

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 20

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte JEFFREY H. HILLER

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Appeal No. 1999-2592  
Application 08/671,935

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ON BRIEF

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Before RUGGIERO, LALL and BLANKENSHIP, Administrative Patent Judges.

RUGGIERO, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal from the final rejection of claims 1-9, which are all of the claims pending in the present application.

The claimed invention relates to a computer keyboard incorporating a multi-mode flat panel touch-sensitive input device which is arranged within an area of the keyboard housing.

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In various operating modes, the touch-sensitive input device functions as a numeric keypad, a mouse, and a digitizer.

Claim 1 is illustrative of the invention and reads as follows:

1. A computer keyboard, comprising:

a keyboard housing:

keys within a QUERTY area of the keyboard, at least some of the keys having indicia permanently affixed thereto; and

within another area of the keyboard, in lieu of keys, a touch-sensitive pad;

wherein the touch-sensitive pad is operable in a plurality of the following modes: a trackpad mode in which movement of a finger across the touchpad results in movement of a cursor across a computer display; a keypad mode of operation in which touch keys are pressed; and a digitizer mode of operation in which movement of a stylus is sensed.

The Examiner relies on the following prior art:

Barrus et al. (Barrus)	5,410,305	Apr. 25, 1995
Clark et al. (Clark)	5,469,194	Nov. 21, 1995
Shima et al. (Shima)	5,489,924	Feb. 06, 1996



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decision, Appellant's arguments set forth in the Brief along with the Examiner's rationale in support of the rejections and arguments in rebuttal set forth in the Examiner's Answer.

It is our view, after consideration of the record before us, that the Barrus reference fully meets the invention as set forth in claim 8. We are further of the view that the evidence relied upon and the level of skill in the particular art would have

suggested to one of ordinary skill in the art the obviousness of the invention as recited in claim 9 based on the combination of

Barrus and Shima. We reach the opposite conclusion with respect to the obviousness of the invention set forth in claims 1-8 based on the combination of Clark and Ouellette. Accordingly, we affirm-in-part.

We initially consider the Examiner's 35 U.S.C. § 102(b) rejection of independent claim 8 as being anticipated by Barrus. We note that anticipation is established only when a

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single prior art reference discloses, expressly or under the principles of inherency, each and every element of a claimed invention as well as disclosing structure which is capable of performing the recited functional limitations. RCA Corp. v. Applied Digital Data Sys., Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir.); cert. dismissed, 468 U.S. 1228 (1984); W.L. Gore and Assoc, Inc. v. Garlock, Inc., 721 F.2d 1540, 1554, 220 USPQ 303, 313 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).

With respect to claim 8, the Examiner has indicated (Answer, page 3) how the various limitations are read on the disclosure of

Barrus. In particular, the Examiner points to the illustration in Figure 1 of Barrus along with the accompanying description beginning at column 2, line 50.

After careful review of the Barrus reference in light of the arguments of record, we are in agreement with the Examiner's position as stated in the Answer. Appellant's arguments in response (Brief, page 5) initially assert that

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Barrus lacks a disclosure of "...a full complement of function keys" as set forth in claim 8. We agree with the Examiner, however, that the keyboard depicted in Figure 1 of Barrus illustrates an assortment of function keys such as ESC, SHIFT, etc. In our view, from every indication in the disclosure of Barrus, the function keys illustrated are a full complement of function keys as contemplated by Barrus.

We further find to be unpersuasive Appellant's related argument that suggests that Barrus's keyboard does not have a full complement of function keys since Barrus provides an LCD display in lieu of function keys. Our review of Barrus reveals no support for such a conclusion. The description of the operation of the LCD display 80 at column 3, lines 3-13, as well

as the operation of the LCD display 200 described at column 9, lines 42-68, indicates that such display is intended to permit an operator to view and edit text and to provide user prompts, not to serve as a substitute for keyboard function keys.

In view of the above discussion, since all of the claimed

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limitations are present in the disclosure of Barrus, the Examiner's 35 U.S.C. § 102(b) rejection of independent claim 8 is sustained.

Turning to a consideration of the Examiner's obviousness rejection of dependent claim 9, which adds an adjustable display feature to the limitations of claim 8, we sustain this rejection as well. To address the limitations of claim 9, the Examiner has proposed a modification of Barrus by adding the adjustable display features of Shima. In the Examiner's analysis, the skilled artisan would have found it obvious to make such a modification "...to have a flat panel display adjustable relative to a keyboard housing because it would provide flexibility and better viewing angle of the display to suit different users." (Answer, page 5). In our view, the Examiner's line of reasoning is persuasive so as to establish a prima facie of obviousness,

which shifts the burden to Appellant to come forward with evidence and/or arguments to rebut the Examiner's position. Arguments which Appellant could have made but elected not to

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make in the Brief have not been considered in this decision  
(note 37

37 CFR § 1.192). Appellant's argument in response (Brief, page 6) broadly asserts a lack of combinability of Barrus and Shima since the structures (presumably Barrus's stand-alone keyboard and Shima's laptop with an incorporated keyboard) have nothing in common. It is apparent to us, however, from the line of reasoning expressed in the Answer that the Examiner is not suggesting the bodily incorporation of Shima's adjustable display into the keyboard structure of Barrus. Rather, it is the suggestion of the advantages to the user of the flexibility achieved through an adjustable display as taught by Shima that is being relied upon as a suggestion for the proposed combination. "The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference . . . . Rather, the test is what the combined teachings of those references would have suggested to those of ordinary skill in the art." In re Keller, 642 F.2d 413,

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425, 208 USPQ 871, 881 (CCPA 1981). See also In re Sneed, 710 F.2d 1544, 1550, 218 USPQ 385, 389 (Fed. Cir. 1983) and In re Nievelt, 482 F.2d 965, 967, 179 USPQ 224, 226 (CCPA 1973).

We next consider the Examiner's 35 U.S.C. § 103(a) rejection of claims 1-8 as unpatentable over the combination of Clark and Ouellette. With respect to independent claim 1, the Examiner proposes to modify the keyboard housing disclosure of Clark which includes a touch sensitive pad, the touch sensitive pad operating as a trackpad to control cursor movement, arranged within an area of the keyboard housing. According to the Examiner (Answer, page 4), Clark discloses the claimed invention except that only a single mode of operation, i.e., a trackpad mode, is disclosed for the touchpad, rather than the additional keypad and digitizer modes as claimed. To address this deficiency, the Examiner turns to Ouellette which, according to the Examiner, discloses a touchpad with the requisite keypad and digitizer modes. According to the Examiner, the skilled artisan would have found it obvious to modify the system of Clark with the touchpad teachings of Ouellette "...to allow Clark's touch sensitive pad to be

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operable in many different modes to reduce cost." (Id.)

After reviewing the applied Clark and Ouellette references in light of the arguments of record, we are in general agreement with Appellant's contention that the Examiner has failed to establish a prima facie case of obviousness. Our review of the disclosure of Ouellette reveals, contrary to the Examiner's interpretation, a lack of any teaching of operation of the touchpad in a digitizer mode. In our view, the portion of the disclosure of Ouellette cited by the Examiner (column 5, lines 1-3) as describing a digitizer mode of operation, merely states that a stylus, instead of a finger, can be used to exert pressure on the touchpad contact sheet. This contact, however, simply allows activation of the keyboard representation underneath the contact sheet, not operation as a digitizer.

In view of this disclosure in Ouellette, it is our opinion that even assuming arguendo that proper motivation were established for combining Clark and Ouellette, the

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resultant structure would not meet all of the limitations of independent claim 1. Accordingly, since the Examiner has not established a prima facie case of obviousness, the rejection of independent claim 1, and claims 2-7 dependent thereon, based on the combination of Clark and Ouellette is not sustained.

Similarly, we also do not sustain the Examiner's obviousness rejection of claim 8. Although the Examiner has grouped together independent claims 1 and 8 in the statement of the rejection (Answer, pages 3 and 4), there is no indication as to how the limitations of independent claim 8 are met by the combined system of Clark and Ouellette. In order for us to sustain the Examiner's rejection under 35 U.S.C. § 103, we would need to resort to speculation or unfounded assumptions or rationales to supply deficiencies in the factual basis of the rejection before us. In re Warner, 379 F.2d 1011, 1017, 154 USPQ 173, 178 (CCPA 1967), cert. denied, 389 U.S. 1057 (1968), rehearing denied, 390 U.S. 1000 (1968).

In summary, we have sustained the Examiner's 35

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U.S.C. § 102(b) rejection of claim 8 as well as the obviousness rejection of claim 9 based on the combination of Barrus and Shima. We have not sustained the 35 U.S.C. § 103(a) rejection of claims 1-8 based on the combination of Clark and Ouellette. Therefore, the Examiner's decision rejecting claims 1-9 is affirmed-in-part.

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

JOSEPH F. RUGGIERO	)	
Administrative Patent Judge	)	
	)	
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	)	BOARD OF PATENT
PARSHOTAM S. LALL	)	APPEALS AND
Administrative Patent Judge	)	INTERFERENCES
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HOWARD B. BLANKENSHIP )  
Administrative Patent Judge )

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