

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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 IRVIN R. STRAUSS and LAM H. THAI

Appeal No. 96-1534
Application 07/888,991¹

ON BRIEF

Before JERRY SMITH, BARRETT and LEE, Administrative Patent Judges.

JERRY SMITH, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal under 35 U.S.C. § 134

¹ Application for patent filed May 21, 1992.

Appeal No. 96-1534
Application 07/888,991

from the examiner's rejection of claims 25-30, which constitute all the claims remaining in the application.

The claimed invention pertains to a method for optimizing the access of information stored in a database file.

Representative claim 28 is reproduced as follows:

28. A method for optimizing the access of information stored in a database file, the method comprising:

(a) entering a query condition; and

(b) accessing the specified information by any one of:

(1) referencing an index if one satisfying the query condition exists or can be created;

(2) referencing an index if one defining a range of records exists or can be created; and

(3) filtering records not meeting the condition as they are accessed if (1) and (2) are not possible, or if the database file is below a pre-selected size.

The examiner relies on the following references:

| | | |
|----------------------------|-----------------------------------|---------------|
| Kuechler et al. (Kuechler) | 4,811,199 | Mar. 07, 1989 |
| Li et al. (Li) | 5,265,246 | Nov. 23, 1993 |
| | (effectively filed Dec. 10, 1990) | |

Claims 28-30 stand rejected under 35 U.S.C. § 102(e) as being anticipated by the disclosure of Li. Claims 25-30 stand rejected under 35 U.S.C. § 103 as being unpatentable over the teachings of Kuechler. In the examiner's answer a new ground of rejection was entered against claims 25-30 under 35 U.S.C. § 102(b) as being anticipated by the disclosure of Kuechler.

Appeal No. 96-1534
Application 07/888,991

Rather than repeat the arguments of appellants or the examiner, we make reference to the briefs and the answers 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 anticipation and obviousness relied upon by the examiner as support for the rejections. We have, likewise, reviewed and taken into consideration, in reaching our decision, the appellants' 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 answers.

It is our view, after consideration of the record before us, that the disclosure of Li fails to fully meet the invention as recited in claims 28-30. We are also of the view that the teachings of Kuechler do not fully meet the invention as recited in claims 25-30 nor would these teachings have suggested to one of ordinary skill in the art the obviousness of the invention as set forth in claims 25-30. Accordingly, we reverse.

Before we consider the specific rejections of the claims, we note that claim interpretation is a critical issue in this case. The examiner noted that the phrase "one of the steps"

Appeal No. 96-1534
Application 07/888,991

differs from the phrase "any one of steps" [answer, page 15]. As a result of this position and the examiner's entry of a new rejection in the answer, appellants amended both independent claims 25 and 28 to read "any one of" a list of steps in an amendment filed concurrently with the reply brief. For reasons which are not clear to us, the examiner never addressed what effect the amendment had on the rejections made by the examiner.

Even though we do not have the examiner's interpretation of the amended claims on record before us, such interpretation is not necessary for disposition of this appeal. Claim interpretation or construction is a question of law. See In re Donaldson Co. Inc., 16 F.3d 1189, 1192, 29 USPQ2d 1845, 1848 (in banc)(Fed. Cir. 1994); Loctite Corp. v. Ultraseal, Ltd., 781 F.2d 861, 866, 228 USPQ 90, 93 (Fed. Cir. 1985). Thus, we will simply give the appealed claims the appropriate legal interpretation.

Independent claim 25 recites the step (b) of accessing information by any one of substeps (1), (2), (3), (4), (5), (6) and (7). Because these substeps are connected in an "and" relationship, we construe claim 25 as requiring that each one of the seven substeps be performed when the condition corresponding to that substep is met. Likewise, in order for a prior art reference to suggest the invention of claim 25, the reference

Appeal No. 96-1534
Application 07/888,991

must suggest performing the specific substep which corresponds to its associated condition when that condition is satisfied. Thus, if the reference teaches that substep (1) is carried out when the condition for substep (4) is satisfied, then the invention of the claim has not been suggested. Independent claim 28 is similar to

claim 25 except that only three substeps are included in the "and" relationship. Each of these substeps as well must be performed when the associated condition is satisfied.

We consider first the rejection of claims 28-30 under 35 U.S.C. § 102(e) as being anticipated by the disclosure of Li. These claims stand or fall together [brief, page 6; reply brief, page 7]. Anticipation is established only when a single prior art reference discloses, expressly or under the principles of inherency, each and every element of a claimed invention as well as disclosing structure which is capable of performing the recited functional limitations. RCA Corp. v. Applied Digital Data Systems, Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir.); cert. dismissed, 468 U.S. 1228 (1984); W.L. Gore and Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 1554, 220 USPQ 303, 313 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).

Appeal No. 96-1534
Application 07/888,991

The examiner has made an effort to read claim 28 on the disclosure of Li [answer, pages 6-8], a procedure which we highly recommend. Notwithstanding the examiner's assertion of how Li anticipates all the limitations of claim 28, appellants argue that Li fails to disclose any of the steps recited in substeps (b)(1)- (b)(3) [reply brief, pages 11-14]. We find ourselves in agreement with appellants.

Appellants correctly point out that Li has nothing to do with the manner in which records are accessed after a query has been made. Li simply relates to a graphical interface which assists the user in visualizing how a range of values of a record field relates to the total range of values of that field. The user can visualize the range between two values of a field, but Li does not indicate how the records are to be accessed once the query has been set by the user. Thus, Li cannot anticipate the accessing steps recited in claim 28.

We also note that the examiner has determined that substeps (b)(1) and (b)(2) are always possible within Li, and since the selection is effectively an OR condition, claim 28 is thereby satisfied [answer, page 7]. This rejection was made before the claim was amended to read "any one of," and, as noted above, the examiner has not addressed the significance of this

Appeal No. 96-1534
Application 07/888,991

amendment even though the examiner implied that such a change would be significant. In view of our interpretation of the claims discussed above, Li does not fully meet the recitations of claim 28. Substep (b)(3) recites that a filtering of records is made as they are accessed if the database file is below a pre-selected size. This condition is independent of the conditions set forth in substeps (b)(1) and (b)(2) and would take precedence if it occurs. As appellants correctly point out, Li contains no disclosure of testing the database file for a pre-selected size.

Since all the limitations of independent claim 28 are not fully met by the disclosure of Li, we do not sustain the rejection of claims 28-30 as anticipated by the disclosure of Li.

We now consider the new rejection of claims 25-30 under 35 U.S.C. § 102(b) as being anticipated by the disclosure of Kuechler. These claims stand or fall together [reply brief, page 7]. Therefore, we will consider claim 28 as the representative claim for this rejection. Although the examiner specifically addresses claim 25 in the rejection, claim 28 is broader than claim 25 so that the examiner's reasoning applies to claim 28 as well.

Appeal No. 96-1534
Application 07/888,991

The Section 102 rejection of claims 25-30 is premised on the position that only one of the steps of the claims needs to be satisfied for the claim as a whole to be met by Kuechler [answer, page 14]. As we noted above, this position was staked out before the claims were amended to read "any one of," and the examiner has not addressed the significance of this amendment. Our interpretation is that the claims require that each of the substeps be capable of being carried out if the associated condition is satisfied. The examiner has not identified where in Kuechler a determination is made in response to a query regarding the size of the database file and the decision to filter records whenever the file is below a pre-selected size. Since this step will take precedence whenever the database file is below a pre-selected size, an anticipatory reference must disclose this step as being present. Kuechler does not disclose this step.

Since all the limitations of representative claim 28 are not fully met by the disclosure of Kuechler, we do not sustain the rejection of claims 25-30 as anticipated by the disclosure of Kuechler.

We now consider the rejection of claims 25-30 under 35 U.S.C. § 103 as being unpatentable over the teachings of

Appeal No. 96-1534
Application 07/888,991

Kuechler. With respect to this rejection, claims 25-27 stand or fall together and claims 28-30 stand or fall together [brief, page 6; reply brief, page 7]. The examiner has specifically considered the limitations of claim 25, and has noted that the analysis covers broader claim 28 as well. Although the examiner is of the belief that only one of the steps of claims 25 and 28 needs to be suggested by a reference to render the claims unpatentable, the examiner nevertheless has indicated that all the steps of claim 25 are suggested by Kuechler.

With respect to claim 25, appellants argue that the examiner has failed to point out where Kuechler teaches any of substeps (b)(4)-(b)(7). The examiner points to Kuechler's technique of direct access to meet substep (b)(4), points to Kuechler's summary of the invention to meet substeps (b)(5) and (b)(6), and asserts obvious default operation to meet substep (b)(7) [answer, pages 10-11]. Appellants respond that the direct accessing of Kuechler does not perform a filtering operation as recited in substeps (b)(4) and (b)(7).

We have carefully reviewed Kuechler, and we cannot find any suggestion therein for filtering records as they are accessed if the database file is below a pre-selected size as recited in substep (b)(4). Kuechler does not consider the size of the

Appeal No. 96-1534
Application 07/888,991

database at all in accessing records in response to a search query. Kuechler also does not teach the steps of creating and referencing an index in response to a query as recited in substeps (b)(5) and (b)(6). The topological maps or indexes of Kuechler are predefined before a query is made. Thus, while Kuechler will use an available index if it exists, Kuechler does not create an index in response to the query. Therefore, we agree with appellants that Kuechler provides no suggestion for the conditions recited in substeps (b)(4)-(b)(7). Accordingly, we do not sustain the Section 103 rejection of claims 25-27.

Independent claim 28 also recites the step of filtering records as they are accessed if the database file is below a pre-selected size. As we noted above, this conditional step is not suggested anywhere in Kuechler. The examiner's mere conclusion that it would be obvious as a default condition is not supported by the record in this case. Therefore, we also do not sustain the Section 103 rejection of claims 28-30.

In summary, we have not sustained any of the examiner's rejections. Therefore, the decision of the examiner rejecting claims 25-30 is reversed.

REVERSED

Appeal No. 96-1534
Application 07/888,991

| | | |
|-----------------------------|---|-----------------|
| |) | |
| JERRY SMITH |) | |
| Administrative Patent Judge |) | |
| |) | |
| |) | |
| |) | BOARD OF PATENT |
| LEE E. BARRETT |) | |
| Administrative Patent Judge |) | APPEALS AND |
| |) | |
| |) | INTERFERENCES |
| |) | |
| JAMESON LEE |) | |
| Administrative Patent Judge |) | |

John A. Smart
CORPORATE AFFAIRS DEPARTMENT
BORLAND INTERNATIONAL, INC.
100 Borland Way
Scotts Valley, CA 95066