

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte YURDAER NEZIHI DOGANATA, YOUSSEF DRISSI,
and LEV KOZAKOV

Appeal 2008-0616
Application 10/155,697
Technology Center 2100

Decided: May 8, 2008

Before JAMES D. THOMAS, JEAN R. HOMERE, and THU A. DANG,
Administrative Patent Judges.

DANG, *Administrative Patent Judge.*

DECISION ON APPEAL

I. STATEMENT OF CASE

Appellants appeal under 35 U.S.C. § 134 from a Final Rejection of claims 1-19, 21, and 22. We have jurisdiction under 35 U.S.C. § 6(b).

A. INVENTION

According to Appellants, the invention is a technique presented for automatically selecting information sources that are most relevant to user queries. Results of searches returned by information sources for queries are analyzed and the information sources are ranked based on this analysis. The information sources that have high rankings for a query are subsequently used to search for relevant results. The returned results of old queries can be analyzed at a later date to update the ranking of the information sources, automatic searches can be performed to update the ranking of the information sources, new queries can be used for analysis and stored, new information sources added, and old information sources deleted (Spec., Abstract).

B. ILLUSTRATIVE CLAIM

Claim 1 is exemplary and is reproduced below:

1. A computer-implemented method, comprising:

 sending a query to a plurality of information sources; and

 ranking the information sources based on scores for results returned by the plurality of information sources in response to said query, wherein at least one of said information sources is ranked based on one or more result scores from a previous query and wherein said result scores from a previous query are deterministically generated.

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C. REJECTIONS

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Culliss	US 6,182,068 B1	Jan. 30, 2001 (filed Mar. 1, 1999)
Kim	US 2003/0046098 A1	Mar. 6, 2003 (filed Sep. 6, 2001)

Claims 1-19, 21, and 22 stand rejected under 35 U.S.C. § 103(a) over the teachings of Kim and Culliss.

We affirm.

II. ISSUES

The issue is whether Appellants have shown that the Examiner erred in finding that claims 1-19, 21, and 22 are unpatentable under 35 U.S.C. § 103(a) over the teachings of Kim and Culliss.

III. FINDINGS OF FACT

The following Findings of Fact (FF) are shown by a preponderance of the evidence.

Appellants' Invention

1. In embodiments of Appellants' invention, personal query manager 110 sends a number of queries to information sources 180. Each

- information source 180 returns results 136. Document retriever 140 keeps track of the results (spec. 10, ll. 5-29; fig. 1). Document analyzer 150 analyzes the documents in the returned results by determining a score for each document (spec. 11, ll. 16-29; fig. 1). The document analyzer 150 sends data 151 about an information source to information source analyzer 160, and information source analyzer 160 analyzes the score and total number of returned documents and ranks sources (spec. 12, ll. 6-9; fig. 1). The returned results of old queries can be analyzed at a later date to update the ranking of the information sources (spec. 3, ll. 13-16).
2. Information sources 180 are any type of information sources available, such as Internet databases, Internet search engines, or public or private databases (spec. 7, ll. 12-15).

Kim

3. Kim discloses searching and listing Internet sites, such as the Web, in response to queries, and modifying the ranking of the search results (pg. 1, para. [0002]).
4. Web site 100 includes a Web server 110 that is connectable to a user computer 112. Server 110 receives request and data from user computer 112, and outputs Web pages and other data to user computer 112. Web site 100 includes a ranking computer 116 that is connected to Web server 110. Ranking computer 116 performs a ranking

- algorithm that orders the URLs from a search, from highest to lowest, based on the calculated scores of the URLs (pg. 3, para. [0049]-[0050]; fig. 1).
5. In Kim, a Web search service receives one or more search terms, and 1) searches first database to identify a first list of uniform resource locators (URLs) defined by the search terms, wherein each URL in the first list has a first score, 2) searches a second database to identify a second list of URLs defined by the search terms, wherein each URL in the second list has a second score, 3) forms a third list of URLs from the first list of URLs and the second list of URLs, and 4) determines a calculated score for each URL in the third list of URLs to rank the third list of URLs based on the calculated score (pg. 3, para. [0035]-[0037]).

Culliss

6. Culliss discloses organizing information in which the search activity of previous users is monitored and such activity is used to organize articles for future users (col. 1, ll. 44-50).
7. According to Culliss, the Internet is an extensive network of computer systems containing hundreds of millions of documents, files, databases, text collections, audio clips, video clips and samples of any other type of information, collectively referred to as articles (col. 2, ll. 19-25).

8. A search query is received from a user and a search engine will identify matched articles and display squibs of the matched articles in accordance with their comparison scores (col. 2, ll. 39-51).
9. Personal invention is utilized to further refine search results (col. 3, ll. 8-18), wherein users can explicitly specify their own personal data, or it can be inferred from a history of their search requests or article viewing habits. Certain known articles or URLs can be detected in a user's searching or browsing habits, such as those relating to CNNfn (www.cnnfn.com) or Quote.com (www.quote.com), and are also used to classify the user as someone interested in finance (col. 3, ll. 46-56). An Index for Articles or URLs is provided (col. 4, ll. 13-19). A cumulative score for a user for search requests or URLs is kept, wherein the record for a user can be updated to reflect the change in score for an item of the user's personal data (col. 4, ll. 60-64).
10. Relevancy scores of Articles are used or combined to determine their ranking (col. 5, ll. 36-48).

IV. PRINCIPLES OF LAW

35 U.S.C. § 103(a)

"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).

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. *KSR*, 127 S. Ct. at 1739 (citing *Graham v. John Deere Co.*, 383 U.S. 1, 12 (1966)). The Court 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." *Id.* 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.* at 1740.

The Federal Circuit recently recognized that "[a]n obviousness determination is not the result of a rigid formula disassociated from the consideration of the facts of a case. Indeed, the common sense of those skilled in the art demonstrates why some combinations would have been obvious where others would not." *Leapfrog Enters., Inc. v. Fisher-Price, Inc.*, 485 F.3d 1157, 1161 (Fed. Cir. 2007) (citing *KSR*, 127 S. Ct. 1727, 1739 (2007)). The Federal Circuit relied in part on the fact that Leapfrog had presented no evidence that the inclusion of a reader in the combined device was "uniquely challenging or difficult for one of ordinary skill in the art" or "represented an unobvious step over the prior art." *Id.* (citing *KSR*, 127 S. Ct. at 1740-41).

One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. *In re Merck & Co., Inc.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986).

V. ANALYSIS

Claims 1, 18, and 19

Appellants argue that Culliss does not disclose the claimed invention because “Culliss does not disclose or suggest that articles are information sources, as defined in the present disclosure” because “The articles disclosed by Culliss cannot, for example, receive a query or return results in response to a query” (App. Br. 5; Reply Br. 3-4).

Appellants appear to be arguing that individually Culliss does not disclose the claimed invention. However, the Examiner has rejected the claims based on the combination of Kim and Culliss, and nonobviousness cannot be shown by attacking the references individually.

The Examiner’s position as to Kim and Culliss disclosing the claimed elements on appeal beginning at page 4 of the Answer and the Examiner’s corresponding responsive arguments beginning at page 10 of the Answer meet all of the limitations required by independent claims 1, 18, and 19 on appeal.

Kim discloses receiving a search request, searching a plurality of databases to determine calculated scores, and performing a ranking algorithm that orders the URLs corresponding to the respective databases

from a search, from highest to lowest, based on the calculated scores of the URLs (FF 3-5). Culliss discloses using personal data, history of search requests or article viewing habits to refine search results, wherein articles or URLs detected in a user's searching or browsing habits are used to classify the user and the cumulative score for a user for search requests or URLs is kept, reflecting the change in score for an item of the user's personal data (FF 6-10).

We agree with the Examiner that the combination of Kim and Culliss discloses ranking information sources based on scores for results in response to a query, wherein the ranking is based on result scores from a previous query, similar to that of the Appellants' own invention. That is, Appellants' own invention discloses determining a score for each document, analyzing the score and total number of returned documents, and using returned results of old queries update the ranking (FF 1).

Though Appellants argue that Culliss discloses ranking articles and not information sources, the rejection is based on the combination of Kim and Culliss. Kim discloses searching a plurality of databases containing the web sites or URLs, and ranking the web sites/URLs corresponding to the databases, based on scores for the results (FF 5). We find that the databases of Kim to be information sources as defined in Appellants' own invention (FF 2), and thus the combined teachings of Kim and Culliss disclose the recited limitations.

Appellants also argue that “Appellants could find no disclosure or suggestion in either Kim or Culliss to combine the techniques disclosed by Culliss for ranking articles with the techniques disclosed by Kim for ranking web sites” (App. Br. 5).

The Examiner’s initial position as to the motivation to combine on appeal beginning at page 4 of the Answer and the Examiner’s corresponding responsive arguments beginning at page 10 of the Answer comply with the requirements of the above-noted case law.

Kim is directed to ranking URLs corresponding to respective databases. As admitted by Appellants, “Kim is directed to ranking web sites” (App. Br. 6). Culliss discloses that articles or URLs can be detected in a user’s searching or browsing habits. We thus find that one of ordinary skill in the art would have applied the detection of articles or URLs of Culliss to the teaching of ranking web sites or URLs of Kim. We agree with the Examiner that one of ordinary skill in the art would have been motivated to combine these references, since one of ordinary skill in the art would have considered the references to be of analogous art.

Appellants have provided no evidence that incorporating Culliss’ use of refining search results using history of search requests to Kim’s ranking of search results was “uniquely challenging or difficult for one of ordinary skill in the art,” *Leapfrog*, 485 F.3d at 1162, nor have Appellants presented evidence that this incorporation yielded more than expected results. Rather, Appellants’ invention is simply an arrangement of the known teaching of

using history of search requests with the known teaching of ranking search results. “[W]hen a patent ‘simply arranges old elements with each performing the same function it had been known to perform’ and yields no more than one would expect from such an arrangement, the combination is obvious.” *KSR*, 127 S. Ct. at 1740 (citing *Sakraida v. AG Pro, Inc.*, 425 U.S. 273, 282 (1976)).

As to the other recited elements of claims 1, 18, and 19, Appellants provide no argument to dispute that the Examiner has correctly shown where all these claimed elements appear in the prior art. Thus, we deem those arguments waived. *See* 37 C.F.R. § 41.37(c)(1)(vii) (2004).

Appellants do not provide a separate argument for dependent claims 3, 6-9, 11, 15, 16, and 21 depending from claim 1; thus, claims 3, 6-9, 11, 15, 16, and 21 fall with claim 1.

Accordingly, we conclude that the Appellants have not shown that the Examiner erred in rejecting claims 1, 3, 6-9, 11, 15, 16, and 21 under 35 U.S.C. § 103(a).

Claims 2 and 22

Claims 2 and 22 depend from claim 1, and thus fall with claim 1. Appellants argue that claim 2 further comprises “receiving the results from each of the plurality of information sources; and determining the scores for the results” and that claim 22 requires “wherein said scores for results are modified based on said ranking of information sources.” However, the

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Examiner's position as to Kim and Culliss disclosing the claimed elements on appeal beginning at page 5 of the Answer and the Examiner's corresponding responsive arguments beginning at page 10 of the Answer meet all of the limitations required by the claims.

Kim discloses receiving results from a plurality of information sources such as databases (FF 5) and Culliss discloses refining scores for results (FF 9). We agree with the Examiner that the combination of Kim and Culliss discloses the recited feature.

Accordingly, we conclude that the Appellants have not shown that the Examiner erred in rejecting claims 2 and 22 under 35 U.S.C. § 103(a).

Claims 4 and 5

Claims 4 and 5 depend from claim 1, and thus fall with claim 1. Furthermore, the Examiner's position as to Kim and Culliss disclosing the claimed elements on appeal beginning at page 5 of the Answer and the Examiner's corresponding responsive arguments beginning at page 10 of the Answer meet all of the limitations required by the claims.

Accordingly, we conclude that the Appellants have not shown that the Examiner erred in rejecting claims 4 and 5 under 35 U.S.C. § 103(a).

Claim 10

Claim 10 depends from claim 1, and thus falls with claim 1. Furthermore, the Examiner's position as to Kim and Culliss disclosing the

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claimed elements on appeal beginning at page 6 of the Answer and the Examiner's corresponding responsive arguments beginning at page 10 of the Answer meet all of the limitations required by the claims.

Accordingly, we conclude that the Appellants have not shown that the Examiner erred in rejecting claim 10 under 35 U.S.C. § 103(a).

Claims 12-14 and 17

Claims 12-14 and 17 depend from claim 1, and thus fall with claim 1. Furthermore, the Examiner's position as to Kim and Culliss disclosing the claimed elements on appeal beginning at page 7 of the Answer and the Examiner's corresponding responsive arguments beginning at page 10 of the Answer meet all of the limitations required by the claims.

Accordingly, we conclude that the Appellants have not shown that the Examiner erred in rejecting claims 12-14 and 17 under 35 U.S.C. § 103(a).

CONCLUSION OF LAW

(1) Appellants have not shown that the Examiner erred in finding that claims 1-19, 21, and 22 are unpatentable under 35 U.S.C. § 103(a) over the teachings of Kim and Culliss.

(2) Claims 1-19, 21, and 22 are not patentable.

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DECISION

The Examiner's rejection of claims 1-19, 21, and 22 under 35 U.S.C. § 103(a) is affirmed.

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

AFFIRMED

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