

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(2) is not binding precedent of the Board.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. 25

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte RODNEY D. WILLIAMS and FELIX GARCIA

MAILED

Appeal No. 94-2838
Application 08/019,998¹

DEC 14 1995

ON BRIEF

PATENT OFFICE
BOARD OF PATENT APPEALS
AND INTERFERENCES

Before HAIRSTON, KRASS, and JERRY SMITH, Administrative Patent Judges.

HAIRSTON, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 1, 22 and 34. Claims 19, 21, 23 and 25 are allowed and claims 20, 24 and 26 through 33 are withdrawn from consideration. Claims 2 through 18 have been canceled.

¹Application for patent filed February 17, 1993. According to applicants, the application is a continuation of Application 07/845,102, filed March 3, 1992; which is a division of Application 07/629,806, filed December 19, 1990, now Patent No. 5,157,546, granted October 20, 1992.

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The disclosed invention relates to a three dimensional cylindrical display wherein an observer is located within the display itself for viewing the display over a wide angle. An x-y image is projected onto a transparent disk which is rotated by a motor via a shaft to form a three dimensional image. The z-dimension is a function of the angle of the disk relative to the direction of the x-y image. Figure 2 discloses a first embodiment wherein two conical regions within the cylindrical display are not displaced by the rotating disk. An observer, animate or inanimate, is placed in one of the two conical regions. Figure 3 discloses an embodiment which differs from the Figure 2 embodiment in that instead of placing an observer in one of the two conical regions, the shaft of Figure 2 is replaced with a hollow, transparent shaft which is sufficiently large to permit an observer to be positioned therein.

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

1. A method of viewing a three dimensional display comprising the steps of:

(a) providing a three dimensional display having depth and a cylindrical exterior surface, said display volumetrically occupying all but a selected region disposed within said cylindrical exterior surface along the axis of said cylindrical exterior surface; and

(b) viewing said display from said selected region disposed within said cylindrical exterior surface.

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The references relied on by the examiner are:

Tashiro et al. (Tashiro)	4,976,438	Dec. 11, 1990
Williams et al. (Williams)	5,157,546	Oct. 20, 1992

Claim 34 stands rejected under the second paragraph of 35 U.S.C. § 112.

Claim 1 stands rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 12 of Williams.

Claim 1 stands rejected under 35 U.S.C. § 102(e) as being anticipated by Tashiro.

Claim 22 stands rejected under 35 U.S.C. § 103 as being unpatentable over Tashiro.

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

OPINION

We have carefully considered the entire record before us, and we will sustain the 35 U.S.C. § 112, second paragraph rejection of claim 34, the obviousness-type double patenting rejection of claim 1, the 35 U.S.C. § 102(e) rejection of claim 1, and the 35 U.S.C. § 103 rejection of claim 22.

Part (c) of claim 34 stands rejected as being indefinite under 35 U.S.C. § 112, second paragraph. The examiner sets forth on page 4 of the answer that part (c) of claim 34 does not provide antecedent basis for the term "at least one of said

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cylindrically shaped volumes." The claim contains no earlier recitation or limitation of more than one cylindrical volume. The indefiniteness in the claim language is of semantic origin and the intended meaning in light of the specification may be apparent. Nevertheless, the rejection of claim 34 under § 112, second paragraph is proper because a claim is not rendered unobjectionable merely because it could have been corrected prior to the instant appeal. See In re Hammack, 427 F.2d 1384, 1388 n.5, 166 USPQ 209, 213 n.5 (CCPA 1970).

The obviousness-type double patenting rejection of claim 1 turns on a two-part analysis. First, the analysis requires inquiry into whether 35 U.S.C. § 121 precludes the double patenting rejection of claim 1. If 35 U.S.C. § 121 does not preclude the double patenting rejection of claim 1, then we must determine whether the invention as defined in appealed claim 1 is an obvious variant of the invention as defined in claim 12 of the Williams patent.

The examiner's rationale for concluding that 35 U.S.C. § 121 does not preclude the double patenting rejection of claim 1 is set forth on pages 3 and 4 of the answer, and is as follows:

Applicants' remarks, page 3, indicate that claim 1 presently on appeal cannot be properly subject to an obviousness-type double patenting rejection because original claim 1 of the parent application was subject to a restriction requirement. Restriction in the parent application was between the

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species of Figure 2 which included "a pair of substantially conically shaped volumes" as set out in original claim 1 and the species of Figure 3 which did not include such volumes. Original claim 1 was properly withdrawn from consideration by the examiner in the parent application as directed to a nonelected species.

Claim 1 on appeal in this application is generic to both the species of Figure 2 and the species of Figure 3. Therefore the obviousness-type double patenting rejection is appropriate. That claim was not submitted "as a result of" the restriction requirement as required under 35 U.S.C. 121. See MPEP Sections 804.01 (A) (b) and 804.01 (B).

In the paragraph bridging pages 4 and 5 of the reply brief, appellant traverses the examiner's arguments as follows:

When the rotating disk which is provided in claim 1 as filed is rotated to provide a three dimensional display, it provides the three dimensional display having depth and a cylindrical exterior surface as required in claim 1 on appeal. Also, the pair of conically shaped volumes in claim 1 as filed are the same as the selected region disposed within the exterior surface along the axis of the cylindrical exterior surface of claim 1 on appeal except for a minor widening of breadth. Claims 3 and 13 [claims 1 and 8 of the Patent No. 5,157,546] are essentially unchanged from filing to issue as demonstrated above. It follows that claim 1 as filed and claim 1 now on appeal are for the same invention and that the double patenting rejection is without merit, whether or not the original requirement was proper, in view of the second element as set forth above.

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As the examiner correctly indicated, the 35 U.S.C. § 121 prohibition against the use of a parent application against a divisional application filed as a result of a restriction requirement only applies where the claims in the divisional application are kept "consonant" with those not elected in the parent application. According to the court,

[c]onsonance requires that the line of demarcation between the "independent and distinct inventions" that prompted the restriction requirement be maintained. Though the claims may be amended, they must not be so amended as to bring them back over the line imposed in the restriction requirement. Where that line is crossed the prohibition of the third sentence of Section 121 does not apply.

Gerber Garment Technology Inc. v. Lectra Systems Inc., 916 F.2d 683, 688, 16 USPQ2d 1436, 1440 (Fed. Cir. 1990).

We agree with the examiner that claim 1 on appeal is generic to both the invention of Figure 2 and the invention of Figure 3. The term "rotating disk" in non-elected claim 1 is much more specific than the term "cylindrical exterior surface" in claim 1 on appeal. In addition, the limitation "conically shaped volume" is more specific than the limitation "a selected region." The change in scope between non-elected claim 1 and claim 1 on appeal is more than a "minor widening of the breadth" as argued by the appellants. Accordingly, claim 1 on appeal is not consonant with non-elected claims 1 and 2 and the prohibition

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of obviousness-type double patenting rejections under 35 U.S.C. § 121 does not apply.

Having determined that 35 U.S.C. § 121 is inapplicable, we turn to the determination of whether the invention defined in appealed claim 1 is an obvious variant of the invention defined in claim 12 of the Williams patent.² The so-called "two-ways" analysis is applied where a later-filed improvement application issues before an earlier-filed basic application which was delayed "not by the applicant, but by 'the rate of progress of the application through the PTO, over which the applicant does not have complete control'." In re Goodman, 11 F.3d 1046, 1053, 29 USPQ2d 2010, 2016 (Fed. Cir 1993) (citing In re Braat, 937 F.2d 589, 593, 19 USPQ2d 1289, 1292 (Fed. Cir. 1991)). The Court in Goodman distinguished Braat because Goodman voluntarily chose to obtain early issuance of narrow species claims and to prosecute genus claims in a continuation application rather than pursue an immediate appeal to the Court on its genus claims. Goodman, 11 F.3d at 1053, 29 USPQ2d at 2016. The Court held that the two-way test did not apply in that case because PTO actions did not dictate the rate of prosecution of the generic claims.

²The Gerber court did not reach this issue because Gerber conceded that obviousness-type double patenting was present should § 121 apply. Gerber Garment Technology Inc. v. Lectra Sys. Inc., 916 F.2d at 687, 16 USPQ2d at 1439.

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Similarly, PTO actions did not dictate the rate of prosecution of generic claim 1 in the present application because the restriction requirement in the patent was made subject to the nonallowance of generic or other linking claims.³ Like Goodman, appellant was not prevented from presenting and fully prosecuting a generic claim during examination of the Williams patent. Indeed, appellant never presented a generic claim during the

³See Paper No. 4 of U.S. Application Serial No. 07/629,806, now U.S. Patent No. 5,157,546 to Williams. The restriction requirement on page 2 is as follows:

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claim is generic.

Applicant is advised that a response to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims sub-sequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP 809.02(a).

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prosecution of the Williams patent and instead chose to seek early issuance of the narrow species claims. "By adopting the easy course of filing a continuation or divisional application to gain a narrow claim, a patentee could gain an extension of the term on a species when the broad genus later issued." Goodman, 11 F.3d at 1053, 29 USPQ2d at 2016. Accordingly, a two-way analysis is not necessary to resolve the issue of double patenting in the present case.

Proceeding then under a one-way determination of obviousness, appealed claim 1 is generic to the species of the invention covered by claim 12 in the patent. Issuance of broad genus claims would provide appellant with an unjustified timewise extension of the patent.⁴ Accordingly, claim 1 is obvious over patent claim 12 and, without a terminal disclaimer, the obvious-type double patenting rejection is proper and will be sustained.

Claim 1 stands rejected under § 102(e) as being anticipated by Tashiro. Figure 1 of Tashiro discloses a video game system wherein a plurality of players are placed within a cylinder-shaped screen 110. As disclosed in column 9 and shown in figure 5, image information generators 520 generate three-dimensional

⁴See Goodman, (citing In re Van Ornum, 686 F.2d 937, 944, 214 USPQ 761, 767 (CCPA 1982); In re Schneller, 397 F.2d 350, 354, 158 USPQ 210, 214 (CCPA 1968); In re Braithwaite, 379 F.2d 606, 154 USPQ 38 (CCPA 1967)).

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images representative of a game space for display on the cylinder-shaped screen 110.

In the paragraph bridging pages 4 and 5 of the answer, the examiner correctly argues as follows:

With regard to applicants' remarks, pages 4 and 5 [of the brief], concerning the rejection of claim 1 over the patent to Tashiro under 35 U.S.C. § 102(e), the display 100, 110 of Tashiro clearly is three-dimensional in space and has depth both in terms of thickness and in terms of defining a cylindrical volume as well as being intended to provide realistic three-dimensional effects. Clearly also the display has an exterior cylindrical surface as set out in claim 1 and the display occupies part and only part of that cylindrical volume defined by that exterior cylindrical surface, contrary to applicants' remarks, page 4. Additionally, the device of Tashiro et al is clearly intended to be viewed from within the cylindrical volume, contrary to applicants' remarks, page 5.

Page 5 of the reply brief offers some additional arguments concerning "a three dimensional display" having "depth" as follows:

Three dimensional displays and the meaning of such terminology is well known. The Morton and Garcia patents of record are examples of three dimensional displays.

The above argument applies as well to claim 22 because it is not readily apparent to place observers within a three dimensional display from any of the cited art. The three dimensional display is provided by having a rotating disk. This makes it difficult to locate an observer within the three dimensional volume of the display because the

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three dimensional display takes up the three dimensions of the space involved.

Appellants apparently interpret claim 1 as encompassing only displays like those in the Garcia and Morton references wherein a rotating disk produces the three-dimensional image. Appellants' arguments, however, are not commensurate in scope with the claimed invention as claims 1 and 22 do not recite a rotating disk. Although Tashiro does not employ a rotating disk, column 9 of the Tashiro reference discloses the use of x-axis, y-axis and z-axis display data for viewing on the cylindrical display, thus the claims as broadly recited read on the three-dimensional display taught by Tashiro. Furthermore, it appears that "depth" is inherent in the reference if it produces a three-dimensional display. The 35 U.S.C. § 102(e) rejection of claim 1 is sustained.

Claim 22 stands rejected under 35 U.S.C. § 103 as being unpatentable over Tashiro. The paragraph bridging pages 5 and 6 of the reply brief indicates that the same arguments offered for claim 1 apply to claim 22. Therefore, claim 22 stands or falls together with claim 1 because appellant has not presented separate arguments directed at the obviousness rejection of claim 22. See In re King, 801 F.2d 1324, 1325, 231 USPQ 136, 137 (Fed. Cir. 1986) (citing In re Sernaker, 702 F.2d 989, 217 USPQ 1 (Fed. Cir. 1983); In re Burckel, 592 F.2d 1175, 201 USPQ 67 (CCPA

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1979)). The 35 U.S.C. § 103 rejection of claim 22 is sustained.

DECISION

The decision of the examiner rejecting claims 1, 22 and 34 is affirmed.

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

AFFIRMED


KENNETH W. HAIRSTON
Administrative Patent Judge)


ERROL A. KRASS
Administrative Patent Judge)


JERRY SMITH
Administrative Patent Judge)

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