

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte STEVEN M. BENNETT

Appeal No. 2006-2225
Application No. 09/815,439

ON BRIEF

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

JERRY SMITH, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal under 35 U.S.C. § 134 from the examiner's rejection of claims 1-30, which constitute all the claims pending in this application.

The disclosed invention pertains to catering or tailoring information presented to a user to allow more efficient and effective use of limited bandwidth. Specifically, an item to be presented to the user is identified in a graphical user interface.

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Sub-items representing depth and/or breadth information relating to the item are automatically retrieved from a storage medium and selected dynamically based on at least one predetermined factor. An interface is then built within the graphical user interface from the sub-items and presented to the user.

Representative claim 1 is reproduced as follows:

1. A method of presenting catered information to a user, the method comprising:

a) identifying in a graphical user interface an item to be presented to the user;

b) automatically retrieving sub-items from a storage medium, the sub-items representing at least one of a depth information and a breadth information relating to the item, the sub-items selected dynamically based on at least one predetermined factor;

c) building an interface within the graphical user interface from the sub-items;

d) presenting the interface to the user; and

e) recording user interface activity in the storage medium.

The examiner relies on the following references:

Bates et al. (Bates)	5,390,295	Feb. 14, 1995
Raman	5,748,186	May 05, 1998
Bodnar et al. (Bodnar)	6,310,634	Oct. 30, 2001
	(Filed Oct. 13, 2000)	

John I. Kiger, The Depth/Breadth Trade-off in the Design of Menu-driven User Interfaces, Int'l J. Man-Machine Studies 20, p. 201-213, 1984 ("Kiger").

The following rejections are on appeal before us:

1. Claims 1-6 and 24-27 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Herz in view of Kiger.
2. Claims 7, 9-20, 28, and 30 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Herz in view of Kiger and further in view of Bodnar.
3. Claims 8 and 29 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Herz in view of Kiger and further in view of Bates.
4. Claims 21-23 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Herz in view of Kiger, Bodnar, and further in view of Raman.

Rather than repeat the arguments of appellant or the examiner, we make reference to the briefs and the answer for the respective details thereof.

OPINION

We have carefully considered the subject matter on appeal, the rejections advanced by the examiner and the evidence of obviousness relied upon by the examiner as support for the rejections. We have, likewise, reviewed and taken into consideration, in reaching our decision, the appellant's arguments set forth in the briefs 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 evidence relied upon and the level of skill in the particular art would have suggested to one of ordinary skill in

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the art the obviousness of the invention as set forth in the claims on appeal. Accordingly, we affirm.

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the examiner to establish a factual basis to support the legal conclusion of obviousness. See In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966). The examiner must articulate reasons for the examiner's decision. In re Lee, 277 F.3d 1338, 1342, 61 USPQ2d 1430, 1434 (Fed. Cir. 2002). In particular, the examiner must show that there is a teaching, motivation, or suggestion of a motivation to combine references relied on as evidence of obviousness. Id. 277 F.3d at 1343, 61 USPQ 2d at 1433-1434. The examiner cannot simply reach conclusions based on the examiner's own understanding or experience - or on his or her assessment of what would be basic knowledge or common sense. Rather, the examiner must point to some concrete evidence in the record in support of these findings. In re Zurko, 258 F.3d 1379, 1386, 59 USPQ2d 1693, 1697 (Fed. Cir. 2001). Thus the examiner must not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the examiner's conclusion. However, a suggestion, teaching, or motivation to combine the relevant prior art teachings does not have to be found explicitly in the prior art, as the teaching, motivation, or suggestion may be implicit from the prior art as a whole, rather

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than expressly stated in the references. The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art. In re Kahn, 441 F.3d 977, 987-88, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006) citing In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1316-1317 (Fed. Cir. 2000). See also In re Thrift, 298 F. 3d 1357, 1363, 63 USPQ2d 2002, 2008 (Fed. Cir. 2002). These showings by the examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). If that burden is met, the burden then shifts to the applicant to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. See Id.; In re Hedges, 783 F.2d 1038, 1039, 228 USPQ 685, 686 (Fed. Cir. 1986); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984); and In re Rinehart, 531 F.2d 1048, 1052, 189 USPQ 143, 147 (CCPA 1976). Only those arguments actually made by appellant have been considered in this decision. Arguments which appellant could have made but chose not to make in the briefs have not been considered and are deemed to be waived [see 37 CFR § 41.37(c)(1)(vii)(2004)].

Regarding independent claims 1 and 24, the examiner's rejection essentially finds that Herz teaches every claimed feature except for sub-items representing at least one of depth information and breadth information relating to the item. The examiner cites Kiger as teaching such sub-items in a menu-driven information retrieval system. The examiner

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finds that it would have been obvious to one of ordinary skill in the art at the time of the invention to include Kiger's teaching of breadth and depth information of a hierarchical tree structure in a menu-driven graphical user interface in Herz to provide an intuitive tool to visually and graphically present information to the end user [answer, pages 3-5].

Appellant argues that there is no motivation to combine Herz and Kiger [brief, pages 4 and 5]. Appellant notes that Herz customizes electronic newspapers and target advertisements, but Kiger discusses the design of menu-driven user interfaces. According to appellant, the references constitute non-analogous art and neither reference suggests combining the references [brief, page 4]. Appellant further argues that Kiger is nearly 15 years older than Herz, yet Herz does not mention Kiger's feature of representing depth and/or breadth information. Appellant concludes that Herz' failure to incorporate such a feature from Kiger actually teaches away from the combination [brief, pages 5 and 6].

Appellant also argues that Herz and Kiger cannot be combined in the manner suggested by the examiner [brief, page 6]. Appellant contends that the claimed invention pertains to a graphical user interface, but Kiger's menu-driven aspects refer to a fixed tree structure used to construct a database. Kiger's menu-driven aspects do not remotely resemble "menus" within graphical user interfaces as understood by skilled artisans [id.; reply brief, pages 2 and 3].

The examiner responds that Herz and Kiger constitute analogous art. The examiner notes that Herz profiles users to determine their interests and retrieves target

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objects related to those interests [answer, page 19]. In Herz, the target objects are then organized to enable users to navigate among groups of articles with varying degrees of specificity (i.e., between larger general groups and smaller specific groups). The examiner further notes that Kiger's teaching of using depth information (information above or below an item in a hierarchy) and breadth information (information in the same level in a hierarchy) in designing user interface menus and tree structures is analogous to the design of menus and hierarchies in Herz [answer, pages 19 and 20].

Appellant also argues that Herz does not disclose the limitation calling for "automatically retrieving sub-items from a storage medium, the sub-items representing at least one of a depth information and breadth information relating to the item, the sub-items selected dynamically based on at least one predetermined factor" as claimed [brief, page 9]. According to appellant, Herz attempts to identify additional items of interest to the user based on various item attributes, rather than dynamically selecting sub-items associated with the item for display as claimed [id.].

The examiner responds that Herz teaches the claimed limitations since target objects are stored on a network and articles of interest are automatically selected and hierarchically organized (i.e., representing depth and breadth information) [answer, page 26].

We will sustain the examiner's rejection of independent claims 1 and 24. At the outset, we note that Herz actually anticipates claims 1 and 24 since the reference discloses, among other things, automatically retrieving sub-items from a storage medium

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where such sub-items represent at least one of depth and breadth information relating to the item as claimed.

Herz' system automatically identifies and retrieves target objects (i.e., digital data representing newspaper stories, movies, items to purchase, etc.) [Herz, col. 6, lines 12-15]. Notably, the user in Herz wishes to locate some small subset of the target objects, such as the target objects that the user most desires to read, investigate, purchase, etc. [Herz, col. 9, lines 51-58]. Information delivery is based on the similarity between a profile for the target object and profiles for target objects for which the user has previously provided positive feedback [Herz, col. 6, lines 16-20].

An application of such a technique is a customized electronic newspaper. In this application, target objects are news articles that the user receives or potentially receives [Herz, col. 7, lines 17-19]. A filtering technique automatically selects a set of articles that the user is likely to desire to read from a larger group of articles (e.g., all items on the AP news wire service, all advertisements in a set of newspapers, etc.) [Herz, col. 7, lines 19-27]. The accuracy of this filtering system improves over time by noting which articles the user reads and measuring the depth to which the user reads each article. This information is then used to update the user's target profile interest summary [Herz, col. 7, lines 27-31]. See also Herz, col. 55, line 42 – col. 61, line 28 (discussing dynamically selecting relevant articles for a customized news clipping service based on the disclosed technique).

Herz' filtering technique, in our view, automatically retrieves sub-items from a storage medium and selects such sub-items dynamically based on at least one

predetermined factor as claimed. The “sub-items” correspond to the selected set of articles. Such sub-items represent at least the breadth of information relating to the item (i.e., the scope of topics that the user is most interested) [see also Herz, col. 18, lines 28-38]. We further note that Herz’ teaching of presenting a hierarchical cluster tree of target objects to the user also fully meets the claimed limitation calling for automatically retrieving sub-items and selecting such sub-items dynamically based on a predetermined factor as claimed. Herz teaches automatically reorganizing the cluster tree so that clusters that are most interesting to the user are identified [Herz, col. 69, lines 20-28]. Furthermore, the system can display a special list of the most interesting clusters, or the most interesting subclusters of the current cluster [Herz, col. 69, lines 29-34]. Notably, such automatic reorganization includes, among other things, migrating interesting clusters higher in the tree and even suppressing clusters with low interest scores from the menus entirely. As a result, a customized tree develops that is more easily navigated [Herz, col. 69, lines 43-63].

For example, such an automated hierarchical menu system can be applied in an electronic mall application where target objects or clusters of target objects can be automatically grouped based on certain criteria at the level of specific items (e.g., specific brands and sizes of soaps and shampoos) and classes of items (e.g., soaps and shampoos generally) [Herz, col. 71, lines 56-66]. Such a system, in our view, amply teaches automatically retrieving sub-items from a storage medium and selecting such sub-items dynamically based on a predetermined factor as claimed. Moreover, dynamically

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grouping classes of items and specific items reasonably represents depth and breadth information relating to the item as claimed.

Although Herz anticipates at least claims 1 and 24, obviousness rejections can nevertheless be based on references that happen to anticipate the claimed subject matter. In re Meyer, 599 F.2d 1026, 1031, 202 USPQ 175, 179 (CCPA 1979). Moreover, in affirming a multiple-reference rejection under 35 U.S.C.

§ 103, the Board may rely on less than the total number of references relied on by the examiner. In re Bush, 296 F.2d 491, 496, 131 USPQ 263, 266- 67 (CCPA 1961); In re Boyer, 363 F.2d 455, 458 n.2, 150 USPQ 441, 444 n.2 (CCPA 1966). Under this analysis, the teachings of Kiger are merely cumulative to those found in Herz.

Notwithstanding the examiner's concession that Herz allegedly did not teach that the sub-items represented depth and/or breadth information in the rejection of claims 1 and 24,¹ the examiner nonetheless apparently recognizes that Herz discloses such a limitation as evidenced by the examiner's discussion on page 26 of the answer. In that discussion, the examiner refers to specific passages within Herz referring to depth and breadth information [answer, page 26]. The examiner appears to rely on Kiger to "supplement" Herz to merely explain what the terms depth and breadth of information mean [id.].

Although the examiner's reliance on Kiger is, in our view, cumulative for the reasons

¹ See page 6, supra, of this opinion. See also answer, page 4.

noted previously, we nevertheless conclude that the skilled artisan would reasonably have combined the references since both references present information to the user hierarchically and therefore constitute analogous art. Furthermore, Kiger explains the role of depth and breadth of menus and tree structures in user interfaces. At a minimum, Kiger explains what constitutes depth and breadth information and such teachings would have reasonably suggested identifying such types of information in the customized information retrieval system of Herz. The examiner's combination of references is reasonable.

The examiner's rejection of claims 1 and 24 is therefore sustained. Since appellant has not separately argued the patentability of dependent claims 2-6 and 25-27, these claims fall with independent claims 1 and 24. See In re Nielson, 816 F.2d 1567, 1572, 2 USPQ2d 1525, 1528 (Fed. Cir. 1987). See also 37 CFR § 41.37(c)(i)(vii).

We next consider the examiner's rejection of claims 7, 9-20, 28, and 30 under 35 U.S.C. § 103(a) as being unpatentable over Herz in view of Kiger and further in view of Bodnar. We will sustain the examiner's rejection. We find that the examiner has established at least a prima facie case of obviousness that appellant has not persuasively rebutted. Specifically, the examiner has (1) pointed out the teachings of Herz and Kiger, (2) pointed out the perceived differences between those references and the claimed invention, and (3) reasonably indicated how and why the references would have been modified to arrive at the claimed invention [answer, pages 7-16].

Once the examiner has satisfied the burden of presenting a prima facie case of obviousness, the burden then shifts to appellant to present evidence or arguments that

persuasively rebut the examiner's prima facie case. Appellant did not persuasively rebut the examiner's prima facie case of obviousness, but merely noted that the addition of Bodnar fails to cure the deficiencies of Herz and Kiger in connection with certain limitations of claims 1 and 24 [brief, pages 11-13]. The rejection is therefore sustained.

We next consider the examiner's rejection of claims 8 and 29 under 35 U.S.C. § 103(a) as being unpatentable over Herz in view of Kiger and further in view of Bates. We will sustain the examiner's rejection. As noted above, we find that the examiner has established at least a prima facie case of obviousness that appellant has not persuasively rebutted. Specifically, the examiner has (1) pointed out the teachings of Herz and Kiger, (2) pointed out the perceived differences between those references and the claimed invention, and (3) reasonably indicated how and why the references would have been modified to arrive at the claimed invention [answer, pages 16 and 17]. Appellant, however, did not persuasively rebut the examiner's prima facie case of obviousness, but merely noted that the addition of Bates fails to cure the deficiencies of Herz and Kiger in connection with certain limitations of claims 1 and 24 [brief, pages 13 and 14]. The rejection is therefore sustained.

Likewise, we will sustain the examiner's rejection of claims 21-23 under 35 U.S.C. § 103(a) as being unpatentable over Herz in view of Kiger, Bodnar, and further in view of Raman. Appellant did not present any arguments pertaining to this rejection.²

² See brief, pages 3 and 4 (omitting the examiner's rejection of claims 21-23 in the grounds of rejection to be reviewed on appeal). See also answer, page 2 (acknowledging appellant's statement of the grounds of rejection to be reviewed on appeal as correct).

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Accordingly, the examiner's prima facie case of obviousness on pages 17 and 18 of the answer is un rebutted and is therefore sustained.

In summary, we have sustained the examiner's rejection with respect to all claims on appeal. Therefore, the decision of the examiner rejecting claims 1-30 is affirmed.

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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)(1)(iv).

AFFIRMED

KENNETH W. HAIRSTON
Administrative Patent Judge

JERRY SMITH
Administrative Patent Judge

HOWARD B. BLANKENSHIP
Administrative Patent Judge

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