

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(2) is not binding precedent of the Board.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. 26

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte TSUTOMU KODAMA
and
KAZUHIRO KATO

Appeal No. 95-4857
Application 08/101,000¹

HEARD: December 10, 1998

Before CALVERT, COHEN and STAAB, Administrative Patent Judges.
CALVERT, Administrative Patent Judge.

¹ Application for patent filed August 3, 1993.

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Application 08/101,000

DECISION ON APPEAL

This is an appeal from the final rejection of claims 1 and 4 to 9, all the claims remaining in the application.

The claims on appeal are drawn to a fuel transporting hose construction, and are reproduced in Appendix A of appellants' brief.

The references applied in the final rejection are:

Johansen et al. (Johansen)	3,828,112	Aug. 6, 1974
Press	4,293,150	Oct. 6, 1981

An additional reference applied herein in rejections pursuant to 37 CFR § 1.196(b) is:

Igarashi et al. (Igarashi)	4,887,647	Dec. 19, 1989
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The claims on appeal stand finally rejected as follows:

(1) Claims 1, 8 and 9, unpatentable over Johansen, under 35 U.S.C. § 103;

(2) Claims 4 to 7, unpatentable over Johansen in view of Press, under 35 U.S.C. § 103.

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Considering first the rejection of claim 1, Johansen discloses a hose for use "as an electrically insulated paint supply hose with air atomizing spray guns" (col. 1, lines 5 and 6). In Figs. 3 and 4, Johansen discloses an embodiment of the hose having an inner layer 11' of a "fluorine-contained resin," i.e., PTFE (Teflon) (col. 2, lines 29 to 32), and an outer layer 12 of a rubber material (col. 2, lines 55 to 58). Johansen does not specifically disclose any dimensions for these layers, but the examiner takes the position that (1) the thickness of each layer would be an obvious design choice, (2) Fig. 4 of Johansen suggests the claimed structure, (3) the claimed dimensions are simply the discovery of optimum values of result effective variables,² and (4) the declaration under 37 CFR § 1.132³ does not address the criticality set forth in the specification.

² Citing In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

³ Rule 132 Declaration of Tsutomu Kodama, filed April 8, 1994 (Paper No. 8).

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After fully considering the record in light of the arguments presented by appellants and the examiner, we conclude that this rejection will not be sustained.

Considering first the examiner's argument (4), we understand this to be directed to the fact that the Rule 132 Declaration purportedly shows that the recited dimensions and ratios are critical to achieve desirable sealing pressures and insert forces, while such properties are not disclosed as critical in appellants' specification. This argument is not well taken, however, because in accordance with the holding in In re Chu, 66 F.3d 292, 298, 36 USPQ2d 1089, 1094 (Fed. Cir. 1995), the evidence and/or arguments presented by an applicant in response to a rejection under § 103 do not have to be contained within the specification in order to be considered. Thus in this case, appellants are not precluded from submitting evidence to show that the claimed numerical limitations are critical to achieve advantages not disclosed in their application.

As for the showing in Fig. 4 of Johansen, layer 11' is shown as having a smaller thickness than layer 12, and the drawing is assumed to show proportions of the parts it purports to delineate. Ex parte Hill, 169 USPQ 437, 438 (Bd. App. 1970). We nevertheless do not regard Fig. 4 as suggestive of appellants' claimed range, because the ratio of the thickness of Johansen's layers 11' and 12 is approximately 1:3, which is considerably smaller than appellants' minimum claimed ratio of 1:10.⁴

In the present case, the structure claimed by appellants differs from that disclosed in the prior art in that particular ranges of thickness and thickness ratio are recited. In such a situation, appellants must show that the claimed ranges are critical, see In re Woodruff, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and we consider that they have done so. Appellants' experimental data cannot be characterized as the optimization of a result effective variable (In re Boesch) or the discovery of optimum

⁴ We suggest that appellants' Fig. 1 be amended so that the thickness ratio of layers 1 and 2 (which now appears to be about 1:2) more closely approximates the claimed range.

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ranges (In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955)), because there is no teaching in the prior art reference (Johansen) that the variables here involved, i.e., layer thickness and thickness ratio, are "known to be result effective."⁵ In order for a claimed parameter to be deemed the result of obvious experimentation, any such experimentation must have come from within the teachings of the art. In re Weymouth, 499 F.2d 1273, 1276, 182 USPQ 290, 292 (CCPA 1974). Johansen contains no such teachings.

Accordingly, the rejection of claim 1, and of claims 8 and 9 dependent thereon, will not be sustained. The rejection of

claims 4 to 7 will likewise not be sustained, since Press does not supply the noted deficiencies of Johansen.

Rejections Pursuant to 37 CFR § 1.196(b)

The following rejections are made pursuant to 37 CFR § 1.196(b):

⁵ In re Boesch, 617 F.2d at 276, 205 USPQ at 219.

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(A) Claims 1, 8 and 9 are rejected under 35 U.S.C. § 102(b) as anticipated by Igarashi. In col. 5, Table 4, Igarashi discloses as Comparative Example 2 a fuel transporting hose having an inner layer of a fluorine-containing resin, FEP, with a thickness of 0.1 mm, an outside rubber layer of "N" (acrylonitrile-butadiene rubber (NBR)), with a thickness of 1.6 mm, and an outer tube rubber layer of "C" (epichlorohydrin rubber (ECO)), with a thickness of 1.0 mm. Igarashi's outside rubber layer and outer tube rubber layer together constitute "an outer layer comprised of a rubber material," as broadly recited, having a total thickness of 2.6 mm and being 26 times as thick as the inner layer, and therefore the disclosed hose falls within the ranges recited in claim 1.

(B) Claims 4 to 7 are rejected under 35 U.S.C. § 103 as unpatentable over Igarashi in view of Press, the latter of which discloses that, when handling fluids such as aircraft fuel in a fluoro-containing resin (PTFE) conduit, the conduit should

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contain a high loading of carbon black particles to prevent buildup of an electrostatic charge (col. 6, lines 9 to 23). This disclosure would have motivated one of ordinary skill in the art to provide carbon black particles in the fluorine-containing resin inner layer of Igarashi for the same purpose. The resistivity and concentration of additive recited in claims 5 and 6 would have been obvious matters of choice, selected to achieve the desirable result taught by Press.

Conclusion

The examiner's decision to reject claims 1 and 4 to 9 is reversed. Claims 1 and 4 to 9 are rejected pursuant to 37 CFR § 1.196(b).

This decision contains new grounds 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. and 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."

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37 CFR § 1.196(b) also provides that the appellant, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new grounds of rejection to avoid termination of proceedings (37 CFR § 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).

REVERSED 37 CFR § 1.196(b)

IAN A. CALVERT)
Administrative Patent Judge)
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	LAWRENCE J. STAAB)	
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