

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 ROBERT M. TODD

Appeal 2006-3291
Application 10/178,845
Technology Center 3600

Decided: February 28, 2007

Before ROBERT E. NAPPI, LINDA E. HORNER and ANTON W. FETTING,
Administrative Patent Judges.

ANTON W. FETTING, *Administrative Patent Judge.*

DECISION ON APPEAL

STATEMENT OF CASE

This appeal involves claims 1, 2, 4-13 and 21-24¹, the only claims pending and remaining under consideration in this application. We have jurisdiction over the appeal pursuant to 35 U.S.C. § 134.

We AFFIRM-IN-PART and ENTER A NEW GROUND OF REJECTION
UNDER 37 C.F.R. § 41.50(b).

The appellant invented a seat or seat attachment which neutralizes the injurious effect of a law enforcement officer's duty belt on the lower back (Specification 1). An understanding of the invention can be derived from a reading of exemplary claim 1, which is reproduced below.

1. A duty belt seat accessory for use with a bench vehicle seat having a seat back and a seat bottom, the seat accessory comprising:

a bottom edge portion;

a thoracic² upper back portion having a substantial thickness;

a lumber [sic. lumbar³] lower back portion disposed between the bottom edge portion and the thoracic upper back portion and having a thickness less than the thickness of the thoracic upper back portion, thereby creating a concavity adjacent the bottom edge portion and positioned so as to be behind the lumber [sic. lumbar] spine of a user seated on the seat bottom and against the seat accessory, to accommodate an equipped duty belt and to relieve pressure on the lumber [sic. lumbar] back caused by equipped duty belt, the concavity extending laterally across the lumbar lower back portion such that no portion of the concavity between the thoracic upper back portion and the bottom edge portion presses against a part of the user below the belt when the user is wearing the duty belt and sitting against the seat accessory in a normal seating position; and,

a support device configured to support the seat accessory such that the bottom edge portion is maintained against the seat back and adjacent to the seat bottom of the vehicle seat.

¹ Claim 3 is cancelled and claims 14-20 have been withdrawn from consideration.

² Thoracic – Related to the chest (Merriam Webster)

³ Lumbar – Related to the lower back (Merriam Webster)

This appeal arises from the examiner's final rejection, mailed July 21, 2005. The appellant filed a brief in support of the appeal on October 24, 2005, and the examiner mailed an answer to the appeal brief on January 6, 2006. The appellant requested an oral hearing, and the case was heard on February 13, 2007.

PRIOR ART⁴

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

Izumida	US 4,883,320	Nov. 28, 1989
Vento	US 5,441,331	Aug. 15, 1995
Davis	US 5,456,519	Oct. 10, 1995
MacKenzie	US 5,868,463	Feb. 09, 1999
Riach, Jr.	US 2002/0068847	Jun. 6, 2002 (Dec. 5, 2000)

REJECTIONS⁵

Claims 1, 4 and 24 stand rejected under 35 U.S.C. § 102(b) as anticipated by Davis.

Claim 2 stands rejected under 35 U.S.C. § 103(a) as obvious over Davis and MacKenzie⁶.

⁴ The examiner failed to list these references as required (MPEP § 1207.02(A)(8)) in the Evidence Relied Upon section (Answer 3), but did refer to Davis in the Grounds of Rejection (Answer 4-5). The examiner referred to all of these references in the Final Rejection pp. 3-8.

⁵ The examiner withdrew a rejection against claims 1, 2 and 4-13 under 35 U.S.C. § 112, first paragraph (Answer 2).

Claims 5-8 and 11-13 stand rejected under 35 U.S.C. § 103(a) as obvious over Davis and Vento.

Claim 9 stands rejected under 35 U.S.C. § 103(a) as obvious over Davis, Vento and Izumida.

Claim 10 stands rejected under 35 U.S.C. § 103(a) as obvious over Davis, Vento and Riach.

Claims 21-23 stand rejected under 35 U.S.C. § 103(a) as obvious over Davis.

ISSUES

The issues pertinent to this appeal are

- Whether Davis shows a seat having a concavity extending laterally across the lumbar lower back portion such that no portion of the concavity between the thoracic upper back portion and the bottom edge portion presses against a part of the user below the belt when the user is wearing a duty belt and sitting against the seat in a normal seating position.
- Whether Davis shows or suggests a concavity about 10 inches high.
- Whether Davis shows or suggests a concavity about 4 inches deep.

In particular, the appellant contends that Davis's sacral counter pressure pad (Fig. 2, Ref. 24), located in Davis's lumbar concavity, would press against the

⁶Not argued in the Brief or Answer.

user's sacrum⁷ below the belt (Br. 11-12), and that Davis has no showing of concavity dimensions of about 10 inches high or 4 inches deep (Br. 14).

FACTS PERTINENT TO THE ISSUES

Claim 1 is directed to a seat device. Therefore, it is defined by its structure.

The structural elements of claim 1 include:

- A bottom edge portion.
- An upper portion having a substantial thickness. This portion is intended for the upper back and therefore must be capable of touching the upper back.
- A portion between the bottom edge portion and the upper portion having a thickness less than the thickness of the upper portion
- The lower portion must be structurally positioned to create a concavity so that no portion of the concavity between the upper back portion and the bottom edge portion presses against a part of a user below a duty belt when the user is wearing the duty belt and sitting against the seat accessory in a normal seating position.

A concavity is a concave line, surface or hollow (Merriam Webster).

The structure of the lower portion is defined relative to where a user positions a belt, in particular, where the lower edge of the belt is on the user's back, when the user sits against the claimed seat device in a normal seating position.

⁷The triangular segment of the spinal column that forms part of the pelvis and closes in the pelvic girdle posteriorly, is formed between the ages of 16 and 25 by the fusion of five originally separate sacral vertebrae, and articulates with the last lumbar vertebra, the coccyx, and the hipbone on either side. (Stedman's Medical)

This structure is defined, therefore, by the anatomical structure of a seat device user, and by where that user positions a worn belt, in particular, where the lower edge of the belt is on the user's back. Both the user's position with respect to the seat and the belt position are variable by user.

The difference in height between where a large person with substantial hip width and buttocks would position the lower edge of a belt and where a petite person with diminutive hip width and buttocks would so position a belt is at least several inches.

A duty belt rests on the user's hips and buttocks so that its lower edge would generally be worn at a height relatively close to where the wearer's sacrum begins.

The height along the seat at which a large person's sacrum would begin would therefore be above the position at which a petite person's sacrum would begin, and thus the position at which a petite person would position the lower edge of a belt.

Davis shows a seat device whose back has an upper portion with substantial thickness that forms a pillow (fig. 4, ref. 44 and col. 4, l. 63 to col. 5, l. 12).

Davis indicates that the intended use of the pillow is lumbar support (col. 5, ll. 6-7). This statement of intended use does not alter the structural description of the upper portion.

The upper portion of Davis's seat would touch different users at different parts of the back, and in particular, once Davis's seat was positioned to support a large person, even were that large person to position the pillow in the lumbar region, a significantly smaller person would encounter that pillow in the thoracic region instead, absent any further adjustment of the seat.

Davis shows a lower portion of the seat back having a thickness less than that of the upper portion. In particular, Davis describes the upper pillow as being 2.5” thick and the lower portion being $\frac{3}{4}$ ” thick (col. 6, ll. 24-27).

This lower portion surface, by virtue of being lower than the upper portion, creates a concave, hollow surface, and so creates a concavity.

Davis’s lower portion has a sacral counter pressure pad, whose location is fixed, but positioned based on anatomical average measurements. The pad is trapezoidal in shape with an upper width of about 3.5” and a lower width of about 1.5” and is no more than $\frac{1}{2}$ ” thicker than the remainder of the lower back portion (col. 6, ll. 28-35).

Therefore, even the overall sacral counter pressure pad thickness of 1.25” is less thick than Davis’s 2.5” thick upper portion pillow.

Davis does not indicate the height of the sacral counter pressure pad on the lower portion, but Davis does show that the height of the seat back, and therefore the pillow, sacral counter pressure pad, and concavity, are adjustable using hook and loop fasteners (col. 6, ll. 14-18).

The sacrum on a substantially larger user would be substantially higher on Davis’s seat back than the sacrum on a substantially smaller user.

Therefore, a substantially larger user would adjust Davis’s seat back higher than would a substantially smaller user.

It is commonplace for one user to accept the existing position of a seat rather than readjust the seat after a different user sat in the seat. Although Davis describes adjusting the seat, implicit in the use of Davis’s seat is the reality that some users simply will not make the adjustment.

Davis's sacral counter pressure pad would thus be at different heights for different users, and in particular, once Davis's seat was positioned to support a large person, even were that large person to position the pad in the sacrum region, a significantly smaller person would encounter that pad above that region instead, absent any further adjustment of the seat.

Davis describes the height of the seat back as 17", the height of the upper portion as 4", the depth of the upper portion as 2.5" and the depth of the lower portion as .75". (col. 6, ll. 19-27).

ANALYSIS

Claims 1, 4 and 24 rejected under 35 U.S.C. § 102(b) as anticipated by Davis.

We note that the appellant argues these claims as a group⁸. Accordingly, we select claim 1 as representative of the group.

The examiner found that the claim limitation describing the structure of the lower portion of the seat in claim 1 contains a limitation of intended use because the size of the lower portion is described in terms of the user and where the user locates a worn belt (Answer 6). That is, the claimed concavity is positioned so as to fulfill an intention of not touching a particular user, not in an objectively specified location.

As the above facts demonstrate, the height of Davis's back portion, below the sacral counter pressure pad will be substantially higher for a larger user than a smaller user. The height at which the sacrum of a large person with substantial hip

⁸ Although the appellant states that claim 4 defines over Davis on its own merits (Br. 13), the appellant does not present any argument supporting this statement.

width and buttocks would begin would be above the height at which the sacrum of a petite person with diminutive hip width and buttocks would begin, and thus above the height of the position the lower edge of a belt on a petite person. Therefore, a smaller user, such as a law enforcement officer, absent any adjustment, such as might occur when joining a chase in hot pursuit, would find that no portion of Davis's lower portion touched the officer below the belt. Therefore, the limitations of the seat device in claim 1 would be met by a foreseeable user, thus anticipating claim 1.

We note that a similar conclusion would follow an analysis based on the overlap of ranges of foreseeable user sizes with the range of potential heights of Davis's lower back portion.

Accordingly, we sustain the examiner's rejection of claims 1, 4 and 24 under 35 U.S.C. § 102(b) as anticipated by Davis.

Claim 2 rejected under 35 U.S.C. § 103(a) as obvious over Davis and MacKenzie.

This claim depends from claim 1 and is not separately argued, nor even referred to in the Grounds Of Rejection To Be Reviewed On Appeal (Br. 8). Accordingly, we summarily sustain the examiner's rejection of claim 2 under 35 U.S.C. § 103(a) as obvious over Davis and MacKenzie.

Claims 5-8 and 11-13 rejected under 35 U.S.C. § 103(a) as obvious over Davis and Vento.

These claims depend from claims 1 and 6 and are not separately argued, nor even referred to in the Grounds Of Rejection To Be Reviewed On Appeal (Br. 8).

Accordingly, we summarily sustain the examiner's rejection of claims 5-8 and 11-13 under 35 U.S.C. § 103(a) as obvious over Davis and Vento.

Claim 9 rejected under 35 U.S.C. § 103(a) as obvious over Davis, Vento and Izumida.

This claim depends from claim 6 and is not separately argued, nor even referred to in the Grounds Of Rejection To Be Reviewed On Appeal (Br. 8). Accordingly, we summarily sustain the examiner's rejection of claim 9 under 35 U.S.C. § 103(a) as obvious over Davis, Vento and Izumida.

Claim 10 rejected under 35 U.S.C. § 103(a) as obvious over Davis, Vento and Riach.

This claim depends from claim 6 and is not separately argued, nor even referred to in the Grounds Of Rejection To Be Reviewed On Appeal (Br. 8). Accordingly, we summarily sustain the examiner's rejection of claim 10 under 35 U.S.C. § 103(a) as obvious over Davis, Vento and Riach.

Claims 21-23 rejected under 35 U.S.C. § 103(a) as obvious over Davis.

Davis's concavity of $2.5'' - .75'' = 1.25''$ is less than one third of the claimed $4''$ and Davis's lower portion height of $17'' - 4'' = 13''$ is 30% more than the claimed $10''$. These differences are more than that which is reasonably conveyed by the limitation of "about" in claims 21-23.

Accordingly, we *do not sustain* the examiner's rejection of claims 21-23 under 35 U.S.C. § 103(a) as obvious over Davis.

NEW GROUND OF REJECTION UNDER 37 CFR § 41.50(B)

Pursuant to 37 CFR § 41.50(b), we enter the following new grounds of rejection:

Claims 1, 2, 4-13, 22 and 24 are rejected under 35 U.S.C. § 112, second paragraph, as failing to particularly point out and distinctly claim the subject matter which the applicant regards as his invention.

More particularly, independent claim 1 has a limitation that no portion of the concavity between the thoracic upper back portion and the bottom edge portion of the claimed seat device presses against a part of the user below the belt when the user is wearing a duty belt and sitting against the seat accessory in a normal seating position. The height of this concavity is totally subjective to each individual obviating any possibility of pointing out the scope of the claims with any degree of particularity.

This being the case, whether [a seat] was covered by the claim would be determined not on the basis of the structural elements and their interrelationships, as set forth in the claim This would give rise to an uncertainty in the interpretation of the claims, which we believe to be exactly what the requirements of 35 USC 112, second paragraph, seek to avoid.

Ex parte Brummer, 12 USPQ2d 1653, 1655 (Bd. Pat. App. & Inter. 1989) (affirming a rejection under § 112, second paragraph, for a claim directed to a bicycle designed for a rider because no evidence was made of record that a known standard exists in the field of bicycle manufacturing for sizing a bicycle to a rider).

Also, reference to undefined standards, regardless of whose views might influence the formation of those standards, fails to provide any direction to one skilled in the art attempting to determine the scope of the claimed invention.

Datamize, LLC v. Plumtree Software, Inc., 417 F.3d 1342, 75 USPQ2d 1801 (Fed. Cir. 2005).

The remaining claims under this rejection depend from claim 1 and therefore incorporate the same indefiniteness. Claims 21 and 23 provide an objective measurement for the height, and therefore do not share this indefiniteness.

REMARKS

If prosecution continues, the examiner should consider whether the open ended transition “comprising” in claim 1, admits of a construction in which Davis’s lower back portion, excluding the sacral counter pressure pad, reads on the claimed concavity, with the sacral counter pressure pad being an additional feature of Davis mounted within the concavity. Under such a construction, no part of such a concavity would touch the user because the sacral counter pressure pad would not be part of the concavity.

DECISION

To summarize, our decision is as follows:

- The rejection of claims 1, 4 and 24 under 35 U.S.C. § 102(b) as anticipated by Davis is sustained.
- The rejection of claim 2 under 35 U.S.C. § 103(a) as obvious over Davis and MacKenzie is sustained.
- The rejection of claims 5-8 and 11-13 under 35 U.S.C. § 103(a) as obvious over Davis and Vento is sustained.
- The rejection of claim 9 under 35 U.S.C. § 103(a) as obvious over Davis, Vento and Izumida is sustained.

- The rejection of claim 10 under 35 U.S.C. § 103(a) as obvious over Davis, Vento and Riach is sustained.
- The rejection of claims 21-23 under 35 U.S.C. § 103(a) as obvious over Davis *is not sustained*.
- A new ground of rejection of claims 1, 2, 4-13, 22 and 24 under 35 U.S.C. § 112, second paragraph, as failing to particularly point out and distinctly claim the subject matter which the applicant regards as his invention is made under 37 CFR § 41.50(b).

Regarding the affirmed rejection(s), 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 new grounds 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 appellant, 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

Should the appellant elect to prosecute further before the examiner pursuant to 37 CFR § 41.50(b)(1), in order to preserve the right to seek review under 35 U.S.C. §§ 141 or 145 with respect to the affirmed rejection, the effective date of the affirmance is deferred until conclusion of the prosecution before the examiner unless, as a mere incident to the limited prosecution, the affirmed rejection is overcome.

If the appellant elect 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.

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

vsh

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