

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

Paper No. 21

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte RAYMOND E. ZEHRUNG

Appeal No. 2001-0207
Application No. 09/151,003

ON BRIEF

Before COHEN, McQUADE, and NASE, Administrative Patent Judges.
McQUADE, Administrative Patent Judge.

DECISION ON APPEAL

Raymond E. Zehrunge appeals from the final rejection of claims 1 through 12, all of the claims pending in the application.

THE INVENTION

The invention relates to "an emergency exit device for unlocking a door for an emergency using either a push bar or a

Appeal No. 2001-0207
Application No. 09/151,003

remotely actuated solenoid" (specification, page 1).

Representative claims 1 and 7 read as follows:

1. An emergency exit device having a mounting side for attachment on a door and an opposed emergency use side, comprising:

a star wheel door latch for alternatively locking or unlocking said door;

a sliding catch formed in a single member having a lock position engaged directly to the star wheel door latch for locking said door and a free position disengaged from the star wheel door latch for unlocking said door;

a solenoid having a plunger engaged directly to the sliding catch for sliding the sliding catch to said free position in response to electrical power; and

a push bar linkage operable from said emergency use side and coupled to the sliding catch for sliding the sliding catch to said free position in response to an inward pushing force.

7. A method for alternatively locking or unlocking a door in an emergency exit device having an emergency use side, comprising steps of;

providing a sliding catch formed in a single member, said sliding catch having a lock position and a free position;

engaging a first end of said sliding catch in said lock position directly to a star wheel door latch, said star wheel door latch for locking said door when engaged by said first end;

coupling a push bar linkage to said sliding catch for sliding said sliding catch from said locked position to said free position for disengaging said first end from said star wheel door latch in response to an inward pushing force of

Appeal No. 2001-0207
Application No. 09/151,003

said push bar linkage, said star wheel door latch for
unlocking said door when disengaged from said first end;

engaging a second end of said sliding catch directly to a
plunger of a solenoid; and

operating said plunger in response to a change in
electrical power for sliding said sliding catch to said free
position for disengaging said first end from said star wheel
door latch.

THE PRIOR ART

The references relied on by the examiner as evidence of
obviousness are:

Miller 1989	4,801,163	Jan. 31,
Smith et al. (Smith) 1989	4,824,150	Apr. 25,
Choi 6, 1990	4,968,070	Nov.
Cross et al. (Cross) 1990	4,976,476	Dec. 11,

THE REJECTIONS

Claims 1, 3, 5 through 7, 9, 11 and 12 stand rejected
under 35 U.S.C. § 103(a) as being unpatentable over Smith in
view of Cross.

Claims 2 and 8 stand rejected under 35 U.S.C. § 103(a) as
being unpatentable over Smith in view of Cross and Choi.

Appeal No. 2001-0207
Application No. 09/151,003

Claims 4 and 10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Smith in view of Cross and Miller.

Attention is directed to the appellant's main and reply briefs (Paper Nos. 14 and 16) and to the examiner's answer (Paper No. 15) for the respective positions of the appellant and the examiner with regard to the merits of these rejections.

DISCUSSION

Smith, the examiner's primary reference, discloses a fire door 11 which is rendered unopenable upon exposure to high temperatures to prevent a fire from spreading. To this end, the door includes a door retention assembly 10 comprising a starwheel latch 14 for engaging a strike 13 on the door frame, a keeper composed of a holder plate 21 and a bracket 22 for lockingly engaging the starwheel, a spring 30 for urging the keeper into engagement with the starwheel, a release link 23 coupled to the keeper, and a panic bar 27 operatively associated with the release link for retracting the keeper from the starwheel so that the door may be opened. The keeper carries a heat fusible part 20 having a steel pin 24 disposed therein. The high temperatures generated by a fire cause the

Appeal No. 2001-0207
Application No. 09/151,003

fusible part to melt and drop the steel pin into jamming relationship with the keeper to prevent it from being retracted.

As conceded by the examiner (see pages 3 and 4 in the answer), Smith does not respond to the limitations in claims 1 and 7 requiring (1) a solenoid and (2) the sliding catch to be "formed in a single member." The Smith device does not include a solenoid, and its keeper, which corresponds to the sliding catch recited in the claims, is formed of two members, i.e., holder plate 21 and bracket 22. Nonetheless, the examiner concludes that it would have been obvious to one of ordinary skill in the art "to modify Smith et al. by providing a solenoid so that the exit device may be operated by remote control, as taught by Cross" (answer, page 4), and to form Smith's holder plate 21 and a bracket 22 as a single member because "forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art" (answer, page 4).

Cross discloses "a panic exit or fire door latch manually unlockable by a pushbar but also electrically unlockable from a remote position" (column 1, lines 10 through 12). The latch

Appeal No. 2001-0207
Application No. 09/151,003

comprises a bolt 27, a drawbar 25 and a spring 29 for urging the bolt 27 into a recess in a door frame. A linkage connector 24 couples the drawbar to the pushbar and to the armature 82 of a remotely actuatable solenoid 76.

Arguably, Cross would have suggested the addition of a solenoid to Smith's door retention assembly to allow it to be remotely actuated. There is nothing in the combined teachings of these references, however, that would have suggested directly engaging the plunger of the solenoid and Smith's sliding catch or keeper as required by claims 1 and 7. The examiner's determination (see page 3 in the answer) that Cross' linkage connector 24 is a sliding catch has no basis in fact.

There is also nothing in the combined teachings of Smith and Cross that would have suggested forming Smith's sliding catch or keeper (holder plate 21 and bracket 22) in a single member as required by claims 1 and 7. Contrary to the position taken by the examiner (see page 7 in the answer), the disclosed structural relationship between Smith's keeper and the heat fusible part 20 carried thereby (see Figure 9) indicates that the two-part construction of the keeper is

Appeal No. 2001-0207
Application No. 09/151,003

necessary to permit the heat fusible part to be attached thereto.

Hence, the combined teachings of Smith and Cross fail to establish a prima facie case of obviousness with respect to the subject matter recited in claims 1 and 7.¹ Therefore, we shall not sustain the standing 35 U.S.C. § 103(a) rejection of claims 1 and 7, and dependent claims 3, 5, 6, 9, 11 and 12, as being unpatentable over Smith in view of Cross.

As neither Choi nor Miller cures the foregoing flaws in the basic Smith-Cross combination, we also shall not sustain the standing 35 U.S.C. § 103(a) rejections of claims 2 and 8 as being unpatentable over Smith in view of Cross and Choi, and of claims 4 and 10 as being unpatentable over Smith in view of Cross and Miller.

¹ As a result, it is not necessary to delve into the merits of the objective evidence of non-obviousness made of record by the appellants.

Appeal No. 2001-0207
Application No. 09/151,003

SUMMARY

The decision of the examiner to reject claims 1 through
12 is reversed.

REVERSED

IRWIN CHARLES COHEN)	
Administrative Patent Judge)	
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)	
)	BOARD OF PATENT
JOHN P. McQUADE)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
)	
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Appeal No. 2001-0207
Application No. 09/151,003

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Appeal No. 2001-0207
Application No. 09/151,003

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REVERSED

June 24, 2002