

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 14

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte STEPHEN M. STANTON, JAMES T. DAVIS II  
and PETER D. IEZZI

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Appeal No.1998-3292  
Application 08/611,848<sup>1</sup>

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ON BRIEF

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Before COHEN, FRANKFORT, and CRAWFORD, Administrative Patent Judges.

FRANKFORT, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1 through 4, 6 through 15 and 17 through 20, which are all of the claims remaining in the application.

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<sup>1</sup> Application for patent filed March 8, 1996.

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Claims 5 and 16 have been canceled.

Appellants' invention relates to a multiplanar functional keypad and to a selective call receiver assembly that includes such a multiplanar functional keypad. As can be seen in Figures 1-3 of the application, and as set forth in appellants' "Abstract of the Disclosure," the selective call receiver assembly (10) includes a front housing (14) having a plurality of apertures (15, 16, 17) formed therein and a multiplanar functional keypad (20), wherein the keypad has "a first set of keys (23) and a second set of keys (22) residing on a first plane (30) and a third set of keys (21) residing on a second plane (28), the first, second, and third set [sic] of keys being integrally formed on one keypad" and at least a portion of the first and third sets of keys protruding through the plurality of apertures (15, 16) of the front housing when mounted within the front housing. A copy of representative claims 1, 6, 12 and 18 can be found in the Appendix to appellants' brief.

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The prior art references relied upon by the examiner in rejecting the appealed claims are:

Joseph	4,072,486	Feb. 7, 1978
Roth	4,707,594	Nov. 17,
1987		
Goldenberg et al. (Goldenberg)	5,175,873	Dec. 29, 1992
Gutman et al. (Gutman)	5,221,838	Jun. 22, 1993
Massa	5,422,934	Jun. 6, 1995
Tracy	5,465,193	Nov. 7, 1995
Grant	5,500,643	Mar. 19, 1996
		(filed Aug. 26,
1993)		

Claims 19 and 20 stand rejected under 35 U.S.C. § 112, first paragraph, as being based on a specification which fails to adequately provide a written description of the invention.

Claims 1 through 4 and 18 through 20 stand rejected under

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35 U.S.C. § 102(e) as being anticipated by Grant.

Claims 6, 7 and 10 stand rejected under 35 U.S.C. §  
102(b) as being anticipated by Gutman.

Claim 8 stands rejected under 35 U.S.C. § 103 as being  
unpatentable over Gutman in view of Massa and Joseph.

Claim 9 stands rejected under 35 U.S.C. § 103 as being  
unpatentable over Gutman in view of Tracy.

Claim 11 stands rejected under 35 U.S.C. § 103 as being  
unpatentable over Gutman in view of Massa and Joseph as  
applied to claim 8 above, and further in view of Grant.

Claims 12, 14, 15 and 17 stand rejected under 35 U.S.C.  
§ 103 as being unpatentable over Grant in view of Goldenberg.

Claim 13 stands rejected under 35 U.S.C. § 103 as being

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unpatentable over Grant in view of Goldenberg as applied to claims 12, 14, 15 and 17 above, and further in view of Roth.

Rather than attempt to reiterate the examiner's full commentary with regard to the above-noted rejections and the conflicting viewpoints advanced by the examiner and appellants regarding the rejections, we make reference to the final rejection (Paper No. 6, mailed April 4, 1997) and the examiner's

answer (Paper No. 13, mailed November 17, 1997) for the reasoning in support of the rejections, and to appellants' brief (Paper No. 12, filed October 14, 1997) for the arguments thereagainst.

OPINION

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In reaching our decision in this appeal, we have given careful consideration to appellants' specification and claims, to the applied prior art references, and to the respective positions articulated by appellants and the examiner. As a consequence of our review, we have made the determinations which follow.

Looking first at the examiner's rejection of claims 19 and 20 under 35 U.S.C. § 112, first paragraph, we note that appellants have not disputed the examiner's position, but have merely attempted to cancel claim 19 and 20 by the amendment after final filed May 1, 1997 (Paper No. 7), which amendment was refused entry by the examiner (see Paper No. 8). Thus, since appellants have not taken issue with the examiner's position regarding claims 19 and 20, we are compelled to summarily sustain this rejection.

Before turning to the examiner's rejections based on prior art, we note that it is an essential prerequisite that

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the scope and content of the claimed subject matter be fully understood prior to the application of prior art thereto. Accordingly, we direct our attention to appellants' independent claims 1, 6, 12 and 18 to derive an understanding of the scope and content thereof. More particularly, we look to the specification and drawings of the application in an effort to understand the recitation in independent claims 1, 6, 12 and 18 relating to the limitation that the various sets of keys defined in these claims are all "integrally formed on one contiguous key pad." In addition, we also look to appellants' disclosure to derive an understanding of the recitation in each of the claims on appeal relating to certain sets of keys of the keypad "residing on a first plane," and another set of keys of the keypad being set forth as "residing on a second plane."

With regard to the recitation that the sets of keys in each of the claims on appeal are "integrally formed on one contiguous key pad," it is apparent from a review of appellants'

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specification and drawings (Figures 1-3) that the multiplanar functional key pad (20) of appellants' invention is a unitary, one-piece structure formed of an elastomeric material with the plurality of keys (21, 22, 23) all being integrally formed or molded from the elastomeric material as part of the one-piece contiguous keypad. While, in a vacuum, the terminology "keypad" might be subject to a broader interpretation, when the entirety of appellants' claim language is considered in light of the disclosure as a whole, it is apparent to us that the type of "keypad" involved in the present application is an integrally formed, one-piece contiguous keypad like that we have noted above. In this regard, we observe that before the PTO, when evaluating claim language during examination of the application, the examiner is required to give the terminology of the claims its broadest reasonable interpretation consistent with the specification, and to remember that the claim language cannot be read in a vacuum, but instead must be read in light of the specification as it would be interpreted by one of ordinary skill

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in the pertinent art. See In re Sneed, 710 F.2d 1544, 1548, 218 USPQ 385, 388 (Fed. Cir. 1983); In re Bond, 910 F.2d 831, 833, 15 USPQ2d 1566, 1567 (Fed. Cir. 1990) and In re Morris, 127 F.3d 1048, 1054, 44 USPQ2d 1023, 1027 (Fed. Cir. 1997).

As for the language in the claims on appeal concerning certain sets of keys "residing on a first plane," while another set of keys is said to be "residing on a second plane," we find this language to be indefinite. The manner in which this language is used in appellants' claims on appeal conveys the clear impression that certain sets of keys are located in a first plane defined by some portion of the keypad (20) itself, while another set of keys is located in/on a second plane defined by some other portion of the keypad. However, the description in appellants' specification and the showing in the drawings, would seem to give a distinctly different picture of the intended meaning of this terminology.

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According to the specification (pages 2-4) the first plane (30) is defined by the upper surface of the underlying printed circuit board seen in the lower right portion of Figure 1, while the second plane (28) is defined by

the light pipe (26) which carries electrical contacts and runners (31) or alternatively includes a flex circuit (32) with runners (33) that are coupled to the control printed circuit board via pad (34). Thus, it appears that the first and second planes referred to in appellants' claims on appeal form no part of the integrally formed contiguous keypad defined in the claims, but instead are merely different planes within the overall device itself, which planes carry electrical contacts with which the keys of the keypad are operatively or functionally associated via the conductive material (19, 25, 35) provided on the bottom surfaces of the keys to thereby permit activation of a given circuit or circuit component. Note particularly, page 4, lines 6-19 of appellants' specification. As a result of the ambiguity in

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the language of the claims on appeal regarding the sets of keys and their association with the first and second planes, we are compelled to enter a new ground of rejection, *infra*, under 35 U.S.C. § 112, second paragraph.

While we would not normally review the examiner's prior art rejections in a case such as this, where we have determined that the claim language renders the claims on appeal indefinite, we have decided, in the interests of judicial economy and fairness to appellants, to consider the prior art rejections applied by the examiner in this case. We do so based on our understanding of appellants' arguments and specification, and as a result of their impact on the significance of the claim terminology "integrally formed on one contiguous keypad," which is found in each of the claims on appeal.

In the rejection of claims 1 through 4 and 18 through 20 under 35 U.S.C. § 102(e) as being anticipated by Grant, the examiner has taken the position, with respect to claim 1, that

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Grant discloses a keypad 10 with a first set of lettered keys, numbered and punctuation keys on the right half of the housing 12 as shown in figure 1 of Grant. Grant discloses a second key 58 labeled "SAVE," and Grant also discloses a third key 36 which is on a different plane than the first and second set of keys. All the keys are integrated into one housing 12.

With respect to claims 18 through 20, the examiner urges that Grant discloses a keypad in which key (58) can be considered one set of keys and key (36) can be considered a second set of keys.

The examiner has reached the above conclusions regarding the teachings of Grant by applying a definition of the term "keypad" apparently found in Webster's Ninth New Collegiate Dictionary as being "a small often hand-held keyboard" (answer, page 4). In the paragraph bridging pages 4 and 5 of the answer, the examiner has further urged that

[t]his definition is also consistent with the definition of "keypad" as used in the art. The term "keypad" denotes a group of keys which together form a set for the entry of data such as a standard computer keyboard, a number keypad for a calculator or various other devices using keys to enter letters and numbers. In addition, one definition of the term "integral" as given by

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Webster's New Collegiate Dictionary is "composed of constituent parts making a whole." The device taught by Grant meets both of the above definitions.

Appellants have argued that the examiner is disregarding the conventional use of the term "keypad" in the trade and giving it a broader meaning. Appellants urge (brief, page 8) that in this case

the term 'keypad' is being used clearly to identify an integrated rubber-type (elastomeric) device that is not within a housing as the examiner would lead you to believe. The "keypad" of the present invention is more akin to the rubber keypads found in the enclosed product sheets.

In addition, appellants have stated that

[i]f the ordinary meaning of 'keypad' includes separate multiple keypads within one housing as shown in Grant, then the Applicant [sic] herein is certainly using it differently.

Based on our determinations supra, after properly evaluating the claim language in light of and consistent with appellants' specification and drawings as they would be interpreted by one of ordinary skill in the pertinent art, we must agree with appellants that the examiner has given the "keypad" terminology as set forth in independent claims 1, 6, 12 and 18 on appeal an unduly broad construction. The key sets seen in Grant that were pointed to by the examiner as being associated with or integrated into the housing (12) are not shown or disclosed as being integrally formed or molded as part of a one-piece contiguous keypad as we have concluded

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above is required in the claims of the present application. Thus, based on that portion of claims 1 through 4 and 18 through 20, which we can understand, we must refuse to sustain the examiner's rejection of those claims under 35 U.S.C. § 102(e) as being anticipated by Grant.

As for the examiner's rejection of claims 6, 7 and 10 under 35 U.S.C. § 102(b) as being anticipated by Gutman, we have again given the terminology "integrally formed on one contiguous keypad" its broadest reasonable interpretation consistent with appellants' specification, and share appellants' view that the key sets pointed to by the examiner's in Gutman are clearly not shown or disclosed as being integrally formed or molded as part of a one-piece contiguous keypad as we have concluded above is required in the claims of the present application. The examiner's reliance on layman's definitions found in dictionaries, instead of on the guidance afforded by appellants' written description as such would have been understood by one of ordinary skill in the art, in our opinion, has led the examiner to an unreasonable interpretation of the language of the claims before us on appeal. For that reason, we will not sustain the examiner's rejection of claims 6, 7 and 10 under 35 U.S.C. § 102(b) as being anticipated by Gutman.

We have additionally reviewed the examiner's reliance on Massa, Joseph, Tracy and Grant in the § 103 rejections of claims 8, 9 and 11 (which depend either directly or indirectly from independent claim 6), however, we find nothing in these added references which provides for that which we have found above to be lacking in Gutman. Accordingly the examiner's rejections of claims 8, 9 and 11 under 35 U.S.C. § 103 will likewise not be sustained.

Turning next to the examiner's rejection of claims 12, 14, 15 and 17 under 35 U.S.C. § 103 as being unpatentable over Grant and Goldenberg, we note that Goldenberg discloses an elastomeric "keypad" (30) of the general type involved in the present application. The examiner points to the elastomeric

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key pad of Goldenberg and to the elastomeric shock pad (42) in the lower portion of the housing (40) of Goldenberg, urging that it would have been obvious to one of ordinary skill in the art to combine the teachings of Goldenberg with the keypad/keyboard of Grant "for the advantage of the shock absorbing keys" (final rejection, page 6). Even if such a combination were made, we must agree with appellants that the resulting structure would not be that set forth in appellants' claims 12, 14, 15 and 17 on appeal, wherein the first, second and third sets of keys are "all integrally formed on one contiguous keypad," as such terminology has been interpreted by this panel of the Board above. For that reason, we will not sustain the examiner's rejection of claims 12, 14, 15 and 17 under 35 U.S.C. § 103.

In rejecting dependent claim 13 under 35 U.S.C. § 103 as being unpatentable over Grant, Goldenberg and Roth, the examiner has relied upon the teachings in Roth concerning its use of conductive carbon ink pads (410), urging that it would have been obvious to one of ordinary skill in the art to use such pads in Grant as modified by Goldenberg. Again, since we see nothing in the collective teachings of the applied references which would have rendered obvious the one-piece, integrally formed, contiguous keypad defined in appellants' claims 12 and 13, we will not sustain the examiner's rejection.

Under the provisions of 37 CFR 1.196(b), we enter the following new ground of rejection against all of the claims on appeal.

Claims 1 through 4, 6 through 15 and 17 through 20 are rejected under 35 U.S.C. § 112, second paragraph, as failing to particularly point out and distinctly claim the subject matter which appellants regard as their invention. More specifically, as we noted *supra*, the recitation in each of the claims on appeal concerning certain of the sets of keys "residing on a first plane," while another set of keys is said to be "residing on a second plane" is indefinite, because although the language of the claims clearly convey that the

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planes in question are part of the keypad itself, the specification of the present application seems to indicate that the first and second planes are some other planes of the overall call receiving device with which the key sets are apparently operatively or functionally associated to electrically activate some portion of the device. However, claims 1 through 4, 12 through 15 and 17 through 20 are directed to a key pad *per se*, without any recitation of the type of device or other structure with which it might be associated. Although claim 6 on appeal is directed to a "selective call receiver assembly" which includes a keypad wherein the sets of keys are all integrally formed on one contiguous keypad, the recitations concerning the first and second planes are still ambiguous since such planes are not clearly and properly defined in the context of what appellants view as their invention. The recitation in claims 4, 11 and 15 that the third set of keys includes a pair of keys residing under a rocker switch, and in claim 12 concerning the third set of keys "residing below a rocker switch and further residing on a second plane" (emphasis added), merely adds to the confusion about exactly what structure is being defined in these claims.

In view of the foregoing, the examiner's decision rejecting claims 19 and 20 under 35 U.S.C. § 112, first paragraph, is affirmed, but the decision rejecting claims 1 through 4 and 18 through 20 under 35 U.S.C. § 102(e) relying on Grant, the decision rejecting claims 6, 7 and 10 under 35 U.S.C. § 102(b) based on Gutman, and the decision rejecting claims 8, 9, 11 through 15 and 17 under 35 U.S.C. § 103 are each reversed. In addition, pursuant to 37 CFR § 1.196(b), we have entered a new ground of rejection against claims 1 through 4, 6 through 15 and 17 through 20 on appeal under 35 U.S.C. § 112, second paragraph.

The decision of the examiner is affirmed-in-part.

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In addition to affirming the examiner's rejection of one or more claims, this decision contains a new ground of rejection pursuant to 37 CFR § 1.196(b)(amended effective Dec. 1, 1997, by final rule notice, 62 Fed. Reg. 53,131, 53,197 (Oct. 10, 1997), 1203 Off. Gaz. Pat. & Trademark Office 63,122 (Oct. 21, 1997)). 37 CFR § 1.196(b) provides, "A new ground of rejection shall not be considered final for purposes of judicial review."

Regarding any affirmed rejection, 37 CFR § 1.197(b) provides:

(b) Appellant may file a single request for rehearing within two months from the date of the original decision . . . .

37 CFR § 1.196(b) also provides that the appellant, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of proceedings (37 CFR § 1.197(c)) as to the rejected claims:

(1) Submit an appropriate amendment of the claims so rejected or a showing of facts relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the application will be remanded to the examiner. . . .

(2) Request that the application be reheard

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under § 1.197(b) by the Board of Patent Appeals and Interferences upon the same record. . . .

Should appellants elect to prosecute further before the Primary Examiner pursuant to 37 CFR § 1.196(b)(1), in order to preserve the right to seek review under 35 U.S.C. §§ 141 or 145 with respect to the affirmed rejection, the effective date of the affirmance is deferred until conclusion of the prosecution before the examiner unless, as a mere incident to the limited prosecution, the affirmed rejection is overcome.

If appellants elect prosecution before the examiner and this does not result in allowance of the application, abandonment or a second appeal, this case should be returned to the Board of Patent Appeals and Interferences for final action on the affirmed rejection, including any timely request for reconsideration thereof.

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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; 37 CFR § 1.196(b)

IRWIN CHARLES COHEN	)
Administrative Patent Judge	)
	)
	) BOARD OF PATENT
CHARLES E. FRANKFORT	)
Administrative Patent Judge	) APPEALS AND
	)
	) INTERFERENCES
	)

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