

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte SRINIVAS GUTTA and KAUSHAL KURAPATI

Appeal 2008-4098
Application 10/014,195
Technology Center 3600

Decided: October 30, 2008

Before HUBERT C. LORIN, ANTON W. FETTING, and
BIBHU R. MOHANTY, *Administrative Patent Judges*.

MOHANTY, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

The Appellants seek our review under 35 U.S.C. § 134 of the final rejection of claims 1-9, 18, and 20-24. Claims 10-17, 19, and 25-31 have been withdrawn. We have jurisdiction under 35 U.S.C. § 6(b) (2002). We AFFIRM.

THE INVENTION

The Appellants' claimed invention is directed to a method and apparatus for recommending items of interest, such as a television program, to a user. Recommendations can be generated before a viewing history or purchase history of the user is available. A third party viewing history or purchase history is obtained from a sample population having demographics that are representative of a larger population. (Specification, 3:15-25.) Claim 1, reproduced below, is representative of the subject matter of appeal.

1. A method for setting-up a user profile indicating preferences of a user, comprising executing the following operations in a data processing device:

partitioning third party selection history, indicating items that are selected by at least one third party, into clusters of items, said clusters being determined based on typical patterns of items selected by representative third-party users, said items being similar, wherein items in a respective one of said clusters has a distance measure closer to a mean of said cluster than to a mean of remaining ones of said clusters;

setting up said user profile with items from at least one selected cluster of items.

THE REJECTIONS

The Examiner relies upon the following as evidence in support of the rejections:

Linden et al.

US 6,266,649 B1

Jul. 24, 2001

Appeal 2008-4098
Application 10/014,195

The following rejections are before us for review:

1. Claims 1-4, 6-9, 18, and 20-21 are rejected under 35 U.S.C. § 102(e) as anticipated by Linden.

2. Claims 5 and 22-24 are rejected under 35 U.S.C. § 103(a) as unpatentable over Linden.

THE ISSUES

The first issue is whether the Appellants have shown that the Examiner erred in rejecting the claims 1-4, 6-9, 18, and 20-21 under 35 U.S.C. § 102(e) as anticipated by Linden.

This second issue is whether the Appellants have shown that the Examiner erred in rejecting the claims 5 and 22-24 under 35 U.S.C. § 103(a) under Linden.

Both these issues turn on whether Linden discloses items in a respective cluster that have a distance measure closer to the mean of that cluster than to a mean of the remaining other clusters.

FINDINGS OF FACT

We find the following enumerated findings of fact (FF) are supported at least by a preponderance of the evidence¹:

FF1. Linden has disclosed that items may be sorted into different groups such as “non-fiction” and “romance” (col. 15:62-67).

¹ See *Ethicon, Inc. v. Quigg*, 849 F.2d 1422, 1427 (Fed. Cir. 1988) (explaining the general evidentiary standard for proceedings before the Patent Office).

Appeal 2008-4098
Application 10/014,195

FF2. Linden discloses that a table of similar items is generated based on the collective interests of the community of users (col. 8:64-66). Linden also discloses using in tables items which are popular (col. 9:15-26).

PRINCIPLES OF LAW

Principles of Law Relating to Anticipation

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, (Fed. Cir. 1987). Analysis of whether a claim is patentable over the prior art under 35 U.S.C. § 102 begins with a determination of the scope of the claim. We determine the scope of the claims in patent applications not solely on the basis of the claim language, but upon giving claims their broadest reasonable construction in light of the specification as it would be interpreted by one of ordinary skill in the art. *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004). The properly interpreted claim must then be compared with the prior art.

Principles of Law Relating to Obviousness

“Section 103 forbids issuance of a patent when ‘the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.’” *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1734 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including (1) the scope and content of the

Appeal 2008-4098

Application 10/014,195

prior art, (2) any differences between the claimed subject matter and the prior art, (3) the level of skill in the art, and (4) where in evidence, so-called secondary considerations. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18, (1966). *See also KSR*, 127 S.Ct. at 1734 (“While the sequence of these questions might be reordered in any particular case, the [*Graham*] factors continue to define the inquiry that controls.”)

In *KSR*, the Supreme Court emphasized “the need for caution in granting a patent based on the combination of elements found in the prior art,” *id.* at 1739, and discussed circumstances in which a patent might be determined to be obvious. In particular, the Supreme Court emphasized that “the principles laid down in *Graham* reaffirmed the ‘functional approach’ of *Hotchkiss*, 11 How. 248.” *KSR*, 127 S.Ct. at 1739, (citing *Graham*, 383 U.S. at 12 (emphasis added)), and reaffirmed principles based on its precedent that “[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” The Court also stated “[i]f a person of ordinary skill can implement a predictable variation, § 103 likely bars its patentability.” *Id.* at 1740. The operative question in this “functional approach” is thus “whether the improvement is more than the predictable use of prior art elements according to their established functions.” *Id.*

The Court noted that “[t]o facilitate review, this analysis should be made explicit.” *Id.* at 1741 (citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006) (“[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness”). However, “the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court

Appeal 2008-4098

Application 10/014,195

can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *Id.*

ANALYSIS

The Appellants argue that the rejection of claims 1, 18, 20, and 21 under 35 U.S.C. § 102(e) is improper because Linden fails to disclose the limitation “wherein items in a respective one of said clusters has a distance measure closer to the mean of said cluster” (Br. 5-6).

The Appellants argue that in Linden the item lists are weighted based on the user’s purchase date or corresponding rating, that similar lists are merged while summing scores, and that the lists are then sorted from highest to lowest (Br. 5). The Appellants also argue that Linden’s Fig. 5 shows the only mathematical function performed to be summing of scores in the merged similar item lists (Br. 5). The Appellants further argue that Linden, unlike the claimed invention, does not place items into clusters and that no mean is calculated as a comparison for clusters. The Appellants further argue the system of Linden does not calculate the distance measure of the item to a cluster (Br. 6).

In contrast the Examiner has determined that Linden teaches the items being placed in “clusters” because the items may be categorized into specific category groups such as “non-fiction” and “romance” and recommending the items that fall within the designated group or category. The Examiner has also determined that items in Linden’s “clusters” will have a relationship to the mean of the “clusters” because for example a “fiction” cluster will be more distant to a “non-fiction” cluster than to for example a comedy cluster (Ans. 5).

We disagree with the Appellants. We first construe the meaning of the word “cluster” as used by the Appellants in the claims. We determine the scope of the claims in patent applications “not solely on the basis of the claim language, but upon giving claims their broadest reasonable construction ‘in light of the specification as it would be interpreted by one of ordinary skill in the art.’” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1316 (Fed. Cir. 2005) (en banc) (*quoting In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004)). The Specification at page 3 describes:

“As used herein, a stereotype profile is a cluster of items (data points) that are similar to one another in some way. Thus, a given cluster corresponds to a particular segment of selected items from the third party viewing or purchase history exhibiting a specific pattern”.

Giving the term “cluster” its broadest reasonable construction in light of the Specification as it would be interpreted by one of ordinary skill in the art we find it to include a grouping of items for example that are sorted into categories such as “non-fiction” and “romance” as they are similar to one another and exhibit a specific pattern in their selection.

Linden has disclosed that items may be sorted into different groups such as “non-fiction” and “romance” (FF1). Linden has also disclosed that third-party selection of items may be based on collective interests and popular items (FF2). The different grouping of items disclosed by Linden such as “non-fiction” or “romance” may thus be considered “clusters”. Further in Linden’s system clearly an item in the non-fiction group or cluster will be closer to the mean of that group than say the romance group or cluster. Linden has accordingly disclosed items in a respective one of said

Appeal 2008-4098
Application 10/014,195

clusters having a distance measure closer to the mean of that cluster as claimed.

For the above reasons, the rejection of claims 1, 18, 20, and 21 under 35 U.S.C. § 102(e) as anticipated by Linden is affirmed. The Appellants have not separately argued the rejection of dependent claims 2-4 and 6-9 and the rejection of these claims is accordingly affirmed as well.

The Appellants have not separately argued the rejection of dependent claims 5 and 22-24 which have been rejected under 35 U.S.C. § 103(a) as unpatentable over Linden and the rejection of these claims is accordingly affirmed as well.

CONCLUSIONS OF LAW

We conclude that Appellants have failed to show that the Examiner erred in rejecting claims 1-4, 6-9, 18, and 20-21 under 35 U.S.C. § 102(e) as being anticipated by Linden.

We also conclude that Appellants have failed to show that the Examiner erred in rejecting claims 5 and 22-24 under 35 U.S.C. § 103(a) as unpatentable over Linden.

DECISION

The Examiner's rejection of claims 1-9, 18, and 20-24 is sustained.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv) (2007).

AFFIRMED

Appeal 2008-4098
Application 10/014,195

LV:

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