

The opinion in support of the decision being entered today was *not* written for publication in and is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MICHAEL G. WEBSTER and JEFF J. ADAMS

Appeal No. 2006-0965
Application No. 10/827,051
Technology Center 3700

ON BRIEF

Decided: February 7, 2007

Before BAHR, CRAWFORD, and LEVY, *Administrative Patent Judges*.

LEVY, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. §134 from the examiner's final rejection of claims 22-27, 33 and 34. Claims 1-23 and 28-32 have been cancelled (Brief p. 1).

We AFFIRM-IN-PART, and enter a New Ground of Rejection under the provisions of 37 CFR § 41.50(b).

BACKGROUND

The appellants' invention relates to a clamping device that may be specially adapted for use in sealing together the components of mass flow controllers such as those used in the manufacture of semiconductor devices (Spec. p.3). An understanding of the invention can be derived from a reading of exemplary claim 24, which is reproduced below.

A position maintainer for a workpiece, comprising:

a biasing device configured to exert a compression force along an axis;

a surface across from said biasing device along said axis and configured to oppose said compression force; and

a plurality of stoppers switchably exclusively interposed between said surface and said biasing device along said axis.

PRIOR ART

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

Yates	713,189	Nov. 11, 1902
Vreeland	2,551,652	May 8, 1951
Buchler	4,824,085	Apr. 25, 1989

THE REJECTIONS

Claims 24-27 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Vreeland.

Claims 33 and 34 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Yates in view of Buchler.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejections, we make reference to the answer (mailed October 31, 2005) for the examiner's complete reasoning in support of the rejections, and to the brief (filed September 12, 2005) and reply brief (filed January 9, 2006) for the appellants' arguments thereagainst.

Only those arguments actually made by appellants have been considered in this decision. Arguments which appellants could have made but chose not to make in the brief have not been considered. See 37 C.F.R. § 41.37(c)(1)(vii)(eff. Sept. 13, 2004).

OPINION

In reaching our decision in this appeal, we have carefully considered the subject matter on appeal, the rejections advanced by the examiner, and the evidence of anticipation and obviousness relied upon by the examiner as support for the rejections. We have, likewise, reviewed and taken into consideration, in reaching our decision, appellants' arguments set forth in the briefs along with the examiner's rationale in support of the rejections and arguments in rebuttal set forth in the examiner's answer.

Upon consideration of the record before us, we make the determinations which follow. We begin with the rejection of claims 24-27 under

35 U.S.C. § 102(b) as being anticipated by Vreeland. We turn first to independent claim 24. We note by way of background that the burden of establishing a prima facie case of anticipation resides with the United States Patent and Trademark Office (USPTO). *See In re Piasecki*, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984).

Appellants assert (Brief p. 3) that “the Examiner’s attempt to analogize Vreeland’s workpiece to a component of claim 24’s position maintainer is untenable, as the position maintainer is expressly distinguished from a workpiece in claim 24’s preamble.” It is asserted (Brief p. 4) that the problem with the examiner's analogizing claim 24's stoppers to Vreeland's apertures 26, 27, and 28 is that claim 24 requires the stoppers to be interposed between the surface and the biasing device. Appellants argue (*id.*) that the apertures 26-28 cannot be interpreted as being interposed between the surface of base 10 and glass tube 31 (or elements 21, 18, and 23). It is further argued (Brief p. 4) that the examiner's citation of Vreeland's element 25 as an aperture represents a mis-comparison because Vreeland's element 25 is a base plate rather than an aperture. Appellants also take issue with the examiner's contention that base plate 25 is a plurality of stoppers, and asserts that the examiner's position is contrary to Vreeland's disclosure of a single base plate. Appellants argue that as a result of these differences, Vreeland cannot be understood to anticipate claim 24.

The examiner's position (Answer p. 3) is that the stoppers are elements 26, 27, and 28 of Vreeland, and that portions of the block containing apertures are stoppers; i.e., each 1/3 of the block containing a single aperture is a stopper. The examiner adds (Answer pp. 5 and 6) that due to the selective positioning of the block as it is slid along the base, the 1/3 of the block is switchably exclusively interposed between the base and the biasing means.

We begin our analysis with claim construction. Before addressing the examiner's rejections based upon prior art, it is an essential prerequisite that the claimed subject matter be fully understood. Analysis of whether a claim is patentable over the prior art begins with a determination of the scope of the claim. The properly interpreted claim must then be compared with the prior art. Claim interpretation must begin with the language of the claim itself. *See Smithkline Diagnostics, Inc. v. Helena Laboratories Corp.*, 859 F.2d 878, 882, 8 USPQ2d 1468, 1472 (Fed. Cir. 1988). Accordingly, we will initially direct our attention to appellants' claim 24 to derive an understanding of the scope and content thereof. We note at the outset the language "[a] position maintainer for a workpiece, comprising:" According to appellants (Brief p. 3), the position maintainer language in claim 24 distinguishes over Vreeland's workpiece. We disagree. In order for a preamble to be given patentable weight, it is necessary that the preamble breath life and meaning into the claim. Here, the language "position maintainer" does not provide antecedent basis for any language in the claim. In addition, the claim is complete in and of itself, and does not rely upon the language "position maintainer" for completeness. Accordingly, we find that the language "position maintainer" in claim 24 fails to breath life and meaning into the claim, and has not been given patentable weight.

From our review of Vreeland, we agree with the examiner that tube 18, chuck 21, and wheel 23 (figure 1) meet the claimed biasing device because these elements cooperate to move glass tube 31 downwardly through perforated stopper 29 (col. 1, ll. 31-34 and 42-53). In addition, although we do not agree with the examiner (Answer p. 3) that each 1/3 of base plate 25 can be considered to be a plurality of stoppers switchably exclusibly interposed between the surface 30 and the biasing device, we find that this limitation is met for the reasons which follow.

Vreeland discloses (col. 1, ll. 32-34) that the base plate contains a plurality of tapered holes for receiving perforated stoppers, and that the base plate is slidable within recess 30 in the base 10. Thus we find from Vreeland that perforated stoppers 29 are placed in the apertures 26-28 and that the base plate 25 is slidable in recess 30 to allow for different size tapered apertures (col. 2, l. 20). From the disclosure of sliding the base plate in the recess to permit a stopper in different tapered apertures to receive a glass tube, we find that the disclosure of Vreeland meets the claimed "plurality of stoppers switchably exclusively interposed between said surface and said biasing device along said axis" as recited in claim 24. Note that the "said surface" is recess 30 of base 10, and that the axis is the axis of the glass tube 31. In addition, we find that recess 30 meets the claimed surface across from the biasing device as the recess is across from the biasing device 18, 21, and 23. However, it is at this point that we part company with the examiner. Although the surface 30 is across from the biasing device along the axis, claim 24 requires more. The claim additionally recites that the surface is configured to oppose the compression force. In Vreeland, the opposition to the compressive force is provided by the surfaces of the stoppers that engage the glass tube. These surfaces are part of the stopper, and not part of the surface that is across from the biasing device, i.e., the recess 30. The stoppers are between the surface and the biasing device, and are a separate element from the stoppers. Thus, we cannot rely upon the perforations in the stoppers 29 to meet the claimed surface. In recess 30, we find an aperture, unnumbered, in figure 1, which receives the glass tube. However, even though the drawings are not drawn to scale, it appears that the glass tube goes through this aperture without opposition.

From our review of Vreeland, we find no disclosure that this unnumbered aperture in recess 30 is configured to oppose the compressive force. Accordingly,

we do not agree with the examiner (Answer p. 3) that the recess at the bottom of the surface 30 meets the claimed surface. Accordingly, we agree with appellants (Brief, p. 3) that Vreeland fails to disclose the opposing language of claim 24. From all of the above, we will not sustain the rejection of claim 24, or claims 25-27 which depend therefrom, under 35 U.S.C. § 102(b).

We turn next to the rejection of claims 33 and 34 under 35 U.S.C. § 103(a) as being unpatentable over Yates in view of Buchler. We note as background that in rejecting claims under 35 U.S.C. § 103, it is incumbent upon the examiner to establish a factual basis to support the legal conclusion of obviousness. *See In re Fine*, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the examiner is expected to make the factual determinations set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 17, 148 USPQ 459, 467 (1966). The examiner must articulate reasons for the examiner's decision. *In re Lee*, 277 F.3d 1338, 1342, 61 USPQ2d 1430, 1434 (Fed. Cir. 2002). In particular, the examiner must show that there is a teaching, motivation, or suggestion of a motivation to combine references relied on as evidence of obviousness. *Id.* at 1343. The examiner cannot simply reach conclusions based on the examiner's own understanding or experience - or on his or her assessment of what would be basic knowledge or common sense. Rather, the examiner must point to some concrete evidence in the record in support of these findings." *In re Zurko*, 258 F.3d 1379, 1386, 59 USPQ2d 1693, 1697 (Fed. Cir. 2001). Thus the examiner must not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the examiner's conclusion. However, a suggestion, teaching, or motivation to combine the relevant prior art teachings does not have to be found explicitly in the prior art, as the teaching, motivation, or suggestion may be implicit from the prior art as a whole, rather than expressly

stated in the references. The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art. *In re Kahn*, 441 F.3d 977, 987, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006) citing *In re Kotzab*, 217 F.3d 1365, 1370, 55 USPQ2d 1313 (Fed. Cir. 2000). See also *In re Thrift*, 298 F. 3d 1357, 1363, 63 USPQ2d 2002, 2008 (Fed. Cir. 2002). These showings by the examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. *Note In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). If that burden is met, the burden then shifts to the applicant to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. *See Id.*; *In re Hedges*, 783 F.2d 1038, 1039, 228 USPQ 685, 686 (Fed. Cir. 1986); *In re Piasecki*, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984); and *In re Rinehart*, 531 F.2d 1048, 1052, 189 USPQ 143, 147 (CCPA 1976).

The examiner's position (Answer p. 4) is that Yates shows a clamping device having a plurality of stop blocks that are configured to be interchangeably interposed between the back member of the workpiece, as described in p. 1, line 100 through p. 2, line 4 of Yates. The examiner states that Yates lacks opposing side members coupled to the front and back member that would define a channel therebetween. To overcome this deficiency of Yates, the examiner turns to Buchler for a teaching of a clamping device having front, back, and opposing side members, as well as interchangeable stop blocks 1.3, as illustrated in figures 3 and 4.

Appellants assert (Brief pp. 10-11) that the examiner has misapplied the references, and that the references teach away from each other as well as from the

examiner's proposed modification. Appellants assert (Brief, p. 11) that in an earlier application, another examiner found that Buchler lacks removable stop blocks. Appellants additionally assert (*id.*) that in Buchler, the reference to the frame clamp of the invention as having a closed, rectangular "flat frame to hold a workpiece with precision without play or stress," relates to the holding of *a flat object*. It is argued (*id.*) that this portion of Buchler relied upon by the examiner addresses a far more specific workpiece.

It is further asserted (Brief p. 12) that the references teach away from each other because Buchler uses a flat workpiece whereas Yates relates to a pipe. It is argued that the directly opposing nature of the workpieces would discourage an artisan from combining Yates and Buchler. Appellants further note (*id.*) that "Buchler specifies that open clamp frames and specifically vises-are incapable of holding a workpiece without play or slack, thereby frustrating the need for high-precision positioning (Buchler at col. 1, ll. 9-23)." From Buchler's disclosure of a closed frame clamp that allows no play, appellants argue (Brief p. 13) that an artisan, having Yates' clamp in mind, would view Buchler's closed clamp as unduly limiting the size of the workpiece that could be accommodated.

It is further argued (Brief, pp. 13-14) that an artisan would understand the generally elongated configuration of pipes and that the pipes would extend beyond the sides of Yates' vice, and that to block the sides of the vice of Yates would unduly limit the length of pipes that Yates could accommodate.

The examiner responds (Answer p. 6) that Buchler employs removable interchangeable stop blocks in figures 3 and 4, and that "any combination of Buchler and Yates would render applicant's claims obvious under 35 USC 103."

From our review of the record, we find that Yates discloses (p. 1, ll. 60-62, 68-72, and 101 through p. 2, l. 1) that

I provide a series of pairs of detachable jaw-faces for use in connection with jaws.

The front of the jaw-face is transversely grooved to present two parallel transverse ribs 12, which are shaped to present sharp holding or clamping edges 13, two for each jaw.

[T]o adjust the rise from one range of pipe sizes to another it is only necessary to remove one pair of jaw-faces and insert another pair of the desired sizes and, if desired, one or more pairs of jaw-faces - can be reserved for particular work.

From the disclosure of Yates, we find that the reference discloses a series of pairs of detachable jaw faces for accommodating different size workpieces. However, from the disclosure of Yates of using the clamp for clamping pipes, we agree with appellants (Brief, pp. 13 and 14) that an artisan would not have been motivated to add sides to the clamp as the sides would prevent the clamp from accommodating pipes of different lengths. In addition, while Buchler does disclose removeable, interchangeable stop blocks in figures 3 and 4, these interchangeable stop blocks are located between the workpiece and the biasing means 1.5.1, not between the back member and the workpiece as recited in claim 33. However, from our review of Buchler, we find that the reference discloses (Figure 1) a clamping device for a workpiece having a front member 1.4, a back member 1.1, opposing side members 1.1 coupled to the front and back members, a clamping member 1.3 configured to operatively couple between the front member 1.4 and the workpiece W.

Buchler further discloses in figure 1 stop blocks 1.3 and a second stop block (unlabeled) between workpiece W and back member 1.1. Both stop blocks contains grooves 1.7. It is further disclosed (col. 3, ll. 65-67) that grooves 1.7 also

have another shape, for example, a triangular cross section. In addition, figures 6 and 7 show, (unlabeled) the two stop blocks to have different shapes. From this disclosure of Buchler, we find a suggestion of having substitutable stop blocks between the workpiece and the back wall. In any event, from the disclosure of Yates of having substitutable jaw faces of different sizes (p. 2, ll. 1-4), and the disclosure of different shapes for the stop members in Buchler, we find that an artisan would have been motivated to provide Buchler with interchangeable stop blocks between the back member and the workpiece.

We are not persuaded by appellants' assertion that Buchler lacks removable stop blocks because to use a stop block of another shape, it would have been obvious to replace the stop block with a stop block of another shape. Nor are we persuaded by appellants' assertion (Brief p. 12) that Buchler emphasizes a flat workpiece while Yates clamps a curved workpiece, such as a pipe, because in Buchler, the flat surface appears to be the top, and not the sides. Buchler (col. 3, ll. 55-56) specifically discloses that the flat workpiece W can have an irregular or curved contour.

From all of the above, we find that the combined teachings of Yates and Buchler would have suggested to an artisan the invention of claims 33 and 34. The rejection of claims 33 and 34 under 35 U.S.C. § 103(a) is sustained. However, because we have relied on different portions of the prior art than the examiner, as well as a different rationale, we designate our affirmance as a New Ground of Rejection under the provisions of 37 CFR § 41.50(b).

In addition, we enter a New Ground of Rejection of claims 24 and 25 under 35 U.S.C. § 103(a) as being unpatentable over the combined teachings and suggestions of Buchler and Yates. We make reference to our claim construction of claim 24, *supra*. We reject claims 24 and 25 under 35 U.S.C. § 103(a) for the

same reasons as we sustained the rejection of claims 33 and 34, noting that claims 24 and 25 lack the opposing side members of claim 33.

Regarding the affirmed rejection of claims 33 and 34, 37 CFR ' 41.52(a)(1) provides "[a]ppellant may file a single request for rehearing within two months from the date of the original decision of the Board."

In addition to affirming the examiner's rejection(s) of one or more claims, this decision contains a new ground of rejection pursuant to 37 CFR ' 41.50(b) (effective September 13, 2004). 37 CFR ' 41.50(b) provides "[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review."

37 CFR ' 41.50(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 the appeal as to the rejected claims:

(1) *Reopen prosecution*. Submit an appropriate amendment of the claims so rejected or new evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the proceeding will be remanded to the examiner. . . .

(2) *Request rehearing*. Request that the proceeding be reheard under ' 41.52 by the Board upon the same record. . . .

If the appellants elects prosecution before the examiner and this does not result in allowance of the application, abandonment or a second appeal, this case

should be returned to the Board of Patent Appeals and Interferences for final action on the affirmed rejection, including any timely request for rehearing thereof.

CONCLUSION

To summarize, the decision of the examiner to reject claims 24-27 under 35 U.S.C. § 102(b) is reversed. The decision of the examiner to reject claims 33 and 34 under 35 U.S.C. § 103(a) is affirmed. In addition, we enter a New Ground of Rejection of claims 24-25 under 35 U.S.C. § 103(a) as being unpatentable over the combined teachings and suggestions of Buchler and Yates. 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-IN-PART; 37 CFR § 41.50(b)

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Administrative Patent Judge)	
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