket, and a body extension extending between the male ball and the female socket. The male ball is locked on the body extension by the male ball having a recess which receives a bead provided on the body extension.

Kujawski discloses a flexible joint of the ball and socket type. As shown in Figures 1 and 2, Kujawski's flexible joint includes a conduit 10 having two ends, a socket housing 22 is connected to one end of the conduit 10 and a ball 20 is connected to the other end of the conduit 10. As shown in Figure 2, the conduit 10 appears to be threadably connected to the ball 20.

Haver discloses a ball and socket joint. As shown in Figure 1, the joint includes a spherical cuff (i.e., ball) 8,

a tubular outlet 5, and a socket 10. An annular ridge 6 is formed in the tubular outlet 5 to engage with an annular slot 7 formed in the inner wall of the cuff 8 and serves to secure the cuff 8 firmly in position upon the end of the tubular outlet 5.

After the scope and content of the prior art are determined, the differences between the prior art and the claims at issue are to be ascertained. Graham v. John Deere Co., 383 U.S. 1, 17-18, 148 USPQ 459, 467 (1966).

Based on our analysis and review of Kujawski and claim 23, we agree with the examiner that the only difference is that Kujawski utilizes a thread to secure conduit 10 (i.e., the body extension) to the ball 20 whereas claim 23 requires a bead on the body extension cooperating with a recess in the male ball to lock the male ball on the body extension.

With regard to this difference, the examiner determined (answer, p. 6) that

> it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the link assembly of Kujawski by substituting the mating thread locking arrangement with the deformed bead and corresponding groove locking arrangement to benefit from having the locking arrangement which is much more simple and cost effective to make.

We agree.

We do not agree with the appellant's argument (brief, pp. 9-10) that there is no suggestion in Haver that would have led one to modify Kujawski. When it is necessary to select elements of various teachings in order to form the claimed invention, we ascertain whether there is any suggestion or motivation in the prior art to make the selection made by the appellant. Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion or incentive supporting the combination. The extent to which such suggestion must be explicit in, or may be fairly inferred from, the references, is decided on the facts of each case, in light of the prior art and its relationship to the appellant's invention. Thus, the references themselves must provide some teaching whereby the appellant's combination would have been obvious. In re

Gorman, 933 F.2d 982, 986, 18 USPQ2d 1885, 1888 (Fed. Cir. 1991) (citations omitted). That is, something in the prior art as a whole must suggest the desirability, and thus the obviousness, of making the combination. See In re Beattie, 974 F.2d 1309, 1312, 24 USPQ2d 1040, 1042 (Fed. Cir. 1992); Lindemann Maschinenfabrik GmbH v. American Hoist and Derrick Co., 730 F.2d 1452, 1462, 221 USPQ 481, 488 (Fed. Cir. 1984). In this case, it is our opinion that the teaching of Haver that ridge 6 is shaped to engage slot 7 to firmly secure the cuff 8 in position on the outlet 5 provides the needed suggestion to modify Kujawski as set forth by the examiner. Additionally, the self-evident advantages (e.g., a locking arrangement which is much more simple and cost effective to make) of substituting one known locking arrangement (i.e., bead and groove) for another known locking arrangement (i.e., threads) would have been readily apparent to a person of ordinary skill in the art.[4]

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[4] An artisan must be presumed to know something about the art apart from what the references disclose (see In re Jacoby, 309 F.2d 513, 516, 135 USPQ 317, 319 (CCPA 1962)) and the conclusion of obviousness may be made from "common knowledge and common sense" of the person of ordinary skill in the art (see In re Bozek, 416 F.2d 1385, 1390, 163 USPQ 545, 549 (CCPA

For the reasons set forth above, we sustain the examiner's rejection of claim 23 under 35 U.S.C. § 103.

The appellant has grouped claims 23 through 25 as standing or falling together.[5] Thereby, in accordance with 37 CFR § 1.192(c)(7), claims 24 and 25 fall with claim 23. Thus, it follows that the examiner's rejection of claim 24 and 25 under 35 U.S.C. § 103 is also sustained.

1969)).

[5] See page 4 of the appellant's brief.

Claims 33 and 35 through 40

We do not sustain the rejection of claims 33 and 35 through 40 under 35 U.S.C. § 103.

Independent claims 33 recites "a clamp tightened to have surfaces moving radially inwardly to lock said female locking portion on said male ball." Independent claims 36 recites "a clamp tightened to have surfaces moving radially inwardly to lock said female locking structure on said male ball."

With respect to the above-noted limitations, the examiner concluded (answer, p. 10) that due to the geometry of Kujawski's spherical ball 20, "the surface 30 would inherently move radially inward as the clamp 27 is screwed onto the threaded element 25."

The appellant (reply brief, pp. 2-3) does not agree with the examiner's "inherent" interpretation of movement. The appellant believes that as Kujawski's clamp 27 is screwed onto the threaded element 25, the surface 30 would be moved

radially outwardly as the flange 29 moves onto larger diameter portions of the ball 20.

When relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art. See Ex parte Levy, 17 USPQ2d 1461, 1464 (Bd. Patent App. & Int. 1990). The mere fact that a certain thing may result from a given set of circumstances is not sufficient. See In re Oelrich, 666 F.2d 578, 581, 212 USPQ 323, 326 (CCPA 1981). We are mindful that there is a line of cases represented by In re Swinehart, 439 F.2d 210, 169 USPQ 226 (CCPA 1971) which indicates that where an examiner has reason to believe that a functional limitation asserted to be critical in the claimed subject matter may, in fact, be an inherent characteristic of the prior art, the examiner possesses the authority to require an applicant to prove that the subject matter shown to be in the prior art does not possess the characteristic relied on. Nevertheless, before an applicant can be put to this burdensome task, the examiner

must provide sufficient evidence or scientific reasoning to establish the reasonableness of the examiner's belief that the functional limitation is an inherent characteristic of the prior art. In the case before us, it is our opinion that the examiner has not provided sufficient evidence or scientific reasoning to establish the reasonableness of his belief that the functional limitation is an inherent characteristic of Kujawski.

We have also reviewed the Haver and Wagenknecht references additionally relied upon by the examiner in rejecting the claims under appeal but find nothing therein that would have suggested the above-noted deficiency of Kujawski.

Since all the limitations of independent claims 33 and 36 are not suggested or taught by the applied prior art, we cannot sustain the examiner's rejection of appealed claims 33

and 36, or claims 35 and 37 through 40 which depend therefrom, under
35 U.S.C. § 103.

CONCLUSION

To summarize, the decision of the examiner to reject claims 33 and 35 through 40 under 35 U.S.C. § 112, second paragraph is reversed; the decision of the examiner to reject claims 23 through 25 under 35 U.S.C. § 103 is affirmed; and the decision of the examiner to reject claims 33 and 35 through 40 under
35 U.S.C. § 103 is reversed.

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

AFFIRMED-IN-PART

LAWRENCE J. STAAB Administrative Patent Judge	)	
JOHN P. McQUADE Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
JEFFREY V. NASE Administrative Patent Judge	)	

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APPEAL NO. 97-2999 - JUDGE NASE
APPLICATION NO. 08/338,714

APJ NASE

APJ STAAB

APJ McQUADE

DECISION: **AFFIRMED-IN-PART**

Prepared By: Delores A. Lowe

DRAFT TYPED: 11 Mar 98

FINAL TYPED: