

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 57

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte WILLIAM A. LUEDERS

Appeal No. 96-3624
Application No. 08/293,104¹

ON BRIEF

Before HAIRSTON, KRASS and BARRETT, Administrative Patent Judges.

¹ Application for patent filed August 19, 1994. According to appellant, this application is continuation of Application 07/852,741, filed March 16, 1992, which is continuation of Application 07/579,214, filed September 5, 1990, which is continuation of Application 07/356,912, filed May 23, 1989, which is division of Application 07/279,240, filed November 30, 1988, which is continuation of Application 07/170,603, filed March 14, 1988, which is continuation of Application 06/900,668, filed August 27, 1986, all of which are now abandoned.

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KRASS, Administrative Patent Judge.

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DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 36 through 39 and 44, all of the claims pending in the application.

The invention is directed to a keyboard with a flexible display which is program-controlled to automatically change the switch identification as the operator progresses in performing a programmed function. Further, the operator can input information into the processing system and the processing system can provide prompting information on the keyboard to the operator.

Representative independent claim 36 is reproduced as follows:

36. A programmable processing system, comprising:

a keyboard having a plurality of switches, each individually operable to generate electrical indication of its operations and wherein each is individually operable to perform multiple functions;

a flexible, continuous programmable template display membrane having electrical connections for addressing display elements to be illuminated, wherein said membrane covers said switches; and

a processor electrically connected to said keyboard and to said membrane for displaying on said display membrane

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positional indicia of desired ones of said switches, and for displaying on said display membrane functional indicia of the function of desired ones of said switches.

The examiner relies on the following references:

Koike et al. (Koike) 1982	4,336,530	Jun. 22,
Hunter et al. (Hunter) 1989	4,823,311	Apr. 18,

Mosley (Polaroid), "Flexible LCD is lighter and thinner than glass," EDN, Vol. 30, Issue 24 (Oct. 1985) p. 93.

Claims 36 through 39 and 44 stand provisionally rejected under obviousness-type double patenting as unpatentable over claims 78 through 83 and 88 through 99 of Serial No. 07/853,356.²

Claims 36 through 39 and 44 stand further rejected under 35 U.S.C. 103 as unpatentable over Koike in view of Hunter and Polaroid.

Reference is made to the briefs and answer for the respective positions of appellant and the examiner.

² The U.S. Court of Appeals for the Federal Circuit reversed a decision by this Board affirming the examiner's rejection of claims 78 through 99 in Application Serial No. 07/853,356. In re Lueders, 111 F.3d 1569, 42 USPQ2d 1481 (Fed. Cir. 1997).

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OPINION

We will summarily sustain the provisional rejection of claims 36 through 39 and 44 under obviousness-type double patenting since appellant has failed to present any arguments as to the merits of this provisional rejection, preferring to assert only that "whether obviousness-type double patenting is an issue shall be addressed when claims become allowed" [principal brief-page 2]. In view of the examiner's assertion of the provisional rejection and the lack of a properly filed terminal disclaimer by appellant in order to overcome such provisional rejection, it is not a matter of *whether* obviousness-type double patenting is an issue; rather, obviousness-type double patenting *is* an issue and should have been addressed.

With regard to the rejection of claims 36 through 39 and 44 under 35 U.S.C. 103, we will not sustain this rejection as we find that the examiner has not established a prima facie case of obviousness with regard to the claimed subject matter.

In particular, the examiner applies Koike as disclosing a flexible, continuous template display membrane to display

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positional and functional indicia and wherein the membrane covers a plurality of switches. The examiner recognizes that Koike does not disclose that the membrane is a programmable display membrane with electrical connections. Therefore, Hunter was applied for the teaching of using a programmable display membrane and a processor which can be electrically programmed to display indicia and for its teaching of replacing conventional non-electrical overlays to permit the expansion of the number of functions without cluttering the keyboard. Polaroid is relied on for the teaching of the conventionality of a flexible programmable display membrane, the examiner concluding that it would have been obvious "to replace the flexible membrane of Koike with the programmable flexible membrane of Polaroid because it provides the advantage of increased flexibility as taught by Hunter"

[answer-page 6].

We disagree. In Koike, an indicia sheet 6 carries groups of key indicia, one group of indicia intended for a timepiece function and another group intended for a calculator function. When mechanical slide switch 8 is moved, one of the groups of indicia is visible and the other group is masked. Depending

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on the position of the slide switch 8, each switch of the keyboard has an alternative function. Thus, it may fairly be said that Koike does disclose a keyboard having a plurality of switches, each individually operable to generate electrical indication of its operations and wherein each is individually operable to perform multiple functions. However, Koike clearly does not disclose a "flexible, continuous programmable template display membrane...wherein said membrane covers said switches" and a "processor electrically connected to said keyboard *and* to said membrane for displaying...positional indicia of desired ones of said switches, and for displaying...functional indicia of the function of desired ones of said switches" [emphasis ours], as claimed.

While Polaroid does disclose a flexible LCD and Hunter does disclose programmably alterable interactive labels for certain function keys, we find nothing in the applied references which would have led the skilled artisan to modify Koike in such a manner as to apply a programmable display membrane, having electrical connections for addressing display elements to be illuminated, over the switches. Polaroid's flexible LCD certainly does not suggest this and Hunter

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clearly fails to suggest any such display membrane, Hunter providing a separate dedicated display for each definable function key. Thus, the only reference left which could possibly disclose a display membrane is Koike. But Koike discloses a transparent sheet 5 through which to view indicia, an indicia sheet 6 which provides groups of indicia, some of which will be masked and some of which will be visible, elastic members 3 and a rigid board 2 on which key contacts 1 are located. The best that could be considered an overlay display membrane in Koike is the indicia sheet 6. Yet, Koike discloses nothing which may be considered the claimed programmable display membrane which is interactive with the keyboard such that display elements to be illuminated are addressed and a processor connected to both the keyboard and the membrane causes the display, on the membrane, of positional and functional indicia. Neither Hunter nor Polaroid is of any help in this regard since only Hunter shows an interaction between definable function keys F1-F5 and dedicated displays 31-35 but clearly fails to suggest anything like the claimed programmable template display membrane, which covers the keyboard switches and interacts with the keyboard

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for displaying, on the membrane, positional and functional indicia and having electrical connections for addressing display elements to be illuminated.

Similarly, the applied references do not make the subject matter of independent method claim 44 obvious since none of these references suggests the functions of the claimed programmable display membrane. Moreover, with regard to claim 44, we find no suggestion by the applied references, and the examiner has pointed to nothing therein, of the claimed "displaying...at continuous locations including locations between keys as well as overlying keys not used to effect the currently desired function."

We have not sustained the rejection of claims 36 through 39 and 44 under 35 U.S.C. 103 but we have sustained the provisional rejection of these claims under the doctrine of obviousness-type double patenting in view of appellant's lack of argument on this issue.

Accordingly, the examiner's decision is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

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AFFIRMED

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

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