

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

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

Paper No. 25

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte GARY D. BREE, MARK M. BERKLICH, and
LLOYD W. ROGERS, JR.

Appeal No. 1996-1300
Application No. 08/076,722¹

ON BRIEF

Before ABRAMS, McQUADE, and LAZARUS, Administrative Patent
Judges.

LAZARUS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 7-12, which are all of the claims pending in this application.

We Reverse.

¹ Application for patent filed June 14, 1993.

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BACKGROUND

The appellant's invention relates to a deadbolt locking actuator for a power door latch (specification, p. 1). A copy of the claims under appeal is set forth in the appendix to the appellants' brief.

The prior art reference of record relied upon by the examiner in rejecting the appealed claims is:

Fukumoto et al. (Fukumoto) 5,169,186 Dec. 8, 1992
(filed Jan. 11, 1991)

Claims 7-12 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Fukumoto.²

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejections, we make reference to the examiner's answer (Paper No. 15, mailed August 11, 1995) and the response to arguments filed in the supplemental reply brief (Paper No. 22, filed August 13, 1999) for the examiner's complete reasoning in support of the rejections, and to the appellants' brief (Paper No. 14, filed June 21, 1995), reply brief (Paper No. 16, filed September 18, 1995) and supplemental reply brief (Paper No. 21

² The rejection Claims 11-12 under 35 U.S.C. § 103 as being unpatentable over Fukumoto has been withdrawn by the examiner (answer, page 3).

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filed June 28, 1999) for the appellants' arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims, to the applied prior art references, and to the respective positions articulated by the appellants and the examiner. As a consequence of our review, we make the determinations which follow.

We cannot sustain the examiner's rejection of appellants' claims 7-12 under 35 U.S.C. § 102(e).

At the outset, we note that the sole independent claim, claim 7, is representative and reads as follows:

7. A locking actuator system for an automotive door latch having a manual locking lever movable between locked and unlocked positions, comprising:
 - (a) a housing;
 - (b) a reversible electric motor mounted in the housing and having an output shaft;
 - (c) a worm mounted on the output shaft;

- (d) a worm gear, mounted in the housing, meshing with the worm;
- (e) an extending pin coupled to the worm gear, wherein rotational movement of the motor output shaft causes arcuate movement of the extending pin between at least two operating positions;
- (f) a link having a first end and a second end, wherein the first end is pivotably coupled to the manual locking lever;
- (g) a slot in the second end of the link, the slot having two slot ends connected by two parallel sides, wherein the slot engages the extending pin and allows limited relative substantially linear movement of the link with respect to the pin and wherein the combination of the slot and the pin constrain the link to at least some linear movement in response to arcuate movement of the extending pin,

wherein, in at least one of the operating positions, the combination of the link, slot, extending pin, worm gear and worm hold the manual locking lever in the locked position so that external force on the manual locking lever does not move the manual locking lever from the locked position.

The examiner's rejection of claim 7 states that "Fukumoto et al. '186 teaches all the elements of the claimed invention including reversible motor with worm 26, worm gear 18, housing 2, rotary arm with extending pin 9 mounted exterior of the housing, link with slot allowing some linear movement 5 and having two operating positions (Figures 3 and 4)" (answer, page 3).

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Appellants urge that "Fukumoto does not have a dead bolt feature in which a combination of link, slot, extending pin, worm gear and worm to hold the manual locking lever in a locked position so that external force on the manual locking lever does not move the manual locking lever from the locked position" (brief, page 8). Further, "Appellants' claimed invention has several structural and functional elements not taught or suggested in Fukumoto. The primary element of claim 7 not taught or suggested in Fukumoto is the dead bolt feature, recited as follows:

... wherein, in at least one of the operating positions, the combination of the link, slot, extending pin, worm gear and worm hold the manual locking lever in the locked position so that external force on the manual locking lever does not move the manual locking lever from the locked position"

(brief, page 8).

In response the examiner explains that "Fukumoto teaches a combined movement of the link, slot, extending pin, worm gear and worm holding the manual locking lever in locked position" and "[t]he Examiner admits that Fukumoto teaches the

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manual locking lever 30 as moveable in both the locked (when manual locking lever is actuated and movement of lever 3 is prevented from unlocking the locking actuator system) and unlocked positions (when manual locking lever 30 is actuated and movement of lever 3 occurs to unlock the locking actuator system). However, when the link 5 and lever 7 are uncoupled (Figs. 3-6) the manual locking lever is held in the locked position because it can not operate to unlock the locking actuator system" (answer, page 5). The examiner appears to recognize that whereas appellants' claim 7 recites structure to "hold the manual locking lever in the locked position", Fukumoto discloses structure which has an idle position wherein the manual locking lever can move, but not to unlock the lock mechanism.

We note appellants disagree with the examiner and stress "[t]hus, if lever 30 is moving, it is not 'held' in a 'locked position' as stated in the Examiner's Answer and as would be required to meet Appellants' claim 7... lever 30 is not locked in any position, but moves whenever the door handle moves" (reply, page 10).

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The issue before us is whether Fukumoto discloses all of the features of claim 7 on appeal, including the function of the "link, slot, extending pin, worm gear and worm" to "hold the manual locking lever in the locked position". It is the examiner's position that "appellants' reliance on an unrealistic and narrow definition of 'held' to distinguish their invention over the prior art is unsustainable. The link, slot, worm gear and worm of Fukumoto 'holds' the manual locking lever in locked position when an external force is applied and prevents it from moving from the locked position since the link is misaligned with projection 7 on lever 3 resulting in an idling movement of the link, slot and extending pin" (answer, page 7). We disagree.

A door lock with elements corresponding to the elements of appellants' claim 7 is disclosed by Fukumoto, including housing 2, electric motor 26 (figs. 9 & 12), worm 27, worm gear 18, lever 5 (corresponding to appellants' link), lever 30 (corresponding to appellants' manual locking lever) and a pin which slides in the slot in lever 5. The door lock device "in FIG. 1 is in a locked condition" (col. 4, line 1). The transition to the unlocked condition of figure 2 is described

whereby lever 30 is rotated counterclockwise and "causes a protrusion 6 at a central portion of the open lever 5 to push an end portion 7 of the release lever 3... and the door is opened" (col. 4, lines 13-22). Thereafter, figures 3 and 4 are described wherein "the door is locked to prevent the door from being opened by carelessness during the running of the vehicle" (col. 4, lines 24-26). "[W]hen the locking button 8 is pushed out and the locking arm 9 is turned clockwise... the open lever 5 is moved around pin 10 in the direction of arrow C (FIG. 1), and said protrusion 6 is released from the end portion 7 of the release lever 3 as shown in FIG. 3. As a result, even if the handle is operated and the open lever 5 is moved downwardly, it moves idly without protrusion 6 abutting end portion 7, so that the lock remains in the locked condition as shown in FIG. 4" (col. 4, lines 33-43).

We note that the manual locking lever (Fukumoto's lever 30) rotates about axis 31 between locking and unlocking positions. Fukumoto provides that the unlocking position may be disabled as shown in figures 3 and 4. However, even in the disabled position of figures 3 and 4, Fukumoto's lever 30 is free to rotate about axis 31 between the locking and unlocking

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positions. These are the only positions described by Fukumoto for lever 30. Fukumoto's lever 30 is free to rotate about axis 31 and there is no description of locking lever 30 against rotation about axis 31 to prevent movement from one position to the other.

In contrast, appellants' claim 7 describes the locking actuator system "wherein, in at least one of the operating positions, the combination of the link, slot, extending pin, worm gear and worm hold the manual locking lever in the locked position so that external force on the manual locking lever does not move the manual locking lever from the locked position." This limitation is not described by, nor inherent in, Fukumoto. We disagree with the examiner's position that the Fukumoto mechanism "holds" the locking lever 30 in the locking position when the mechanism has been moved to the idle position. In the idle position the locking lever 30 is not held, or seized, in place, but remains free to move between the same positions as when the mechanism is moved to the other (non-idle) position.

We find that Fukumoto discloses a lock system having an electric motor, worm, worm gear, link 5 and locking lever 30

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which moves to and from locking and unlocking positions, but there is no disclosure that the elements "hold" the locking lever so that external force does not move the locking lever from the locked position. On the contrary, the locking lever 30 is shown in figure 1 in the locked position, then rotated to the unlocked position in figure 2. When in the idle position the locking lever 30 is free to assume the locked position shown in figure 3, or the unlocked position shown in figure 4. Fukumoto simply does not disclose a device "wherein in at least one of the operating positions, the combination of the link, slot, extending pin, worm gear and worm hold the manual locking lever in the locked position so that external force on the manual locking lever does not move the manual locking lever from the locked position" (emphasis added).

Accordingly, the decision of the examiner to reject claim 7 under 35 U.S.C. § 102(e) is reversed. It follows that the examiner's other rejection of claims 8-12 under 35 U.S.C. § 102(e) is also reversed.

CONCLUSION

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To summarize, the examiner's rejection of claims 7-12 under 35 U.S.C. § 102(e) is not sustained. The decision of the examiner is reversed.

REVERSED

NEAL E. ABRAMS)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
JOHN P. McQUADE)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
)	
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)	
RICHARD B. LAZARUS)	
Administrative Patent Judge)	

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ANTHONY L. SIMON
GENERAL MOTORS CORPORATION
LEGAL STAFF
P.O. BOX 33114
DETROIT, MI 48232

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RL/pgg

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APJ LAZARUS

APJ McQUADE

APJ ABRAMS

DECISION: **REVERSED**

Prepared By:

DRAFT TYPED: 07 Jun 01

FINAL TYPED: