UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte DANIEL HOCK and ALEXANDER BUTTNER

Appeal 2008-2007
Application 10/664,124
Technology Center 3600

Decided: October 21, 2008

Before MURRIEL E. CRAWFORD, JENNIFER D. BAHR, and MICHAEL W. O'NEILL, *Administrative Patent Judges*.

O'NEILL, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Daniel Hock and Alexander Buttner (Appellants) seek our review under 35 U.S.C. § 134 of the final rejection of claims 1-4, 6-15, and 17-23. We have jurisdiction under 35 U.S.C. § 6(b) (2002).

SUMMARY OF DECISION

We AFFIRM-IN-PART.[1]

THE INVENTION

The claimed invention relates to a sunshade guide mechanism.

Claims 1, reproduced below, is representative of the subject matter on appeal.

> 1. A sunshade guide mechanism, comprising:
>
> at least one guide rail having a brake face; and
>
> a sliding carriage shiftable in the at least one guide rail, the sliding carriage having
>
> > a body that shifts in the at least one guide rail,
> >
> > a brake member connected to the body and that cooperates with the brake face to lock the sliding carriage in the at least one guide rail,
> >
> > at least one spring having a biasing force that acts upon the sliding carriage to press the brake member against the brake face, and
> >
> > at least one tilt edge spaced away from the brake member, wherein the sliding carriage swivels about the at least one tilt edge against the biasing force of the at least one spring to release the brake member from the brake face.

[1] Our decision will make reference to Appellants' Appeal Brief ("App. Br.," filed Jan. 16, 2006), Reply Brief ("Reply Br.," filed Jun. 23, 2006), and the Examiner's Answer ("Answer," mailed Nov. 30, 2006).

THE PRIOR ART

The Examiner relies upon the following as evidence of unpatentability:

Milans	US 729,630	Jun. 2, 1903

THE REJECTIONS

The following rejections are before us for review:

Claims 1-3, 6, 9-13, 21, 22 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Milans.

Claims 4, 7, 8, 14, 15, 17-20, and 23 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Milans.

ISSUES

The first issue before us is whether Milans's truck E is capable of being swiveled about one edge against the biasing force of spring F to release the brake member (wheels e) from the brake face (guide d').

The second issue before us is whether the material that is used to make at least a portion of Milans's truck E has a low coefficient of friction.

The third issue before us is whether the material that is used to make Milans's brake member (wheels e) has a high coefficient of friction.

The fourth issue before us is whether Milans's brake member (wheels e) comprises a pair of braking cushions.

FINDINGS OF FACT

We find that the following enumerated findings of fact are supported by at least a preponderance of the evidence. *Ethicon, Inc. v. Quigg*, 849

F.2d 1422, 1427 (Fed. Cir. 1988) (explaining the general evidentiary standard for proceedings before the Office).

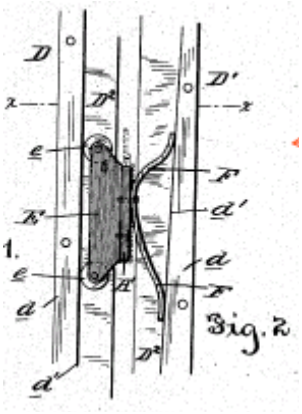
Facts involving claim construction

1. The Specification is silent with respect to a material that constitutes "a material having a low coefficient of friction."
2. The Specification fails to provide guidance as to a type of material that constitutes "a material having a high coefficient of friction."
3. The Specification fails to provide guidance as to a structure that satisfies a "braking cushion."
4. Cushion means "an elastic body for reducing shock." *Webster's Collegiate Dictionary* (entry 3e) 285 (10th edition 1999).

Facts involving the scope and content of the prior art

5. Milans describes a friction holding device for a spring actuated shade.
6. Milans's Figure 2 shows the construction of the truck body E.

Milans's Figure 2 is reproduced below:

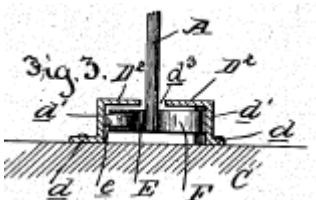


Milans's Figure 2 depicts the truck body E.

7. Milans's Figure 3 shows the profile of the guide strips D and D'. As can be seen in the figure a gap exists between surface D^2 and the truck body E. Further, a gap exists between the surface denoted by C (the

window casing that guide strips D and D' are affixed to) and the truck body E.

Milans's Figure 3 is reproduced below:



Milans's Figure 3 depicts the guide strips' profile.

8. Truck E is constructed of a truck-body having wheels e at its upper and lower ends. Wheels e are arranged to engage and rest against the straight vertical guide d'. (Milans, pg. 2, ll. 37-41.)
9. Secured on the side opposite of wheels e is a substantially U-shaped spring F. Spring F is bowed outwardly and its opposite branches are slightly curved and arranged to engage or lie against the inclined side of the guide bead d'. (Milans, pg. 2, ll. 41-47.)
10. Spring F biases the wheels e against guide d' to create sufficient friction to retain the curtain in its proper adjustment and to prevent binding. (Milans, pg. 2, ll. 56-60 and 86-97.)
11. Exertion of pressure opposing the biasing force of spring F will release wheels e from guide d'.

PRINCIPLES OF LAW

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros., Inc. v. Union Oil Co. of Cal.*, 814 F.2d 628, 631 (Fed. Cir. 1987). Anticipation is determined by first construing the

claims and then comparing the properly construed claims to the prior art. *In re Cruciferous Sprout Litigation*, 301 F.3d 1343, 1346 (Fed. Cir. 2002). After the PTO establishes a prima facie case of anticipation based on inherency, the burden shifts to the appellant to prove that the subject matter shown to be in the prior art does not possess the characteristics of the claimed invention. *See In re Thorpe*, 777 F.2d 695, 698 (Fed. Cir. 1985); *In re King*, 801 F.2d 1324, 1327 (Fed. Cir. 1986).

"Section 103 forbids issuance of a patent when 'the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.'" *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1734 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including (1) the scope and content of the prior art, (2) any differences between the claimed subject matter and the prior art, and (3) the level of skill in the art. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966). See also *KSR*, 127 S.Ct. at 1734 ("While the sequence of these questions might be reordered in any particular case, the [Graham] factors continue to define the inquiry that controls.") The Court in Graham further noted that evidence of secondary considerations "might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented." 383 U.S. at 17-18.

All the claim limitations must be taught or suggested by the prior art to establish a prima facie case of obviousness. *In re Royka*, 490 F.2d 981 (CCPA 1974). In rejecting claims under 35 U.S.C. § 103(a), the examiner bears the initial burden of establishing a prima facie case of obviousness. *In*

re Oetiker, 977 F.2d 1443, 1445 (Fed. Cir. 1992); *see also In re Piasecki*, 745 F.2d 1468, 1472 (Fed. Cir. 1984). Only if this initial burden is met does the burden of coming forward with evidence or argument shift to the appellant. *See Oetiker*, 977 F.2d at 1445; *see also Piasecki*, 745 F.2d at 1472. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. *Id.*

ANALYSIS

Claims 1-3, 9, 11-13, 21, and 22

The Appellants argue claims 1-3, 9, 11-13, 21, and 22 as a group. We select claim 1 as representative. Claims 2, 3, 9, 11-13, 21, and 22 stand or fall with claim 1.

As such, the first question before us is whether Milans's truck body E is capable of swiveling about one of its edges against the biasing force of the spring F to release the brake member (wheel e) from the brake face (surface d'). If so, then Milans anticipates claim 1 under the doctrine of inherency, because there is no express disclosure of this feature as acknowledged by the Examiner (Answer 3).

Viewing Figure 3 of Milans (Fact 7), we find a gap between surface D^2 and the truck body E. Further, we find a gap between the surface denoted by C and the truck body E.

In operation, we find a person would grasp the curtain-stick A' (see Fig. 5) and move the curtain-stick A' up or down depending on whether the person want the shade A open or close. We further find as curtain-stick A' is raised or lowered, truck body E moves accordingly. We find when a person

releases curtain-stick A' that truck bodies E will stay in position because of the tension of spring F. We further find, while the spring tension in spring F is an amount to hold truck body E at the position upon release of the curtain-stick A' by the person, this tension is not an amount so great as to prohibit the truck from being moved within the gaps present between surfaces D^2 and C and truck body E. In other words, while spring F biases the wheels e against guide d' to create sufficient friction to retain the curtain in its proper adjustment and to prevent binding (fact 10), exertion of pressure opposing the biasing force of spring F on one side of the curtain-stick A' will release the wheels e of the truck body E on that side from guide d' (fact 11) to permit swiveling of the truck body E. Accordingly, within the gaps mentioned above truck body E is capable of being swiveled around a plane parallel to the shade A whereby an edge near a brake member (either wheel e) would be the axis of rotation.

For these reasons, we will sustain the Examiner's rejections of claims 1-3, 9, 11-13, 21, and 22.

Claim 6

In addition to referring to the reasons given for the patentability of claim 1, the Appellants argue Milans's asymmetrical spring configuration could not allow tilting about a second tilt edge. (App. Br. 13.) We are not persuaded by this argument for the same reasoning as given above with respect to swiveling about the first tilt edge. That is, while spring F provides sufficient friction to retain the curtain in its proper adjustment and to prevent binding (see fact 10), exertion of pressure opposing the biasing force of spring F on one side of the curtain-stick A' will release the wheels e of the

truck body E on that side from guide d' (see fact 11) regardless of the spring's asymmetrical configuration.

For these reasons, we will sustain the Examiner's rejection of claim 6.

Claim 10

The Appellants argue "that the wheels (e) of Milans are not 'cushions'" and that the wheels e are not on opposite sides of the block body E (App. Br. 13-14.) As such, the next question before us is whether Milans's wheels e can satisfy the brake member comprising a pair of braking cushions arranged on opposite sides of the carriage (truck body E). The issue will depend upon the broadest reasonable meaning of "cushion" as one of ordinary skill in the art would understand the term.[2]

The Specification fails to provide guidance as to what structure would satisfy a "braking cushion." (Fact 3.). In our view, one skilled in the art would interpret cushion to mean an elastic body for reducing shock. (Fact 4.) Therefore, the term "braking cushion" would encompass any structure or body that facilitates retarding motion (brakes) and reduces shock. As such, the question becomes whether Milans's wheels e satisfy a structure or body that facilitates retarding motion and reducing shock.

Milans's wheels e are arranged to engage and to rest against the guide strip d'. (Facts 6 and 8.) On the opposite side of the wheels e is spring F. (Fact 6.) Spring F provides a compression force to truck body E that in turn

[2] The term "braking" is "readily apparent even to lay judges and [this] claim construction ... involves little more than the application of widely accepted meaning of commonly understood words." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1314 (Fed. Cir. 2005). In this case, "braking" means to retard or stop motion.

provides a compression force onto wheels to keep the wheels engaged and resting against the guide surface d'. The wheels e have to be constructed from a material with a coefficient of friction that is able to resist the force of gravity, else the trucks E would not be able to be maintained in a fixed position once a person releases the curtain-stick A'. As such, the wheels facilitate retarding motion. In addition, the material of wheels e would provide a cushioning effect inasmuch as they reduce shock to the truck body E . Accordingly, wheels e satisfy the claimed subject matter of a braking member comprised of braking cushions as the term “braking cushions,” as we find, would be understood by one of ordinary skill in the art. In addition, wheels e are disposed on opposite sides of the truck body E.

For these reasons, we will sustain the Examiner’s rejection of claim 10.

Claims 4, 7, and 17

We will not sustain the Examiner’s rejections of claims 4, 7, and 17. The Appellants do not specifically define in their Specification what is meant by “low coefficient of friction” (fact 1), but we find that a person of ordinary skill in the art would understand a low coefficient of friction material to be one which encourages relative sliding between surfaces. While we find the wheels e would be constructed from a material having a sufficiently high coefficient of friction to prevent the truck body E from sliding down the guide strip D when a person releases the curtain-stick A', we do not find any structure described in Milans, either expressly or inherently, to make a finding that any portion of the truck body is made from a material having a low coefficient of friction. As such, we agree with the

Appellant that because the truck body E never contacts the engagement surfaces d', there appears to be no reason to find the truck body E is made from a low coefficient material other than with hindsight gleaned from the Appellants' disclosure.

Claim 8

However, we will sustain the Examiner's rejection of claim 8, because we are not persuaded by the Appellants' argument that the wheels e must be capable of easily rolling within the guide strips. (App. Br. 16.) There is nothing in Milans that requires the wheels to "easily roll." What is required is that the wheels roll and that the wheels have a coefficient of friction that resists the force of gravity when a person releases the curtain-stick A' in order for the shade, and thus truck body E, to maintain its position. Moreover, the Appellants chose to quantify the claim subject matter within claim 8 with the term "high" The Specification is silent with respect to a definition of "high" or, moreover, a material that would satisfy the claimed subject matter of a material having a high coefficient of friction. As such, we are left with what one of ordinary skill in the art would understand as "high" for a material in this art. We hold that one of ordinary skill in the art would consider a material that discourages relative slippage between surfaces as having a high coefficient of friction. Milans's wheels e act in concert with the spring F to resist the force of gravity by discouraging slippage between wheels e and guide d'. Accordingly, the wheel e material satisfies the claimed subject matter of a material having a high coefficient of friction as such would be understood by one of ordinary skill in the art in light of the Specification.

Claims 14, 15, 18, 20, and 23

Appellants have argued claims 14, 15, 18, 20, and 23 as a group. We select claim 14 as representative. Claims 15, 18, 20, and 23 will stand or fall with 14.

We will sustain the Examiner's rejections of claims 14, 15, 18, 20, and 23 for the same reasons given *supra* with respect to claims 1, and 8 because the Appellants have provided similar arguments to the arguments raised against the rejections of claims 1 and 8.

Claim 19

We will sustain the Examiner's rejection of claim 19 for the same reasons given *supra* with respect to claim 10 because the Appellants have provided similar arguments to the arguments raised against the rejection of claim 10.

CONCLUSIONS OF LAW

We conclude that the Appellants have not shown an error in the Examiner's rejections of claims 1-3, 6, 8-15, and 18-23 as being unpatentable over Milans.

We conclude that the Appellants have shown an error in the Examiner's rejection of claims 4, 7, and 17.

DECISION

The Examiner's decision to reject claims 1-3, 6, 8-15, and 18-23 is affirmed.

The Examiner's decision to reject claims 4, 7, and 17 is reversed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv) (2007).

AFFIRMED-IN-PART

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