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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte KOJI AKIYAMA, YASUKO ANDOH, and NORIHIKO IZUMI

Appeal 2012-012225
Application 12/333,261¹
Technology Center 2100

Before ST. JOHN COURTENAY III, THU A. DANG, and
LARRY J. HUME, *Administrative Patent Judges*.

DANG, *Administrative Patent Judge*.

DECISION ON APPEAL

¹ According to Appellants, the real party in interest is International Business Machines Corporation. App. Br. 2.

I. STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134(a) from a final rejection of claims 1–23, 26, and 27. Claims 24 and 25 have been canceled. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

A. INVENTION

According to Appellants, the invention relates to supporting creation of a search expression in an information search that employs a plurality of words as a key (Spec. ¶ 1).

B. ILLUSTRATIVE CLAIM

Claim 1 is exemplary:

1. A method for supporting creation of a search expression that employs a plurality of words, comprising the steps of:

displaying a search expression creation support screen comprising a search word field for inputting therein search words and a search expression field for visually displaying, in a nodal form, a search expression that comprises the inputted search words;

sorting the search words, inputted in the search word field, into one or more groups depending on their categories;

displaying, in the search expression field, the search words included in each of the groups as OR-connected nodes, while displaying connections between the groups as AND-connections;

searching in a database for the search words displayed in the search expression field according to logical operators connecting the search words;

displaying search results in a search results field; and

changing a search expression in the search expression field in response to a user's operation that has been performed in the search word field or in the search expression field.

C. REJECTION

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

de Hita et al.	US 6,081,774	June 27, 2000
Goldberg et al.	US 2005/0004911 A1	Jan. 6, 2005
Schillings et al.	US 2005/0021935 A1	Jan. 27, 2005
Nakazawa	US 2005/0278379 A1	Dec. 15, 2005
Marchisio et al.	US 7,398,201 B2	July 8, 2008

Claims 1–8, 10, and 11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Goldberg and Marchisio.²

Claim 9 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Goldberg, Marchisio, and Schillings.

Claims 12–15, 20, and 21 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Goldberg and de Hita.

Claims 16–18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Goldberg, de Hita, and Marchisio.

Claim 19 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Goldberg, de Hita, and Schillings.

Claims 22 and 23 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Goldberg, de Hita, and Nakazawa.

² The rejection of claims 12–23 under 35 U.S.C. § 101 has been withdrawn (Ans. 32).

Claims 26 and 27 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Goldberg, Marchisio, and de Hita.

II. ISSUE

The principal issue before us is whether the Examiner erred in finding that Goldberg, in view of Marchisio, teaches or would have suggested: “displaying a search expression creation support screen” comprising “a search word *field for inputting* therein *search words*” and “a search expression *field for visually displaying*, in a *nodal* form, a search expression that comprises *the inputted search words*” (claim 1, emphasis added).

III. FINDINGS OF FACT

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

Goldberg

Goldberg discloses a graphical condition builder that presents a graphical representation of a search query (Abst.), wherein Figure 7 is reproduced below:

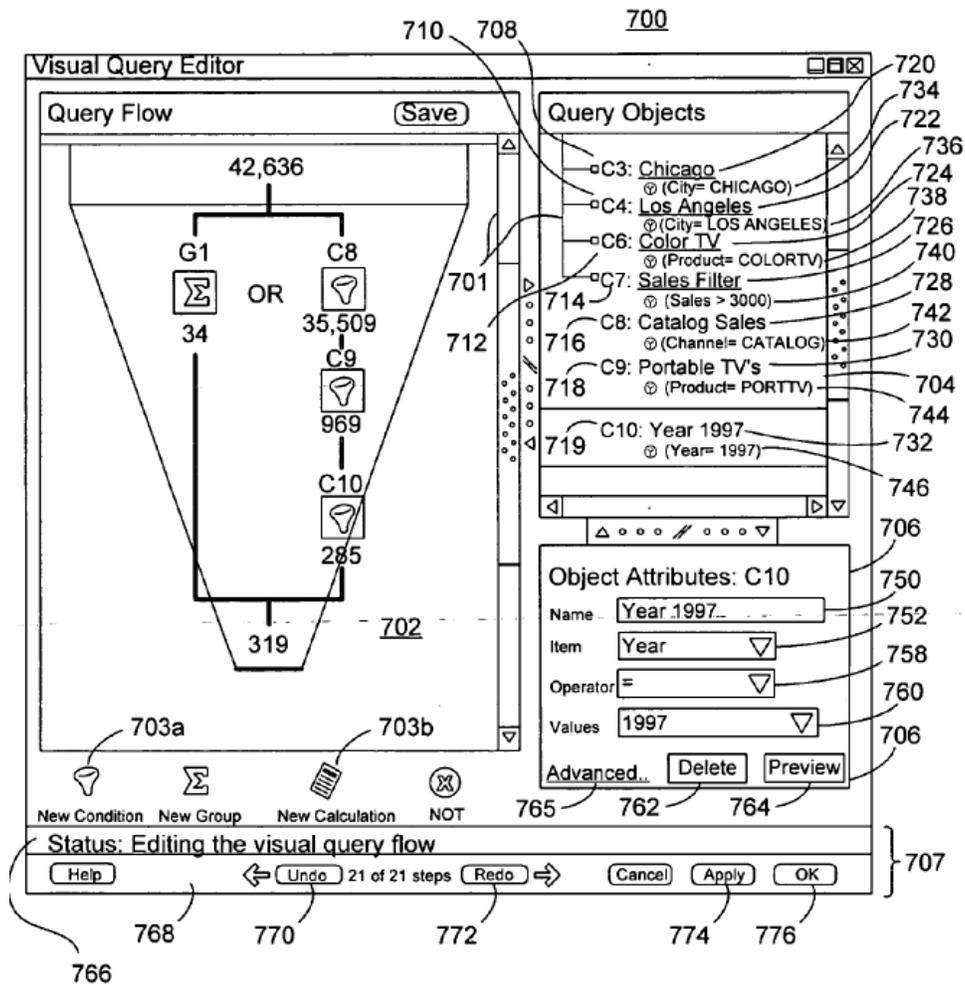


FIG. 7

As shown in Figure 7, query flow pane 702 is used for graphically constructing a search query with query objects added to the query of the query flow (Goldburg ¶ 85), wherein objects corresponding to the icons of the query flow window 702 is listed in query objects pane 704 (*id.* at ¶ 86).

IV. ANALYSIS

As for claim 1, Appellants contend “Goldberg does not teach or suggest ‘visually displaying, in a nodal form, a search expression that comprises inputted search words’” (App. Br. 13, emphasis omitted). In

particular, Appellants contend “the word ‘Chicago’ is not a search word and is not visually displayed in nodal form” (*id.*). Appellants also contend “Goldberg does not teach or suggest that any of the text that is displayed nodally in conjunction with the filter icons is ever used as a search word” and “[t]he Examiner fails to show how or where Marchisio remedies these shortcomings of Goldberg” (*id.*)

However, the Examiner finds, in Goldberg, “‘Chicago’ is ‘an inputted word’ and ‘Chicago’ is displayed in a nodal form as query object C3 in FIG. 7” (Ans. 34). In particular, the Examiner finds “‘Chicago’ will be displayed in a nodal form as C3 in a query flow pane 702 after user scroll up query flo[w] pane 702 to display the upper part of the query flow” (*id.*).

We find no error with the Examiner’s underlying factual findings and ultimate legal conclusion of obviousness.

We give the claims their broadest reasonable interpretation consistent with the Specification. *See In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997).

Although Appellants contend “the word ‘Chicago’ is not a search word and is not visually displayed in nodal form” (App. Br. 13), we note claim 1 provides no definition for “search word” and “nodal form” other than the “search word” is input into a “search word field” and a “search expression” comprising the inputted search word is displayed in a “nodal form” (claim 1). We also note that the Specification does not provide any clear definition for the terms. Thus, we give “search word” is broadest reasonable interpretation consistent with the Specification as any word or data input in executing a search/query. Further, we give “nodal form” its

broadest reasonable interpretation as any form/configuration of the displayed search word which comprises nodes/points of connection.³

Goldberg discloses displaying a graphical presentation that comprises a query objects pane 704 with query objects (such as “Chicago”) inputted therein, and a query flow pane 702 for visually displaying, in a query expressions (such as “G1” “OR” “C8-C9-C10”) that comprise the inputted query objects (such as “C8”, “C9” and “C10’), in a query flow form/configuration connecting the query objects (FF).

We agree with the Examiner’s finding Goldberg’s “Chicago” is ‘an inputted word’” wherein in “Chicago” will be displayed in a nodal form as C3 in a query flow pane 702 after user scroll up query flo[w] pane 702 to display the upper part of the query flow” (Ans. 34). Thus, we agree with the

³ To the extent Appellant contends Goldberg’s inputted information such as “Chicago” differs from the claimed “search word” to be displayed in a nodal form (App. Br. 13), we note the such contention urging patentability is predicated on the type or content of the data that input and displayed. Thus, a question arises as to whether such type or content of the data should be given patentable weight. *See In re Ngai*, 367 F.3d 1336, 1338 (Fed. Cir. 2004); *Ex parte Nehls*, 88 USPQ2d 1883, 1887–90 (BPAI 2008) (precedential); *Ex parte Curry*, 84 USPQ2d 1272 (BPAI 2005) (informative) (Fed. Cir. Appeal No. 2006-1003), *aff’d*, (Rule 36) (June 12, 2006)); *Ex parte Mathias*, 84 USPQ2d 1276 (BPAI 2005) (informative), *aff’d*, 191 Fed. Appx. 959 (Fed. Cir. 2006). Here, the information is intended to be presented to an end user/human viewer, but the informational content is not positively recited as actually being used to: (1) change or affect any machine or computer function, or (2) alter how the information will be obtained or displayed. *See also* MPEP § 2111.05 8th ed., Rev. 9, Aug. 2012 (“[W]here the claim as a whole is directed conveying a message or meaning to a human reader independent of the intended computer system, and/or the computer-readable medium merely serves as a support for information or data, no functional relationship exists.”).

Examiner that Goldberg in combination with Marchisio would at least have suggested the contested limitations: “displaying a search expression creation support screen” comprising “a search word field for inputting therein search words” and “a search expression field for visually displaying, in a nodal form, a search expression that comprises the inputted search words” (claim 1).

Furthermore, since the Examiner rejects the claims as *obvious* over the combined teachings of Goldberg and Marchisio under 35 U.S.C. § 103(a), the test for obviousness what the Goldberg in combination with Marchisio *would have suggested to one of ordinary skill in the art*. See *In re Merck & Co.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986). Thus, even assuming, *arguendo*, our reviewing court were to adopt a more narrow construction and find Goldberg does not expressly teach a “search word” to be displayed in “nodal form,” we conclude that it would have been well within the skill of one skilled in the art to display a search word (query object) in “nodal form” instead of, or in addition to, displaying the search word in a flow form.

The Supreme Court has determined the conclusion of obviousness can be based on the interrelated teachings of multiple patents, the effects of demands known to the design community or present in the marketplace, and the background knowledge possessed by a person having ordinary skill in the art. *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007). The skilled artisan is “a person of ordinary creativity, not an automaton.” *Id.* at 420-21.

Appellant has presented no evidence that displaying a search word in a nodal form instead of or in addition to a flow form would have been “uniquely challenging or difficult for one of ordinary skill in the art.”

Leapfrog Enters., Inc. v. Fisher-Price, Inc., 485 F.3d 1157, 1162 (Fed. Cir. 2007) (citing *KSR*, 550 U.S. at 418).

On this record, we find no error in the Examiner's rejection of claim 1 over Goldberg and Marchisio.

As for claim 5, Appellants contend "Marchisio does not teach or suggest ... displaying 'extracted frequent words in a different field adjacent to said search expression field on the search expression creation support screen'" (App. Br. 15). However, we agree with the Examiner's finding Marchisio discloses (Fig. 11) "an example screen display illustrating advanced search results" wherein "the number in brackets after each listed verb indicates the number of times the designated subject and listed verb are found together in a sentence" which "indicates extracted frequent word" (Ans. 35). That is, we find no error with the Examiner's broad but reasonable interpretation that "extracting frequent words" (claim 5) encompasses words/data indicating the frequency (number of times) words are found together. Furthermore, we find that it would have been well within the level of ordinary skill in the art to display such data in a different field.⁴

Similarly, for claim 6, Appellants contend "[Goldberg's] filter icon is not 'specific frequent word' and is not displayed in a 'different field' from the search expression field" (App. Br. 17). However, we agree with the Examiner's finding Goldberg discloses "as filter icons 206a-g are being dragged on canvas 201, a ghost image appears displaying either an AND indicator or an OR indicator" depending upon "whether the icons are

⁴ See also footnote 2 concerning information intended to be presented/ displayed to an end user/human viewer.

vertically aligned (one above the other) or horizontally aligned (side by side)” (Ans. 35–36). That is, we find no error with the Examiner’s broad but reasonable interpretation that “specific frequent word” encompasses Goldberg’s filter icons. Furthermore, we conclude that such user operation would have been well within the level of skill of one skilled in the art.

As for claim 7, Appellants contend “there is no teaching or suggestion in the cited art of AND connecting a node of a *specific frequent word* to ‘an end group among those groups that are AND-connected in the search field”” (App. Br. 18). However, we agree with the Examiner’s finding Goldberg discloses “if a filter icon is placed above or below existing filter icons, then the condition associated with the filter icons is ANDed with the conditions associated with the other icons” and that Marchisio discloses “specific frequent word,” wherein the combination of Goldberg and Marchisio teaches or would have suggested the invention (Ans. 36). That is, we find no error with the Examiner’s finding that such combined teachings would have been well within the level of skill of one skilled in the art (*id.*).

As for claim 9, although Appellants contend “Schillings has nothing to do with a method of supporting creation of a search expression” (App. Br. 19), we agree with the Examiner’s finding the *combination* of Goldberg, Marchisio and Schilling teaches or *would have suggested* the claim limitation. (Ans. 37).

As for claims 12–15, 20 and 21, Appellants repeat the arguments set forth for claim 1 and add “Goldberg does not teach or suggest ‘a categorization unit configured to sort the search words, inputted in the search word field, into one or more groups depending on their categories by referencing a categorization dictionary”” while “de Hita does not remedy the

shortcomings of Goldberg because de Hita does not teach or suggest grouping ‘search words, inputted in the search field’ into groups” (App. Br. 21). However, we agree with the Examiner’s finding Goldberg discloses “search words, inputted in the search word field” and that de Hita discloses “sort[ing] the words by referencing a categorization dictionary” (Ans. 38). That is, we find no error with the Examiner’s finding that such *combined* teachings would have been well within the level of skill of one skilled in the art (*id.*).

As for claims 16 and 17, Appellants repeat the arguments for claims 5 and 6 respectively (App. Br. 23–25). However, as discussed above, we find no error with the Examiner’s reliance on Goldberg and Marchisio for the teachings and suggestions of the claimed invention (Ans. 38).

As for claim 19, Appellants repeat the arguments for claim 9 (App. Br. 25–26). However, as discussed above, we find no error with the Examiner’s reliance on Goldberg and Schilling for the teachings and suggestions of the claimed invention (Ans. 39).

As for claims 22 and 23, Appellants contend the claims are patentable “for at least the same reasons given above for the patentability of independent claim 12” (App. Br. 26). However, as discussed above with respect to claim 12, we find no error with the Examiner’s reliance on Goldberg and de Hita for the teachings and suggestions of the claimed invention (Ans. 39).

As for claims 26 and 27, Appellants repeat the arguments for claim 6 (App. Br. 27–28). However, as discussed above with respect to claim 6, we find no error with the Examiner’s reliance on Goldberg and Marchisio for the teachings and suggestions of the claimed invention (Ans. 38).

V. CONCLUSION AND DECISION

We affirm the Examiner's rejections of claims 1–23, 26, and 27 under 35 U.S.C. § 103(a).⁵

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).

AFFIRMED

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⁵ Although the Examiner has withdrawn the rejection of claims 12–23 under 35 U.S.C. § 101, in the event of further prosecution of this application, we direct the Examiner's attention to the question of whether the claims are patent-eligible under 35 U.S.C. § 101 in light of the recently issued preliminary examination instructions on patent eligible subject matter. See “*Preliminary Examination Instructions in view of the Supreme Court Decision in Alice Corporation Pty. Ltd. v. CLS Bank International, et al.*,” Memorandum to the Examining Corps, June 25, 2014. Abstract ideas have been identified by the courts by way of example, including fundamental economic practices, certain methods of organizing human activities, an idea ‘of itself,’ and mathematical relationships/formulas. *Alice Corp.*, 134 S. Ct. at 2355–56. All claims on appeal appear to be merely directed to displaying data in various forms, even though several of Appellants' claims nominally recite otherwise an “apparatus” configured for performing such display method. Although the Board is authorized to reject claims under 37 C.F.R. § 41.50(b), no inference should be drawn when the Board elects not to do so. See Manual of Patent Examining Procedure (MPEP) 1213.02.