The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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 D. HILLMAN, EVAN T. WARD, and PAUL B. SPECHT

Appeal No. 2006-1919
Application No. 09/724,279
Technology Center 3600

ON BRIEF[1]

Before CRAWFORD, LEVY, and FETTING, Administrative Patent Judges.
LEVY, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 12, 13, 15, 17, 18, 38-41 and 49-51. Claims 1-11 have been allowed. Claims 19-37, 46-48 and 54-72 have been withdrawn from consideration. Claims 52 and 53 have been cancelled. Claims 14, 16, and 42-45 have been objected to (brief, page 2).

We AFFIRM.

---

[1] The Oral Hearing scheduled for August 10, 2006 has been waived by appellants in a communication filed, via facsimile, on July 21, 2006.

BACKGROUND

The appellants' invention relates to a cordless blind (specification, page 1). In particular, the appellants' invention relates to a cordless blind having one or more spring motors to balance the bottom rail of the blind, independent of the extent to which the blind or shade is raised or lowered (specification, page 3).

Claim 12 is representative of the invention and is reproduced as follows:

A cordless blind comprising:

a headrail;

a bottom rail suspended from the headrail by a first cord and a second cord;

a window covering disposed between the headrail and the bottom rail;

a drive actuator including:

a spool,

a spring motor coupled to the spool,

a biasing element coupled to the spring motor and configured to provide a force biased against movement of the bottom rail, and

a bias adjustment mechanism coupled to the biasing element, the bias adjustment mechanism being configured to provide a selective variable application of a biasing force by the biasing element.

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

Griswold	350,429	Oct. 5, 1886
Judkins et al. (Judkins)	5,176,192	Jan. 5, 1993

Kuhar	5,482,100	Jan. 9, 1996

Claims 12, 13, 15, 17, 18 and 49-51 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kuhar in view of Griswald.

Claims 38-41 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kuhar in view of Judkins.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejections, we make reference to the answer (supp. answer, mailed May 5, 2004) for the examiner's complete reasoning in support of the rejections, and to the brief (filed June 16, 2003) and reply brief (filed November 7, 2003) 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 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 12, 13, 15, 17, 18 and 49-51 under 35 U.S.C. § 103(a) as being unpatentable over Kuhar in view of Griswald. We observe at the outset appellants' statement (brief, page 6) that the claims of this group stand or fall together. Consistent with this statement, appellants argue the limitations of independent claim 12[2]. Accordingly, we select claim 12 as representative of the group.

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), and to provide a reason why one having ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir. 1988); *Ashland Oil, Inc. v. Delta Resins & Refractories, Inc.*, 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985); *ACS Hosp. Sys., Inc. v. Montefiore Hosp.*, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. *Note*

[2] Although the brief (page 12) includes in heading (c) a statement that claims 49-51 are not obvious over Kuhar in view of Griswald, we note that in the short discussion that follows, that the patentability of claims 49-51 is based upon the arguments presented for the patentability of the other claims in the group.

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. *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).

Turning to claim 12, we find from our review of the record that the teachings of Kuhar and Griswold would have suggested to an artisan, for the reasons advanced by the examiner and amplified by our comments, infra, the obviousness of the invention recited in claim 12. The examiner's position (answer, pgs. 6-7) is that Kuhar teaches a cordless blind comprising a headrail, a bottom rail suspended from the headrail by a first cord and a second cord, a window covering disposed between the headrail and the bottom rail. The examiner asserts that Kuhar teaches a drive actuator that includes a spool and a spring motor coupled to the spool.

The examiner notes that Kuhar fails to teach the "biasing element" and the "bias adjustment mechanism" recited in the last two paragraphs of claim 12. To overcome this deficiency of Kuhar, the examiner turns to Griswold for a teaching of these two limitations, and makes the following argument in support of this combination:

> Griswold discloses a well known adjustment system in the form of knobs and threaded member g and spring K. It is noted that the adjustment knob is necessarily accessible from outside of the device. Such is used to adjust the force exerted by the spring. One of ordinary skill in the art experiencing problems with different sized blinds being operated by a spring motor would

> have looked to the prior art for a means to adjust the tension exerted by a spring motor and would have found Griswold, It would have been obvious to modify Kuhar to have such an adjustment system as taught by Griswold so as to adjust the blind operation to accommodate different sized blinds. While the knob is not threaded onto the axle g, such is an obvious attachment expedient.

Appellants' position (brief, page 9) is that the Kuhar and Griswold references are neither analogous art, nor in the same field of endeavor.[3] Respecting the Kuhar reference, appellants state that "Kuhar relates to cordless blinds wherein a constant variable spring motor is adapted to balance the blinds by providing a variable force that is 'at its highest level when the blind … is fully raised … [and] at its lowest point when the window covering is fully lowered." (brief, page 9). Respecting the Griswold reference, appellants state that "Griswold does not attempt to provide a balanced system at all, let alone attempt to balance a varying amount of weight." (brief, page 10). Appellants further argue (brief, page 10) that :

> While Griswold's suspension device purports to 'counterbalance' the suspended article, it is apparent from the specification that, by design, the suspension device will unwind under to the weight of the suspended article in the absence of the force applied by the brake J. Griswold does not disclose or suggest that the weight of the suspended article varies as the cords B are wound onto and unwound from the drum A, or that the suspension device is configured or intended to balance either a constant or varying weight. Because the weight of the suspended article is not variable, and Griswold does not attempt to balance the weight of the suspended article, it follows that Griswold also does not endeavor to use a spring motor to balance a varying weight as addressed in Kuhar.

[3] See appeal brief, pg. 9, 2nd paragraph. The brief refers to a prior art reference, Carouso, that was not actually relied upon by the examiner in the rejection of claim 12. This is noted in the examiner's answer and the reply brief. Accordingly, the Carouso reference has not been relied upon in deciding this appeal.

Appellants assert (brief, page 10) that the examiner has provided no factual basis for a suggestion or motivation to combine the references, and that the examiner's assertions are conclusory and rely on an improper hindsight analysis. In support of this position, appellants state that "Kuhar does not suggest engaging the spring motor with a biasing element and bias adjustment mechanism, and Griswold does not suggest implementing the brake J and drum A to engage the spring motor of a cordless blind to assist with balancing a varying weight."

The examiner responds that "one faced with Appellants' particular problem, i.e. the ability of a spring motor used to support suspended articles to be adjusted so that it may be in a balanced condition regardless of the weight of the suspended articles, would have looked to the art precisely related with this objective and would have found Griswold" (answer, page 6). The examiner (answer, pages 6 and 7) cites portions of Griswold (from pages 1 and 2) to support the position that "[T]he spring system K,g, of Griswold is used to adjust the amount of force that the spring C applies to winding of the cords B onto the spool A (answer, page 7)."

In the reply brief (page 2), appellants' assert that "contrary to the Examiner's position, a person skilled in the art would not be motivated to add Griswold's brake mechanism to Kuhar's cordless blind system because Griswold's brake applies force only in the direction of unwinding a cord or chain." Appellants further assert (reply brief, pages 2 and 3) that Griswold brakes in one direction only and that Griswold only works when the object is too heavy (i.e. the downward force of the object is greater than the upward force being exerted on the object by the springs.

From our review of Kuhar, we find that Kuhar is directed to a venetian blind or shade in which lifting cords and locking mechanisms are eliminated (col. 1, lines 9 and 10). The invention features techniques for increasing the friction on the cords used to raise and lower the blinds to assist in maintaining a desired position against any spring force which may exist through the range of travel of the bottom bar (col. 2, lines 19-23). It is disclosed that the force is at its highest level when the blind is fully raised and is at its lowest level when the blind is fully lowered (col. 2, lines 42-47). The features of the invention are accomplished by providing selection criteria for the springs, providing additional spring motors, and the use of friction imparting devices (col. 2, lines 54-58). Kuhar additionally discloses that although springs varying in width and height are shown, other spring configurations could be used, such as for example, a spring with a round cross-section (col. 3, lines 61-66). Kuhar further describes a headrail, (Fig. 7, element 94) a bottom rail suspended from the headrail by a first and a second cord, (Fig. 7, element 92) a window covering disposed between the headrail and the bottom rail, (Fig. 7, generally) and a drive actuator that includes a spool and a spring motor coupled to the spool. Fig. 2 shows a spool 30 coupled to the spring motor illustrated by storage drum 10, output drum 20, and spring 45. Kuhar additionally discloses slots 56 for increasing the tension on cord 52 (col. 4, lines 52-54). From the disclosure of Kuhar, we find that the reference addresses the problem of adjusting the springs as necessary to compensate for heavier or wider window coverings. (See also col. 2, lines 57 and 58).

Turning to Griswold, we find that Griswold relates, inter alia, to devices employed to counterbalance the weight of an article suspended from a support so

that the article will remain at any position into which it may be vertically adjusted, and yet can be easily raised (page 1, lines 8-13). Griswold describes a coiled spring C that acts as a counterbalance for the article suspended from the cords B (col. 1, lines 39-44). Element J designates a disk brake (page 1, lines 98 and 99). The portions of Griswold relied upon by the examiner (answer, page 4) show that spring K is used to adjust the amount of force that the applied by the spring C. Griswold further discloses (page 2, lines 43-51) that in order to vary the pressure in which the brake will act upon the drum, bow-shaped springs K have their ends bearing upon the brake. They may be adjusted toward and from the brake so as to increase or decrease their resistance. As noted by the examiner (answer, page 4) Griswold describes the thumb-screws g being used to increase or decrease the pressure that the spring K applies to the spring C.

From the disclosure of Kuhar of recognizing the need to accommodate the different widths and heights of blinds by varying the type of spring, the width of the spring or the thickness of the spring, we find that an artisan would have been motivated to have a mechanism that was capable of adjusting the spring instead of having to replace the spring. From the disclosure of Griswold of having a device for counterbalancing the weight of a suspended article so that the article may remain at whatever vertical position it was adjusted to, we find that an artisan would have been motivated to provide the adjustable blind balancing mechanism of Kuhar with a biasing element and bias adjustment mechanism as taught by Griswold.

We note that appellants have not argued that the combination of Kuhar and Griswold is insufficient to meet the limitations of claim 12. Rather, appellants

focus their arguments on an alleged lack of motivation to combine these two teachings to arrive at the claimed invention.

We are not persuaded by appellants' assertion that there is no motivation or suggestion to combine the teachings of the references. As aptly stated by the examiner (answer, page 6) the problem appellants' address is "the ability of a spring motor used to support suspended articles to be adjusted so that it may be in a balanced condition regardless of the weight of the suspended articles." As noted above, Kuhar makes note of this problem throughout his disclosure and suggests ways of dealing with it. These ways include varying the width, thickness and type of spring used. From this disclosure and the disclosure of Griswold, an artisan would have been taught to provide an adjustable spring instead of replacing the type or structure of spring used. We additionally agree with the examiner (answer, page 7) that an artisan would have been led to Griswold because the reference is directed to counterbalancing the weight of an article suspended from a support so that the article will remain in any position into which it may be vertically adjusted , and yet can be easily raised. We add that an artisan would look to Griswold for a way of employing an external bias adjustment mechanism that works by increasing or decreasing the friction that is applied to a spring.

Appellants' argument that Griswold only brakes in one direction is noted, but is unpersuasive because Kuhar is concerned with balancing blinds in both directions and suggests the use of springs as a way of achieving proper balancing (regardless of whether the object is too heavy and moves downward, or is too light and moves upward).

Nor are we persuaded by appellants' assertion (brief, page 9) that with respect to Kuhar, Griswold is not analogous art, nor in the same field of endeavor. As noted, supra, from the disclosure of Griswold that the reference is directed to counterbalancing the weight of an article suspended from a support so that the article will remain in any position into which it may be vertically adjusted , and yet can be easily raised, we find that Griswold is in the same field of endeavor as Kuhar and is analogous art.

Nor are we persuaded by appellants' assertion (brief, page 10) that Kuhar neither discloses or suggests coupling a biasing element to the spring motor and coupling a bias adjustment element to the biasing element because it is Griswold is relied upon for these features. In addition, although the phrase "spring motor" does not appear in Griswold, we find from the recited structure of the spring and the spring biasing device that Griswold discloses a spring motor which is adjustably biased by bow shaped springs hat are biased against brake J. Moreover Kuhar suggests the combination by disclosing that the spring be changed to accommodate different widths and heights of blinds.

From all of the above, we hold that the combined teachings of Kuhar and Griswold would have suggested the language of claim 12 and are not convinced of any error on the part of the examiner. Accordingly, the rejection of claim 12, and claims 13, 15, 17, 18 and 14, 9-51, which fall with claim 12, is sustained.

We turn next to the rejection of claims 38-41 under 35 U.S.C. § 103(a) being unpatentable over Kuhar is view of Judkins. We note at the outset that appellants' only present arguments for claim 38. Accordingly, we select claim 38 as representative of the group.

The examiner's position (answer, page 8) is that Kuhar teaches a cordless blind comprising a headrail, a bottom rail suspended from the headrail, a window covering disposed between the headrail and the bottom rail, and a spring motor being adapted to apply a force to the bottom rail in the direction of the headrail.

The examiner asserts (answer, page 11) that Kuhar fails to teach or suggest altering the weight of the bottom rail to balance the system. To overcome this deficiency of Kuhar, the examiner turns to Judkins for the disclosure of this limitation and makes the following argument (answer, page 5) in support of the combination:

> One way to provide weight to the bottom rail of a blind, which is desirable for a variety of reasons, e.g. better hanging characteristics, is to provide a weight in the form of a bar W, seen in Figs. 23 and 24. It would have been obvious in view of this teaching to provide Kuhar with such a weight to also achieve, for example, better hanging characteristics.

Appellants' position is that "Neither Kuhar nor Judkins et al. discloses or suggests applying a varying amount of weight to a bottom rail to counterbalance the force applied by a spring motor." (Appeal brief, pg. 11). Appellants state that Judkins "contains no disclosure or suggestion of using the weight W to counterbalance the force of a spring motor as recited in claim 38 because the shade does not have a spring motor, and the locking mechanism locks the shade in place." (Appeal brief, pgs. 11-12).

The examiner appears to agree that neither reference—when taken alone—discloses this limitation. However, the examiner asserts that the combination of these two references meets this limitation and that these references are combinable because they are clearly analogous art. (answer, page 8).

In the reply brief Appellants assert (reply brief, page 3) that Judkins and Kuhar are not analogous. Appellants concede (id.) that both references relate broadly to blinds and shades, but assert that "Kuhar relates to cordless blinds wherein variations in the weight of the blind affect the ability of the blind to be balanced in a given position, whereas Judkins relates to a traditional corded blind that is not balanced by a spring motor and instead includes a locking mechanism to control the raising and lowering of the shade to maintain the bottom rail in a fixed position" (reply brief, page 3). Appellants then conclude that "one skilled in the art would not be motivated to look to corded blinds for solutions to balancing cordless blinds." (reply brief, page 3).

From our review of the Kuhar and Judkins references, we find that the references, when combined, would have suggested to an artisan all of the limitations of claim 38, as advanced by the examiner. At the outset, we find that as acknowledged by appellants (reply brief, page 3), "the references relate broadly to blinds and shades" and (id.) "Judkins *et al.* relates to a traditional corded blind." Both references are analogous art because they are both directed to corded blinds.

We presume appellants are correct in noting that Judkins generally relates to a corded blind system[4]. However, Appellants are incorrect in asserting that Judkins is not at all concerned with balancing blinds. Judkins discloses bottom rails generally, and discloses adding weights to bottom rails to pull the shade in a downward direction (col. 2, lines 10 and 11). Judkins further discloses that the bottom rail is balanced to help offset curling or rolling of the shade (col. 4, lines 11

[4] Although Judkins does not specifically refer to the term blind, because the reference is directed to a shade, and appellants assert on the record (reply brief, page 3) that Judkins is directed to a traditional corded blind, we find that the disclosure of a shade in Judkins also refers to or suggests a blind.

and 12). It is further disclosed (col. 8 lines 35-40 and 53-54) that the weight is placed in the bottom rail to center the web section of the shade beneath the load for the stiffness needed to support a relatively heavy shade, and to assist in lowering of the shade in an even and aesthetically pleasing manner, which will minimize rolling of the shade during operation. Judkins additionally discloses that the weight should be placed in the bottom rail to prevent rolling. From this disclosure, we find that an artisan faced with the problem of keeping a heavy shade balanced to prevent it from rolling up, would have been motivated to add weights to the bottom rail of the shade as taught by Judkins. Thus, one of ordinary skill in the art that was faced with the problem of balancing a bottom rail—regardless of whether it was corded or cordless—would have looked to Judkins for a teaching of putting weights in the bottom rail of a blind/shade in order to balance the bottom rail. We are not persuaded by appellants' assertion (brief, page 11) that neither reference discloses or suggests applying a varying amount of weight to a bottom rail to counterbalance the force of a spring motor because it is the combined teachings of the references that must be considered. From the disclosure of Judkins of providing an optional weight in the bottom rail to pull the shade in a downward direction to center the wide web section of the shade beneath the load for the stiffness needed to support a relatively heavy shade, we find that an artisan would have been motivated to add weights to the bottom rail of Kuhar as an alternative to or in addition to modifying the force provided by the spring member. Accordingly, we do not agree with appellants (brief, page 12) that the combination of Kuhar and Judkins is based upon impermissible hindsight.

Nor are we persuaded by appellants' assertion (brief, page 11 and reply brief, page 3) that in Judkins, there is no suggestion of altering the weight of the bottom rail to balance the system and that balancing the blinds is not an issue. From the disclosure of Judkins (col. 4, lines 6-12) that adding the weight to the bottom rail causes the shade to be balanced to help offset curling and rolling, we find that keeping the shade balanced is an issue in Judkins and that altering the weight of the shade will balance the system.

From all of the above, we find that the combined teachings of Kuhar and Judkins would have suggested to an artisan the language of claim 38, and we are not convinced of any error on the part of the examiner in rejecting claim 38. Accordingly, the rejection of claim 38, and claims 39-41, which fall with claim 38 is sustained.

CONCLUSION

To summarize, the decision of the examiner to reject claims 12, 13, 15, 17, 18, 38-41 and 49-51 under 35 U.S.C. § 103 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

MURRIEL E. CRAWFORD Administrative Patent Judge	)	
STUART S. LEVY Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
ANTON W. FETTING Administrative Patent Judge	)	

ANTHONY J. SITKO
MARSHALL, GERSTEIN & BORUN
6300 SEARS TOWER
233 SOUTH WACKER DRIVE
CHICAGO, IL 60606-6357

SL/lg