

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte LOUIS D. DELELLIS, JOHN E. SCHAMBRE,
LLOYD G. MONTFORD, LEONARD C. PAUL JR.
and MICHAEL O. FORKER

Appeal 2008-1705
Application 10/999,458
Technology Center 3600

Decided: September 29, 2008

Before: MURRIEL E. CRAWFORD, JENNIFER D. BAHR and
STEVEN D.A. McCARTHY, *Administrative Patent Judges.*

McCARTHY, *Administrative Patent Judge.*

DECISION ON APPEAL

1 STATEMENT OF THE CASE

2 The Appellants appeal under 35 U.S.C. § 134 (2002) from the final
3 rejection of claims 1-4, 9, 10 and 20. We have jurisdiction under 35 U.S.C.

1 § 6(b) (2002). We AFFIRM the rejection of claims 1-4 and REVERSE the
2 rejection of claims 9, 10 and 20.

3 The claims on appeal relate to a repositionable seat assembly for a
4 vehicle and to a method for operating the seat. (Spec. 1, ll. 9-11.) One
5 application for the repositionable seat assembly is as a second row seat in a
6 minivan, where the capacity of the seat to be repositioned would facilitate
7 access into and out of the vehicle. (Spec. 5, ll. 3-7).

8 Claim 1 is typical of the claims on appeal:

9
10 1. A seat assembly for a vehicle, the
11 assembly comprising:
12 a frame operably attached to the vehicle;
13 a seat bottom operably attached to the frame,
14 the seat bottom repositionable between a seating
15 position and a stowed position; and
16 a seat back operably attached to the frame,
17 the seat back repositionable between a seating
18 position and a stowed position; wherein the seat
19 back rotates about a longitudinal axis during
20 repositioning of the seat back between the seating
21 position and the stowed position, the seat back
22 including at least one cable adjacent to a top of the
23 seat back and coupled to a release to enable the
24 seat back to be repositioned.
25

26 ISSUES

27 The issues in this appeal are whether the Appellants have shown that
28 the Examiner erred by rejecting claims 1-4, 9, 10 and 20 under 35 U.S.C.
29 § 103(a) (2002) as being unpatentable over Freijy (US Patent 6,685,269 B1,
30 issued 3 Feb. 20042) and Konishi (US Patent 6,595,587 B2, issued 22 Jul.

1 2003).¹ These issues turn, at least in part, on whether the teachings of Freijy
2 and Konishi suggest (1) a seat back including at least one cable adjacent to a
3 top of the seat back and coupled to a release to enable the seat back to be
4 repositioned as recited in claim 1 or (2) pulling a cable adjacent a top of a
5 seat back to pull at least one pin to release the seat back as recited in claim 9.

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7

FINDINGS OF FACT

8

The record supports the following findings of fact (“FF”) by a
9 preponderance of the evidence.

9

10 1. Freijy teaches a seat assembly for a vehicle. (Freijy, col. 1, ll.
11 43-44).

12 2. The seat assembly includes a frame assembly having an upper
13 seat back frame member, a lower seat back frame member and a seat bottom
14 frame member. (Freijy, col. 5, ll. 56-57 and 59-61). The seat bottom frame
15 member is mounted so as to pivot between a seating position and a stowed
16 position. (Freijy, col. 5, l. 65 – col. 6, l. 5; *compare* Freijy, Fig. 6 *with id.*,
17 Fig. 7).

18 3. The seat bottom frame member has a locking mechanism
19 keeping the seat frame member in a generally horizontal position. The
20 locking mechanism includes a lifting device such as handle or strap which,
21 when pulled, releases the locking mechanism. (Freijy, col. 6, ll. 9-11 and
22 15-20).

¹ In the Final Office Action mailed November 24, 2006, claims 9 and 10 were rejected under § 103(a) as being unpatentable over Freijy alone. It appears that this rejection was withdrawn and the current rejection of claims 9 and 10 was entered as a new ground in the Examiner’s Answer. (*See* Ans. 2 and 4).

1 4. The seat back frame members are supported at one end by a
2 hinge pivot member that is connected to the vehicle floor. (Freijy, col. 7, ll.
3 15-22).

4 5. A release mechanism operable by a lever releases the lower seat
5 back frame member from the vehicle floor to permit the seat back frame
6 members to swing from a seating position to an easy entry or stowed
7 position. (Freijy, col. 7, ll. 30-32 and 48-53).

8 6. The release mechanism disengages a floor latch attached to the
9 vehicle floor when activated. (Freijy, col. 7, ll. 53-56). The floor latch is
10 shown in Figs. 6 and 7 of Freijy as an inverted U-shaped striker.

11 7. Konishi teaches a full-flat-type fold-down vehicle seat
12 including a base frame and a seat cushion frame pivotally mounted on the
13 base frame. (Konishi, col. 3, ll. 41-47 and col. 4, ll. 28-31).

14 8. The seat cushion frame includes a locking mechanism. The
15 locking mechanism releasably engages an inverted U-shaped striker to
16 restrain movement of the seat cushion. (Konishi, col. 4, ll. 9-12 and col. 7,
17 ll. 20-31).

18 9. The locking mechanism includes a latch for releasable
19 engagement with the striker; a locking plate workable to place the latch in a
20 locked relation with the striker; and an unlocking lever unit operatively
21 connected via a cable with the locking plate. (Konishi, col. 5, ll. 28-38).

22 10. The latch of the locking mechanism is pivotally supported
23 between two support plates. The latch normally is biased by a spring into
24 engagement over the striker. Drawing an unlocking lever attached to the
25 cable overcomes the biasing force of the spring and rotates the latch out of
26 engagement with the striker. (*Id.*; Konishi, col. 6, ll. 22-29 and 46-52).

1 be repositioned as recited in claim 1. (Reply Br. 5). We sustain the
2 rejection of claims 1-4.

3 Freijy discloses a seat assembly including a frame assembly having
4 upper and lower seat back frame members. (FF 1 and 2). The seat back
5 frame members are supported at one end by a hinge pivot member which
6 permits the seat back frame members to swing about a longitudinal axis
7 from a seating position to a stowed position. (FF 4 and 5). The lower seat
8 back frame member includes a release which appears to be capable of
9 engaging an inverted U-shaped striker mounted to the vehicle floor to
10 maintain the seat back in the seating position. (FF 5).

11 Konishi discloses a vehicle seat having a seat cushion frame pivotally
12 mounted on the base frame. (FF 7 and 8). The seat cushion frame includes
13 a locking mechanism which releasably engages an inverted U-shaped striker
14 affixed to the floor of the vehicle to restrain the seat cushion from pivoting
15 on the base frame. (FF 8 and 9). The unlocking mechanism includes a cable
16 which may be drawn to release the locking mechanism. (FF 9 and 10).

17 “[W]hen a patent claims a structure already known in the prior art that
18 is altered by the mere substitution of one element for another known in the
19 field, the combination must do more than yield a predictable result.” *KSR*
20 *Int’l Co. v. Teleflex, Inc.*, 127 S.Ct. 1727, 1740 (2007). It would have been
21 obvious to substitute a locking mechanism of the type used to secure the seat
22 cushion frame to the base frame in Konishi for the release which maintains
23 the seat back in the seating position in Freijy. One of ordinary skill in the art
24 would have appreciated the functional similarity between Konishi’s locking
25 mechanism and Freijy’s release, both of which engage an inverted U-shaped
26 striker to restrain pivotal movement of a seat member. The Appellants do

1 not appear to contend that substituting Konishi's locking mechanism for
2 Freijy's release would have been beyond the level of ordinary skill in the art.
3 While one of ordinary skill in the art would have recognized that Konishi's
4 locking mechanism would have to be rotated by 90° so as to engage the
5 inverted U-shaped striker while pivoting about a longitudinal axis rather
6 than a horizontal axis, there is no evidence before us sufficient to show that
7 more than ordinary skill would have been required to implement the
8 rotation. The Appellants do not appear to contend that such a substitution
9 would have produced unpredictable or unexpected results. Such a
10 substitution would have modified Freijy's seat back to include a cable
11 coupled to a release or locking mechanism to enable the seat back to be
12 repositioned.

13 It would have been obvious to position the cable adjacent to a top of
14 the seat back. The word "adjacent" in its ordinary usage is synonymous
15 with "near." The Appellants have not drawn our attention to anything in the
16 Specification which would limit how adjacent or how near the cable must be
17 to the top of the seat back. In fact, the only mention of the cable in the
18 written Specification appears to be the statement that "[r]eleases 66, 84 may
19 use the cables to withdraw spring loaded pins of the bracket spring assembly
20 68 and the first seat back lock assembly 92 to the seat bottom 60 and the seat
21 back 80, respectively." (Spec. 7, ll. 14-16). This passage provides no
22 guidance in interpreting the term "adjacent." While Figs. 3, 4 and 6 appear
23 to show cables, the drawing figures provide no clear limitation on the scope
24 of the term "adjacent."

25 Konishi teaches drawing the cable of the locking mechanism by
26 means of an unlocking lever unit mounted on a central support plate of a seat

1 back frame. After having substituted Konishi's locking mechanism for
2 Freijy's release, it would have been obvious to terminate the cable with a
3 lever placed in a corresponding position on the seat back. When the term
4 "adjacent" is construed as broadly as would be reasonable, the term is broad
5 enough to encompass positioning the cable as shown in Konishi.

6 We disagree with the Appellants' contention (Reply Br. 7-8) that the
7 substitution of Konishi's locking mechanism for Freijy's release would have
8 changed the principle of operation of Freijy's seat. After the substitution,
9 Freijy's seat would remain pivotally mounted for rotation about a
10 longitudinal axis between a seating position and a stowed position. The test
11 for obviousness is what the combined teachings of Freijy and Konishi would
12 have suggested and not whether the features of Konishi could have been
13 incorporated bodily into Freijy's seat assembly. *See In re Keller*, 642 F.2d
14 413, 425 (CCPA 1981). Hence, the substitution would have been obvious
15 even though Konishi uses the locking mechanism to restrain pivotal
16 movement about a horizontal axis rather than a longitudinal axis. On the
17 record before us, the Appellants have not shown that the Examiner erred in
18 rejecting claims 1-4 under § 103(a).

19
20 *B. The Rejection of Claim 20*

21 The Appellants contend (Reply Br. 8) that the combined teachings of
22 Freijy and Konishi would not have suggested coupling a fabric loop to the
23 cable to enable an operator to pull the cable to release the seat back
24 assembly. We agree. Konishi teaches the use of an unlocking lever to enable
25 an operator to pull the cable to release the locking mechanism. (FF 10).
26 Freijy discloses a seat bottom locking mechanism including a lifting device

1 such as a “strap” which, when pulled, releases the locking mechanism. (FF
2 3). The Examiner appears to find that this strap is a fabric loop and then
3 concludes that the substitution of such a fabric loop for Konishi’s unlocking
4 lever would have been obvious because a fabric loop would be easier to use.
5 (Ans. 4).

6 We do not agree with the Examiner that Freijy’s “strap,” which is not
7 shown clearly in Freijy’s drawing or otherwise described in Freijy’s
8 specification, necessarily is a fabric loop. Even were we to have found that
9 Freijy’s strap is a fabric loop, Freijy’s lifting mechanism appears to be
10 connected directly to a locking mechanism whereas Konishi’s unlocking
11 lever is connected to a cable. It is not clear how Freijy connects the strap to
12 the locking mechanism or how the strap acts as a “lifting mechanism.” In
13 light of this uncertainty, we do not conclude that the replacement of
14 Konishi’s unlocking lever with Freijy’s strap would be a simple substitution.

15 We are not convinced that the reasoning articulated by the Examiner
16 is sufficient to support of the rejection of claim 20. Even if we agreed with
17 the Examiner that a fabric loop necessarily would be easier to use than an
18 unlocking lever for purposes of drawing the cable, this finding would not
19 explain how one of ordinary skill in the art might bridge the differences
20 between the claimed subject matter and the prior art. In short, we are not
21 convinced that the Examiner has established a prima facie case that claim 20
22 would have been obvious. On the record before us, the Appellants have not
23 shown that the Examiner erred in rejecting claim 20 under § 103(a).

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

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AFFIRMED-IN-PART

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