

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 12

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ROBERT CASAGRANDE,
ERICH J. PANNENBORG,
and ANDRE J. M'SADOQUES

Appeal No. 1997-0906
Application 08/292,666¹

ON BRIEF

Before JERRY SMITH, BARRETT, and GROSS, Administrative Patent Judges.

BARRETT, Administrative Patent Judge.

DECISION ON APPEAL

¹ Application for patent filed August 18, 1994, entitled "Circuit Breaker Handle Interlock."

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Application 08/292,666

This is a decision on appeal under 35 U.S.C. § 134 from the final rejection of claims 1 and 8.

We reverse.

BACKGROUND

The disclosed invention is directed to a handle tie for joining the handles of several multi-pole circuit breakers together to form a common assembly.

Claim 1 is reproduced below.

1. A metal free handle tie for multi-pole circuit breakers comprising:

a molded plastic trough having a pair of opposing end walls and a pair of opposing sidewalls, said sidewalls being longer than said endwalls defining a rectangle, said endwalls defining a U-shaped configuration; and

a plurality of first compartments within said trough, said first compartments formed by inner walls extending between said sidewalls, said first compartments including detent means integrally formed on opposite sides of said sidewalls, said detent means being arranged to capture slots formed on opposite sides of circuit breaker operating handles to lockingly retain said operating handles within said first compartments, said first compartments further define an inner surface that abuts an outer surface on said operating handles, when said operating handles are received within said first compartments, said inner surface and said outer surface comprise a radial configuration.

The examiner relies on the following prior art references:

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Darlow	3,183,320	May 11, 1965
Adamson	4,906,958	March 6, 1990
Kakisako	4,980,525	December 25, 1990

Adamson discloses a snap-on thermoplastic handle tie for connecting together the handles of circuit breakers. The handles extend all the way through openings in the handle tie so that the handle tie does not extend beyond the end of the handle to prevent interference with the circuit breaker enclosure. "The handle tie is slidably received about the handles so that it is free to float along at least a portion of a length of the handles." (Abstract.) The "float" allows the handle tie to slide backward down the handle if there is an interference between the handle tie and the surrounding structure (col. 3, lines 28-39). The handle tie has protrusions 40, 42 (figure 9) that are loosely received in recesses 38 (figure 3) in the handle to permit the float 34 (figure 3) of the handle tie. As shown in figures 9 and 11, the handle tie has opposing side walls 44, 46 (called main beams), opposing end walls 48, 50 (called cross beams), and inner walls 62, 64 (called cross beams) which form openings 24, 26.

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Darlow discloses a metal handle tie bar for circuit breaker handles. The handle tie bar has a channel shaped cross section comprised of bottom 16 and opposing sides 18 and 20. The sides 18 and 20 are formed with spurs 22 which dig into the plastic handles of the circuit breaker and resist removal of the tie bar from the handles. The bottom of the channel has windows 24 to show the amperage markings on the end of the handles. We disagree with Appellants' finding that Darlow has "apertures for receiving the circuit breaker handles" (Br7). The windows 24 show the amperage markings, but it appears that the ends of the handles abut the bottom 16 on the edges of the windows because figure 3 shows that the width of the windows is less than the width of the handles and because the edge of the sidewall is visible along the lower edge of the window. The Examiner relies on Darlow only for its teaching of the placement of spurs 22.

Kakisako discloses a handle tie which fits over the end of the circuit breaker handles and having a groove 8b and protrusions 9 which engage a connecting pin 5 which extends through holes in the handles. The handle tie has compartments

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for the ends of the handles and the ends of the handles do not protrude through the handle tie.

Claims 1 and 8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Adamson, Darlow, and Kakisako.

We refer to the Final Rejection (Paper No. 5) and the Examiner's Answer (Paper No. 11) (pages referred to as "EA__") for a statement of the Examiner's position and to the Brief (Paper No. 10) (pages referred to as "Br__") for a statement of Appellants' arguments thereagainst.

OPINION

Appellants' only real argument is the advantage provided by abutting the operating handles against the handle tie (Br8):

In their Specification, at page 4, beginning at line 5, Applicants describe the problem with the disproportionate distribution of forces involved with such prior art handle tie devices and improves thereover by abutting the operating handles against the handle tie to provide a uniform distribution of force to all the circuit breaker operating handles as well as eliminating the arcing problems that occur when metal items abut the circuit breaker operating handles.

The Examiner's statement of the rejection does not anywhere address the limitations that "said first compartments further define an inner surface that abuts an outer surface on

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said operating handles, when said operating handles are received within said first compartments, said inner surface and said outer surface comprise a radial configuration." In the Response to Argument section of the Examiner's Answer, the Examiner states that "the combination of references provides for the distribution of forces by abutting the operating handles against the handle tie" (EA6), but offers no explanation. As best we can determine, the Examiner is referring generally to the fact that the handle ties of the references engage the handles rather than to the actual claim limitations.

Adamson clearly does not disclose that the inner surface of the trough abuts an outer surface of the operating handles since the handles extend through the trough. The protrusions 40 and 42 do touch the handle at the recesses 38; however, this does not meet the claim limitation. Because the handle tie is intended to "float" due to the protrusions 40 and 42 being loosely received in the recesses (col. 3, lines 65-68), Adamson teaches away from using a handle tie that abuts the operating handles. Further, because the handles extend through the handle tie, Adamson does not teach an inner

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surface of the trough in a "radial configuration" with the outer surface of the handle.

The Examiner applies Darlow solely for its teaching of locating spurs on the side wall for engaging the side of the operating handles (EA4; EA6). Darlow shows a tie bar in which the end of the handles appears to abut the inside surface of the tie bar (figures 3 and 4). The Examiner does not rely on this teaching in the rejection. If he did, it would be necessary to explain how and why one of ordinary skill in the art would modify Adamson, which the Examiner has selected as the primary reference and which discloses a floating relationship between the handle tie and the handles and handles extending through the handle tie, to have an abutting relationship. We do not find such a reason why one of ordinary skill in the art would have sought to modify Adamson to provide an abutting relationship since this would be contrary to the purpose of Adamson.

Kakisako is applied because it shows a handle tie without apertures. It does not appear that claim 1 precludes having windows in the "inner surface" of the handle tie (like Darlow) as long as the outer surface of the handles still abuts the

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inner surface; i.e., it appears that Kakisako is unnecessary. In any case, however, Kakisako does not teach an abutting relationship between the handle tie and the handles. As shown in figures 1 and 2, the inside surface of the groove 8b abuts the connecting pin 5 and the handle tie is locked in place by the protrusions 9. There must be a space between the hollows 8a for receiving the operating levers and the levers themselves or the handle tie might not properly clamp over the connecting pin 5.

In summary, the Examiner's rejection fails to set forth a prima facie case of obviousness. Therefore, it is not necessary to address the merits of the Declaration of Joseph Palmieri. The rejection of claims 1 and 8 is reversed.

REVERSED

JERRY SMITH)
Administrative Patent Judge)
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) BOARD OF PATENT

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LEE E. BARRETT)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
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