

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(2) is not binding precedent of the Board.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. 21

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JAMES L. LAGREE and
JOSEPH J. MATSKO

Appeal No. 96-2189
Application 07/969,731¹

ON BRIEF

Before KRASS, BARRETT, and FLEMING, **Administrative Patent
Judges**.

¹ Application for patent filed October 27, 1992.
According to appellants, this application is a continuation-
in-part of Application 07/907,131, filed June 30, 1992; which
is a continuation-in-part of Application 07/636,634, filed
December 28, 1990.

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FLEMING, *Administrative Patent Judge.*

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DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 1 through 10, all of the claims pending in the present application.

The invention relates to an overcurrent trip unit for a circuit breaker. More particularly, the invention relates to indicators associated on an user interface panel with a visual protector curve representation of an adjustable trip function. An exemplary visual protection representation is illustrated in Figure 114 as element F22 in Appellants' specification. Appellants further disclose on pages 46 and of the specification that LED indicators D60 are associated with the visual protection curve representation F22 shown in Figure 114. These LED indicators D60 illuminate red to indicate a trip. In addition, when a trip parameter displayed by the display D86 is being adjusted, the associated LED indicator D60 illuminates green, a different color, in response to the adjustment.

The independent claim 1 is reproduced as follows:

1. An overcurrent trip unit for an electrical circuit interrupting device comprising:

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current sensing means sensing an electrical current flowing through said electrical circuit interrupting device;

trip means responsive to said current sensing means generating a trip signal as an adjustable predetermined function of magnitude and time period of the electrical current flowing through said electrical circuit interrupting device;

a user interface panel presenting a visual protection curve representation of said adjustable predetermined function;

input means selectively adjusting said adjustable predetermined function; and

indicator means associated on said user interface panel with said visual protection curve representation and having a first state in response to a trip signal generated by the trip means and having a second state associated with said visual protection curve representation in response to adjusting of said adjustable predetermined function through said input means.

The Examiner relies on the following references:

McLaughlin et al. (McLaughlin)	3,941,989	Mar. 2, 1976
Tubbs	4,409,665	Oct. 11, 1983
Matsko et al. (Matsko)	4,752,853	Jun. 21, 1988
Cheng	4,825,143	Apr. 25, 1989
Yalla et al. (Yalla) 1991)	5,224,011	Jun. 29, 1993 (filed April 19,

Claims 1, 2, 4 through 8 and 10 stand rejected under

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35 U.S.C. § 103 as being unpatentable over the acknowledged prior art or Matsko in view of Yalla. Claims 3 and 9 stand rejected under 35 U.S.C. § 103 as being unpatentable over the acknowledged prior art or Matsko in view of Yalla in further in view of either Tubbs, McLaughlin or Cheng.

Rather than reiterate the arguments of Appellants and the Examiner, reference is made to the brief and answer for the respective details thereof.

OPINION

We will not sustain the rejection of claims 1 through 9 under 35 U.S.C. § 103.

The Examiner has failed to set forth a **prima facie** case. It is the burden of the Examiner to establish why one having ordinary skill in the art would have been led to the claimed invention by the express teachings or suggestions found in the prior art, or by implications contained in such teachings or suggestions. **In re Sernaker**, 702 F.2d 989, 995, 217 USPQ 1, 6 (Fed. Cir. 1983). "Additionally, when determining obviousness, the claimed invention should be considered as a

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whole; there is no legally recognizable 'heart' of the invention." *Para-Ordnance Mfg., Inc. v. SGS Importers Int'l, Inc.*, 73 F.3d 1085, 1087, 37 USPQ2d 1237, 1239 (Fed. Cir. 1995), *cert. denied*, 117 S. Ct. 80 (1996) *citing* *W.L. Gore & Assocs., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 15451, 1553, 220 USPQ 303, 311-13 [sic] (Fed.Cir. 1983), *cert. denied*, 469 U.S. 851, 105 S.Ct. 172, 83 L.Ed.2d 107 (1984).

Appellants argue on pages 5 through 8 of the brief that Matsko and Yalla, together or individually, fail to teach or suggest an overcurrent trip unit which includes an indicator means associated on a user interface panel with a visual protection curve representation and having a first state in response to a trip signal generated by the trip means and having a second state associated with the visual protection curve representation in response to adjustable predetermined function through input means. We note that Appellant's claim 1 recites:

[a]n overcurrent trip unit . . .

a user interface panel presenting a visual protection curve representation of said adjustable predetermined function;

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indicator means associated on said user interface panel with said visual protection curve representation and having a first state in response to a trip signal generated by the trip means and having a second state associated with said visual protection curve representation in response to adjusting of said adjustable predetermined function through input means.

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On page 3 of the answer, the Examiner refers us back to the first action rejection, mailed September 6, 1994, for the grounds of the rejection. Turning to the above rejection, the Examiner points out that the acknowledged prior art found on page 1 of the Appellants' specification and Matsko fail to teach a user indicator means associated on said user interface panel with said visual protection curve representation and having a first state in response to a trip signal generated by the trip means and having a second state associated with said visual protection curve representation in response to adjusting of said adjustable predetermined function through input means. However, the Examiner points to Yalla, in particular Figure 1 and column 27, lines 5-10. There, the Examiner argues that Yalla teaches an indicator means. The Examiner argues that it would have been obvious to those skilled in the art to modify the carriage of the acknowledged prior art or Matsko in view of the Yalla teachings to provide an indicator means with the first and second states as recited in Appellants' claim 1.

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On pages 7 and 8 of the brief, Appellants argue that Yalla fails to teach a user interface panel presenting a visual protection curve representative of said adjustable predetermined function. Appellants argue that Yalla at best teaches separate and distinct LEDs 71 and 72 to prompt an operator to select a relay element function and to confirm the entry of the function to be accessed and twelve separate and distinct LEDs 15 to indicate the reason for the trip operation. Appellants argue that Yalla fails to suggest any reason to modify the Matsko visual protection curve representation 42, 47, 48a having LED indicators 140-143 merely having a first state to a system in which the LED indicators have a first and second state as recited in Appellants' claim 1.

Upon a careful review of the acknowledged prior art on page 1 of Appellants' specification, Matsko and Yalla, we fail to find any suggestion or reason to modify the Matsko user interface panel presenting a visual protection curve representation 42, 47, 48a having LED indicators 140-143 merely having a first state to LED indicators having a first

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and second state as recited in Appellants' claim 1. The Federal Circuit states that "[t]he mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification." **In re Fritch**, 972 F.2d 1260, 1266 n.14, 23 USPQ2d 1780, 1783-84 n.14 (Fed. Cir. 1992), **citing In re Gordon**, 733 F.2d at 902, 221 USPQ at 1127. "Obviousness may not be established using hindsight or in view of the teachings or suggestions of the inventor." **Para-Ordnance Mfg.**, *supra*.

We find that Matsko teaches in column 14, lines 41-52, that Figure 5 shows a visual protection curve representation 42, 47, 48a and LED indicators 140-143 having a first state in response to a trip signal associated with the visual protection curve representation. However, Matsko fails to teach that the LED indicators 140-143 have a second state in response to adjusting of said adjustable predetermined function through said input means. In column 5, lines 15-59, Yalla teaches that the LEDs 71 and 72 (shown in Figure 1) prompt an operator to select a relay element function and

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confirm the entry of the function to be accessed and twelve LEDs 15 to indicate the reason for the trip operation. However, Yalla fails to teach a user interface panel presenting a visual protection curve representation of the adjustable predetermined function as well as indicator means associated with the visual protection curve having a first state in response to a trip and a second state in response to adjusting through an input means. Yalla teaches in contrast that the operator must view a screen 41 to scroll through a program menu to display the functions indicated by LED 71 and their set points ranges, and to enter a set point indicated by LED 72 which defines the operational limits of the tripping and reconnect functions. Thus, LEDs 71 and 72 are not associated with a visual protection curve representation or an indicator means for displaying a trip signal.

Therefore, we fail to find that the Examiner has shown that the prior art suggested the desirability of the modifying the Matsko user interface panel presenting a visual protection curve representation 42, 47, 48a having LED indicators 140-143 merely having a first state to a user interface panel having

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LED indicators that have a first and second state as recited in Appellants' claims 1, 2 and 4 through 8. In regard to the rejection of claims 3 and 9 under 35 U.S.C. § 103 as being unpatentable over the acknowledged prior art or Matsko in view of Yalla in further view of either Tubbs, McLaughlin or Cheng, we fail to find that these references suggest the desirability of the Examiner's proposed modification as well.

In regard to the Examiner's rejection of claim 10 under 35 U.S.C. § 103 as being unpatentable over the acknowledged prior art or Matsko in view of Yalla, Appellants argue that Matsko or Yalla, either alone or in combination, fail to teach a front panel have a first switch means for adjusting selectable parameter used by a trip means and a second switch means for testing the trip means, with the first switch means being a first identifiable color and the second switch mans being a second, different identifying color. Appellant's claim 10 recites:

a front panel having first switch means thereon for adjusting said selectable parameters and second switch means for testing said trip means, said first switch means being a first identifiable color and said second switch means being a second, different identifying color.

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The Examiner argues that it is well known in the art to provide visual indication to users using color.

Upon a closer inspection of Matsko, we find that Figure 5 shows a front panel 63 having first switch means 144, 145, 146, 147, 148, 149 and 156 thereon for adjusting the selectable parameters. In particular, Matsko discloses in column 14, line 58, through column 15, lines 7, that these seven rotary switches 144-149 and 156 are for selecting a value for LDPU factor, LDT factor, SDPU factor, SDT factor, INSTPU factor, GFPU factor and GET factor, respectively. Matsko further shows in Figure 5 that the front panel 63 having a second switch means 150, 151 and 152 for testing said trip means. In particular, Matsko discloses in column 15, lines 7-31, that the rotary switch 150 is for selecting test values, test push-button switch 151 is for starting the test and test trip reset push-button switch 152 is for resetting the system. Matsko further shows in Figure 5 that the first switch means 144, 145, 146, 147, 148, 149 and 156 are distinguished from the second switch means 150, 151 and 152 by physical placement of the first switch means as a group in one

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portion of the panel different from the physical placement of the second switch means as a group in another portion of the panel.

Matsko is silent as to having the first switch means being a first identifiable color and a second switch means being a second different identifying color. However, as pointed out above, Matsko does teach that the first switch means and the second switch means are to be distinguishable to the operator by Matsko's physical placement of the first and second switch means on the panel.

Another well known way of distinguishing a first group of operator control switches from a second group of operator control switches is the use of a different color to mark each group of switches. One only has to look to a television and VCR remote to find the use of color to distinguish a group of control switches used for one function from another group of control switches used for another function. Other examples of use of color to distinguish different groups of control switches are found in home security system control panels, calculators and lap top computer keyboards. Thus, the use of

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color to aid the operator to distinguish a group of control switches related to one particular function from a group of control switches related to another function is notoriously well known in the art.

Matsko teaches that the first switch means for adjusting selectable parameters are to distinguish from the second switch means for testing by the physical placement of the first and second switch means on the panel shown in Figure 5. This teaching suggests to those skilled in the art the need to distinguish groups of control switch. As noted above, a well known way of distinguishing groups of control switches is the use of color coding of the switches. Those skilled in the art would have recognized that color may be used as well in the physical placement of the switches to further enhance the distinction between the first and second switch means to the operator. Therefore, we find that it would have been obvious to those skilled in the art to use well known color coding such that the first switch means is a first identifiable color and the second switch means is a second different identifying color as recited in Appellants' claim 10.

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In view of the foregoing, we will sustain the rejection of claim 10 under 35 U.S.C. § 103, however, we have not sustained the rejection of claims 1 through 9 under 35 U.S.C. § 103.

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

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ERROL A. KRASS))
Administrative Patent Judge)	
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)	BOARD OF PATENT
LEE E. BARRETT))
Administrative Patent Judge)	APPEALS AND
)	
)	INTERFERENCES
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