

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

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ROBERT THOMAS UTHE

Appeal 2006-3172
Application 10/420,685
Technology Center 3600

Decided: January 26, 2007

Before ANITA PELLMAN GROSS, STUART S. LEVY and ANTON W. FETTING, *Administrative Patent Judges*.

ANTON W. FETTING, *Administrative Patent Judge*.

DECISION ON APPEAL

This appeal involves claims 1-9 and 11-22, claims 10 and 23 having been indicated as containing allowable subject matter by the examiner. Claims 1-23 are the only claims pending in this application. We have jurisdiction over the appeal pursuant to 35 U.S.C. § 134.

We REVERSE and ENTER A NEW GROUND OF REJECTION
PURSUANT TO 37 CFR § 41.50(b).

BACKGROUND

The appellant's invention relates to presenting inter-relationships in a treemap¹. An understanding of the invention can be derived from a reading of exemplary claim 1, which is reproduced below.

1. A method for presenting inter-related nodes in a treemap, the treemap comprising hierarchical information to a rectangular 2-D display in a space-filling manner in which the entirety of a designated display space is utilized, the method comprising the steps of:
 - detecting a proximity event about a representation for a node in the treemap;
 - determining through said representation at least one inter-related node; and,
 - highlighting said nodes and drawing a linkage in said treemap between said nodes.

PRIOR ART

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

Theisen	US 6,259,458 B1	Jul. 10, 2001
Wills	US 6,304,260 B1	Oct. 16, 2001
Hodgson	US 6,774,911 B2	Aug. 10, 2004 (Jun. 23, 2002)

¹ A treemap is a visualization technique that maps hierarchical information to a rectangular 2-D display in a space-filling manner in which the entirety of a designated display space is utilized. (Spec 2).

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In addition, we make the following prior art of record:

Cottingham, Excel 2000 Developer's Handbook, ISBN 0-7821-2328-7,
pp. 524-533 (1999).

REJECTIONS

Claims 1-7 and 11-20 stand rejected under 35 U.S.C. § 103(a) as obvious over Wills and Hodgson.

Claims 8, 9, 21 and 22 stand rejected under 35 U.S.C. § 103(a) as obvious over Wills, Hodgson and Theisen.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellant regarding the above-noted rejections, we make reference to the examiner's answer (mailed March 3, 2006) for the reasoning in support of the rejection, and to appellant's brief (filed February 1, 2006) and reply brief (filed April 26, 2006) for the arguments thereagainst.

OPINION

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

Claims 1-7 and 11-20 rejected under 35 U.S.C. § 103(a) as obvious over Wills and Hodgson.

We note that the appellant argues these claims as a group. Accordingly, we select claim 1 as representative of the group.

The examiner applied Wills for its teachings of the need for visual enhancements to treemaps and Hodgson to show highlighting and drawing linkages among related nodes in a tree in response to selection of a tree node (Answer 3-5).

The appellant argues that the examiner failed to provide objective evidence for the motivation to combine the teachings of Wills and Hodgson (Br. 5-9; Reply Br. 2-4), and that even were Wills and Hodgson combined, it would not have resulted in the claimed invention (Br. 9-10; Reply Br. 5).

The examiner points to Hodgson's col. 5, lines 11-15, as evidence that a person of ordinary skill in the art would have been motivated to combine its teachings with Wills (Answer 8-9). This portion of Hodgson states

By selecting a capability (node 12) in the model display (10), the user causes the processing means (not shown) to automatically generate the hierarchical structure display (16) and redisplay the same on a display screen with an indication, such as a highlight, to indicate the selected capability (node) in its contextual location in the hierarchy of the organization.

(emphasis as added by examiner).

We agree that this is evidence of such desirability and further note that Hodgson provides stronger evidence earlier in its disclosure:

However, many organizational needs are not currently met by the graphical model of an organization. These needs can include a need for the user to be able to understand the location of an organization

capability within a broader organizational graph in terms of its superior and subordinate capabilities. There is also a need for the user to be able to maintain the context of components within an organizational model in terms of the respective position of that component in a structured hierachic view of the organization.

(Col. 1, lines 44-52).

Therefore, we find the appellant's arguments to be unpersuasive as to the lack of evidence to combine the references.

As to whether the combined references actually would result in the claimed invention, however, we cannot agree with the examiner's arguments. The examiner argues that

Hodgson shows (Figs. 1, 2 and 4) the nodes (12) having linkages or inter-relations (14), wherein detecting a proximity event about a node in the tree map and highlighting the nodes and drawing a linkage in the tree map between nodes. See column 1, lines 19-42; column 3, lines 23-27; column 4, lines 40-62; and column 5, lines 1-19.

(Answer 4).

We reviewed Hodgson, particularly the sections noted by the examiner, looking for the claimed subject matter identified by the examiner and found Hodgson lacking. Hodgson essentially describes presenting two different graphical displays of the same organizational information, and, when a node in one of the displays is selected, highlighting the respective representation of that same node in the other display. (Col. 5, lines 10-19). While Hodgson does indeed portray linkages among nodes (ref. 14 in figs. 2 and 4), these linkages are merely part of the model itself, and not linkages drawn among nodes that have been determined to be inter-related to a node whose representation had a proximity event detected about it, as required by claim 1. And while Hodgson does highlight two representations of the same node, one of whose representations had a

proximity event detected about it, Hodgson does not describe highlighting inter-related nodes as well. Therefore, we find the examiner's arguments to be unpersuasive.

Accordingly we do not sustain the examiner's rejection of claims 1-7 and 11-20 under 35 U.S.C. § 103(a) as obvious over Wills and Hodgson.

Claims 8, 9, 21 and 22 rejected under 35 U.S.C. § 103(a) as obvious over Wills, Hodgson and Theisen.

The examiner relies on Theisen to show iteration of the detecting and highlighting. (Answer 6-7). Nothing in Theisen teaches or suggests drawing linkages among nodes that have been determined to be inter-related to a node whose representation had a proximity event detected about it. Like Hodgson, Theisen draws links for the model itself and does not draw additional links in response to such detecting. Therefore, we find the examiner's arguments to be unpersuasive. Accordingly we do not sustain the examiner's rejection of claims 8, 9, 21 and 22 under 35 U.S.C. § 103(a) as obvious over Wills, Hodgson and Theisen.

NEW GROUND OF REJECTION UNDER 37 CFR § 41.50(b)

Pursuant to 37 CFR § 41.50(b), we enter the following new ground of rejection:

Independent claims 1, 11 and 14, and dependent claims 2, 3, 6, 7, 8, 12, 13, 15, 16, 19, 20 and 21 are rejected under 35 U.S.C. § 102(b) as anticipated by Cottingham, Excel 2000 Developer's Handbook, pp. 524-533, 1999, describing the auditing feature of the Excel spreadsheet software product.

The auditing feature of Excel, initiated by a mouse click event on a cell and on a menu button, provides visual highlighting (by placing a dot with a distinguishable color in a cell) and linkage drawing (by drawing directed arrows) of nodes related to a selected node in the worksheet (see figures on pp. 527 and 531), and that this audit display may be performed repeatedly, i.e. iteratively, throughout the affected chain (see the two TraceAllLevelsOfPrecedency and TraceAllLevelsOfDependency calls, which, by virtue of tracing all levels, inherently trace each level iteratively, on p. 531).

We also note that a spreadsheet, being an array, is a tree data structure that presents hierarchical row and column information to a rectangular 2D display in a space filling manner in which the entirety of a designated worksheet display space is utilized by individual cells. It is a treemap in that it maps a tree comprised of a root (the spreadsheet frame) and leaves from the root (individual cells) within the root representation.

The examiner should consider whether the remaining claims, which introduce limitations regarding mouse-over events and numeric constraints on the number of

iterations shown, are patentable in view of Cottingham and the remaining art of record.

CONCLUSION

To summarize,

- The rejection of claims 1-7 and 11-20 under 35 U.S.C. § 103(a) as obvious over Wills and Hodgson is not sustained.
- The rejection of claims 8, 9, 21 and 22 under 35 U.S.C. § 103(a) as obvious over Wills, Hodgson and Theisen is not sustained.
- Pursuant to 37 CFR § 41.50(b), we enter the following new ground of rejection
 - Independent claims 1, 11 and 14, and dependent claims 2, 3, 6, 7, 8, 12, 13, 15, 16, 19, 20 and 21 are rejected under 35 U.S.C. § 102(b) as anticipated by Cottingham.

This decision contains a new ground of rejection pursuant to 37 CFR § 41.50(b) (effective September 13, 2004, 69 Fed. Reg. 49960 (August 12, 2004), 1286 Off. Gaz. Pat. Office 21 (September 7, 2004)). 37 CFR § 41.50(b) provides “[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review.”

37 CFR § 41.50 (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 the appeal as to the rejected claims:

- (1) Reopen prosecution. Submit an appropriate amendment of the claims so rejected or new evidence relating to the claims so

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rejected, or both, and have the matter reconsidered by the examiner, in which event the proceeding will be remanded to the examiner . . .

(2) Request rehearing. Request that the proceeding be reheard under § 41.52 by the Board upon the same record

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a)(1)(iv).

REVERSED
and

ENTERED A NEW GROUND OF REJECTION PURSUANT TO
37 CFR § 41.50(b).

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