

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 16

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JUNICHI NAGAHARA and TOSHIKAZU MINOSHIMA

Appeal No. 1999-1602
Application No. 08/776,957

ON BRIEF

Before BARRETT, BLANKENSHIP, and SAADAT, Administrative Patent Judges.
BLANKENSHIP, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 2-5 and 7-10, which are all the claims remaining in the application.

We affirm-in-part.

BACKGROUND

The invention is directed to an information processing method and apparatus which display a “virtual space” in response to viewer-specified “viewpoint information” indicating a desired viewpoint within the virtual space (Brief at 2). Representative claim 7 is reproduced below.

7. An information display method, comprising the steps of:

controlling view point information of a virtual user within a virtual space in accordance with input information from a user;

reading virtual space structured data from a memory unit in accordance with the viewpoint information of the virtual user, the virtual space structured data including data indicative of predetermined areas of the virtual space having hierarchical structure and corresponding to nodes, some of the nodes having low order, wherein the data indicates that each of plural objects and an entrance hall area for collectively or panoramically displaying the objects is disposed within a different one of the predetermined areas of the virtual space, and wherein the data links each of the objects to a different one of the nodes having low order; and

displaying the virtual space on the basis of at least some of the virtual space structured data, wherein the virtual space structured data includes data indicating that the entrance hall area is disposed at one side of a polygon, and the objects are disposed at other respective sides of the polygon.

The examiner relies on the following references:

O’Neill et al. (O’Neill)	5,621,906	Apr. 15, 1997 (filed Feb. 13, 1995)
Goh	5,678,015	Oct. 14, 1997 (filed Sep. 1, 1995)

Claims 2-5 and 7-10 stand rejected under 35 U.S.C. § 103 as being unpatentable over O’Neill and Goh.

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We refer to the Final Rejection (mailed Jul. 23, 1998) and the Examiner's Answer (mailed Oct. 14, 1998) for a statement of the examiner's position and to the Brief (filed Sep. 25, 1998) for appellants' position with respect to the claims which stand rejected.

OPINION

Grouping of Claims

Appellants appear to propose separate patentability for two groups of claims, based on groups of independent claims (Brief at 7), and appellants submit arguments for each of the two groups. However, appellants present additional arguments for dependent claims 3, 8 (Brief at 8 and 11), 5, and 10 (Brief at 8-9). We select claim 7 as representative of claims 2 and 7; claim 9 as representative of claims 4 and 9; claim 8 as representative of claims 3 and 8; and claim 10 as representative of claims 5 and 10. See 37 CFR § 1.192(c)(7).

The section 103 rejection

A section 103 analysis begins with a key legal question -- what is the invention claimed? Panduit Corp. v. Dennison Mfg. Co., 810 F.2d 1561, 1567, 1 USPQ2d 1593, 1597 (Fed. Cir. 1987). Thus, we first investigate the scope of the invention claimed, with particular emphasis on the language that appellants assert distinguishes the claims over the prior art.

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Appellants contest the view that O'Neill discloses, as set forth in instant claim 7, a display (e.g., Fig. 4 or 6) that indicates "an entrance hall disposed at one side of a polygon," and objects disposed at other respective sides of the polygon. (Brief at 9-11.)

Claims are to be given their broadest reasonable interpretation during prosecution, and the scope of a claim cannot be narrowed by reading disclosed limitations into the claim. See In re Morris, 127 F.3d 1048, 1054, 44 USPQ2d 1023, 1027 (Fed. Cir. 1997); In re Zletz, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989); In re Prater, 415 F.2d 1393, 1404, 162 USPQ 541, 550 (CCPA 1969).

There is no evidence in the record that the words such as "entrance hall area" and "polygon" have any special meaning to the artisan. Nor do appellants point to any particular definitions of the words in the instant specification. See In re Paulsen, 30 F.3d 1475, 1480, 31 USPQ2d 1671, 1674 (Fed. Cir. 1994) (repeating the principle that where an inventor chooses to be his own lexicographer and gives terms uncommon meanings, he must set out the uncommon definition in the patent disclosure). See also Beachcombers Int'l, Inc. v. WildeWood Creative Prods., Inc., 31 F.3d 1154, 1158, 31 USPQ2d 1653, 1656 (Fed. Cir. 1994) ("As we have repeatedly said, a patentee can be his own lexicographer provided the patentee's definition, to the extent it differs from the conventional definition, is clearly set forth in the specification."); Johnson Worldwide Assocs., Inc. v. Zebco Corp., 175 F.3d 985, 989, 50 USPQ2d 1607, 1610 (Fed. Cir. 1999) (there is a "heavy presumption" that claim language has its ordinary meaning).

We thus interpret the words in accordance with their ordinary meanings. A “polygon” is defined as a “closed plane figure bounded by three or more line segments.” The American Heritage Dictionary, Second College Edition at 961 (1982). A “hall” is a “corridor or passageway in a building,” or a “large entrance room or vestibule in a building; lobby.” Id. at 589. An “area” is “a section or region, as of land,” or a “distinct part or section, as of a building, set aside for a specific function.” The word is also considered an “inclusive” term that means any particular portion of a surface and suggests a portion that spreads out in all directions from a center, with a vague periphery. Id. at 126.

Instant claim 7 recites, “wherein the data indicates that each of plural objects and an entrance hall area for collectively or panoramically displaying the objects is disposed within a different one of the predetermined areas of the virtual space.” The claim thus recites a function for the “entrance hall area”; in view of the disjunctive “or,” the claim requires at least an entrance hall area for collectively displaying the objects. The “entrance hall area” is thus interpreted as meaning visual indication of a distinct part or section, as of a building, corresponding to a corridor, passageway, large entrance room, or vestibule. The visual indication further requires that the virtual user may view objects in the virtual space separated from the entrance hall area.¹

¹ Consistent with appellants’ disclosure, we interpret the entrance hall area as an area from which the objects may be viewed; i.e., as not requiring any objects within the entrance hall area itself. (See Brief, “Summary of Invention,” ¶¶ bridging pages 2 and 3.)

Claim 7 further recites, “wherein the virtual space structured data includes data indicating that the entrance hall area is disposed at one side of a polygon, and the objects are disposed at other respective sides of the polygon.” Contrary to appellants’ indication (Brief at 10), the claim does not require any “polygonal space,” such as a “polygonal room.” There is nothing in the claim to require that the “polygon” be part of the virtual space. We decline appellants’ invitation to read disclosed limitations into the claim.

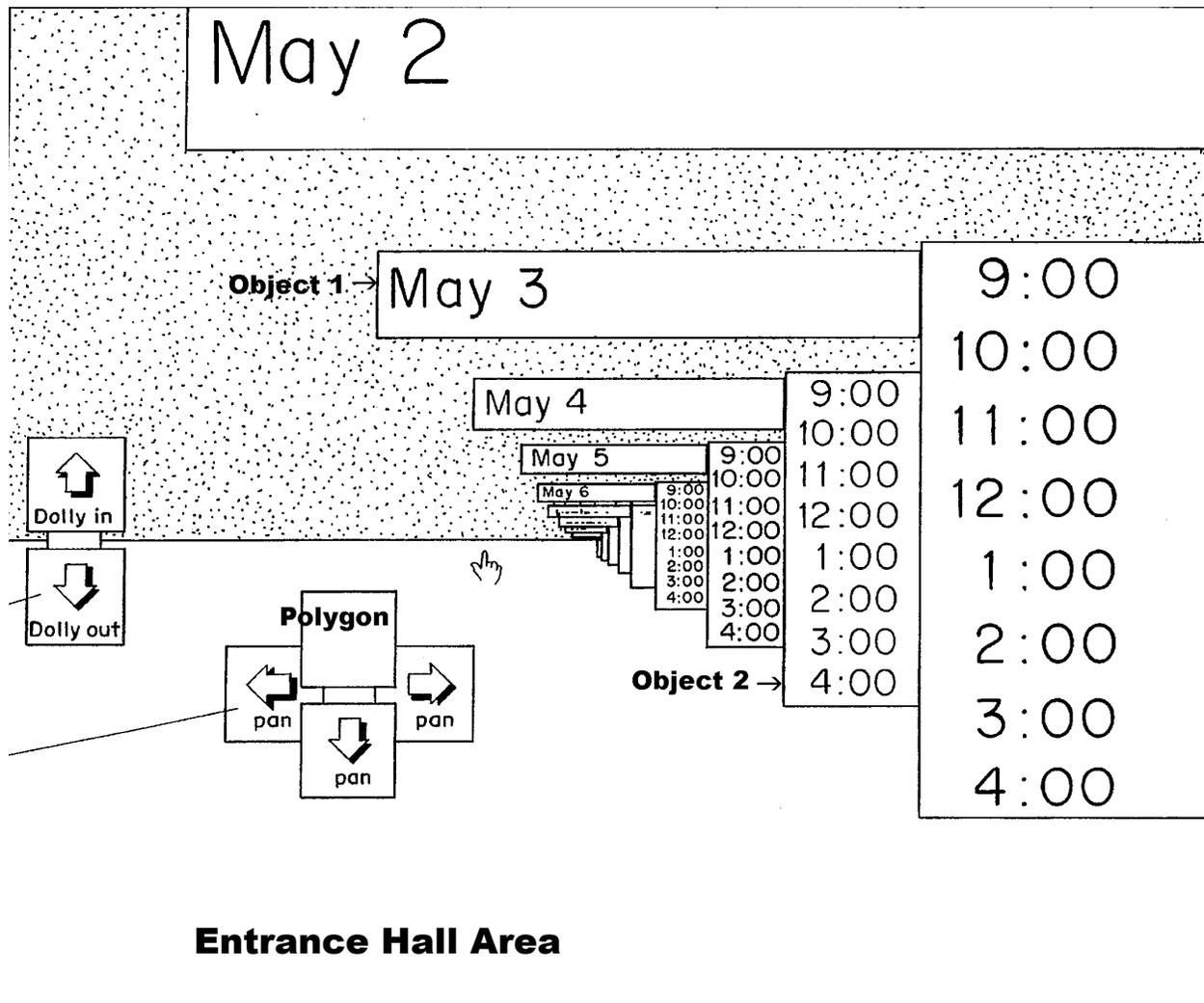
We now turn to consider the teachings of the reference in controversy. O’Neill describes, particularly at columns 3 and 4, presenting a three-dimensional view of information, as that stored in a database, whereby the user can move about within the file, in a virtual sense, and retain a sense of location within the file. By means of an input device, as shown in Figure 4, the user may navigate forward or back (DOLLY), or shift up, down, left, or right (PAN).

Although other examples of databases are described by O’Neill, Figure 4 depicts the form of an appointment book having mastheads 21 and information surfaces 20 placed in a perspective row arrangement. We consider the mastheads and information surfaces to be “objects” within the meaning of the instant claims; further, appellants do not argue to the contrary.

We agree with the examiner that the argued terms of claim 7 are broad enough to read on the disclosure of O’Neill. We also note that, in view of the language of claim 7, appellants rely for patentability on what the data “indicates” -- i.e., how one is to

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interpret the graphical components viewed on a two-dimensional display, based on the visual cues thereby provided. We find that Figure 4 of O'Neill thus indicates, in accordance with the labels we add as below:



O'Neill Figure 4

-- Entrance Hall Area -- initial (entry) portion of the overall virtual area in which the virtual user may stand and view plural objects, including at least object 1 and object 2

- Entrance Hall Area is at one side of a polygon (square)
- Object 1 is disposed at other respective side of the polygon
- Object 2 is disposed at another respective side of the polygon

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We therefore find that O'Neill's disclosure meets the claim 7 language regarding the "indications" argued to be missing from the prior art.

We also find that O'Neill's Figure 4 indicates "a linear corridor area connected to the entrance hall area," as required by instant claim 9. That is, the display indicates that at least the area that is past the "May 3" masthead, from the viewpoint of a virtual user, is in the form of a linear corridor, with masthead and information surface objects at the right-hand side of the corridor. We have considered appellants' arguments to the contrary (Brief at 12). However, in our opinion the broadest reasonable interpretation of "entrance hall area" includes within its meaning the nearest (initial) portion of the area indicated in Figure 4 of O'Neill, for the reasons we have previously expressed herein. We also find, consistent with instant claim 10, that O'Neill's Figure 4 indicates that the objects are disposed "only at one side" (i.e., the right-hand side) of the corridor.

Since we are not persuaded of error in the rejection of representative claims 7, 9 or 10, we sustain the rejection of claims 2, 4, 5, 7, 9, and 10 under 35 U.S.C. § 103 as being unpatentable over O'Neill and Goh.

Each of instant claims 3 and 8 recites indication that "the entrance hall area is disposed at a position from which the virtual user has a bird's eye view of the inside of the polygon and the objects." A "birds-eye" is defined as "seen from high above or from a distance: *a bird's eye view*." The American Heritage Dictionary, Second College Edition at 181 (1982). We agree with appellants that the disclosure of O'Neill does not teach the noted limitations of claims 3 and 8. The view of the polygon we have

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identified in O'Neill's Figure 4 does not appear to change in perspective as the virtual user moves about the virtual area. We find it unclear how the limitations of claims 3 and 8 might be disclosed or suggested by Figure 6 of O'Neill, or by any other portion of the disclosure. We therefore do not sustain the rejection of claims 3 and 8 under 35 U.S.C. § 103 as being unpatentable over O'Neill and Goh.

We have considered all of appellants' arguments in making our determinations. Arguments not relied upon are deemed waived. See 37 CFR § 1.192(a) ("Any arguments or authorities not included in the brief will be refused consideration by the Board of Patent Appeals and Interferences, unless good cause is shown.") and §1.192(c)(8)(iv) (the brief must point out the errors in the rejection).

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CONCLUSION

We have affirmed the rejection of claims 2, 4, 5, 7, 9, and 10 under 35 U.S.C. § 103. We have reversed the rejection of claims 3 and 8 under the same statute. The examiner's decision in rejecting claims 2-5 and 7-10 is thus 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

LEE E. BARRETT)	
Administrative Patent Judge)	
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HOWARD B. BLANKENSHIP)	APPEALS
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