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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/461,147	07/31/2006	Jonathan J. Hull	10010-02558 US	3191

95037 7590 03/04/2013
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EXAMINER
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ART UNIT	PAPER NUMBER
2158	

NOTIFICATION DATE	DELIVERY MODE
03/04/2013	ELECTRONIC

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JONATHAN J. HULL, DAR-SHYANG LEE,
and KURT W. PIERSOL

Appeal 2010-011932
Application 11/461,147
Technology Center 2100

Before ALLEN R. MacDONALD, KRISTEN L. DROESCH, and GEORGIANNA W. BRADEN, *Administrative Patent Judges*.

BRADEN, *Administrative Patent Judge*

DECISION ON APPEAL

This is an appeal[1] under 35 U.S.C. § 134(a) from the Final Rejection of claims 1-8, 17-19, 21, 23-26, 28-29, and 31-35.[2] We have jurisdiction under 35 U.S.C. § 6(b). Claims 9-16, 20, 22, 27, and 30 were previously cancelled by Appellants.

We affirm.

STATEMENT OF THE CASE

Appellants' Invention

Appellants' invention relates to providing mixed media documents, which include media of at least two types (printed paper, digital content, and /or web links). (Spec. ¶ [0002]; Abstract.) The mixed media reality (MMR) system includes a content-based retrieval database configured with an index table to represent two-dimensional geometric relationships between objects extracted from a printed document in a way that allows look-up using a text-based index. (Abstract.)

Exemplary Claim

Claims 1, 17, 21, and 29 are independent. Independent claims 1 and 21 are representative of the invention, and are reproduced below with disputed limitations in italics:

1. A computer implemented method for organizing and accessing information in a mixed media reality document system, the method comprising:

[1] The Real Party in Interest is Ricoh Co., Ltd.
[2] Although claims 1, 17, 21, and 29 are the only claims addressed by Appellants on appeal, all pending claims are within the jurisdiction of the Board and are the subject of this Decision.

generating an electronic representation of the paper document;

identifying features on the paper document that indicate two-dimensional aspects of the paper document;

identifying locations of the features; and

indexing the features by their respective locations, thereby generating an index table.

21. A computer implemented method for accessing information in a mixed media reality document system, the method comprising:

receiving at least an image patch of a target document;

determining, from the received image patch, a query term that indicates two-dimensional relationships between objects in the target document;

comparing the query term to an index table of document features from mixed media reality documents to identify candidate regions in the mixed media reality documents that comprise the query term, the index table further comprising locations of the document features in the mixed media reality documents; and

responsive to comparing the query term to the document features in the index table, identifying one or more of the mixed media reality documents comprising the identified candidate regions comprising the query term.

Examiner's Rejections

1. Claims 1-8, 17-19, 21, 23-26, 28-29, and 31-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Page (US Patent Publication No. 2004/0122811 A1, Jun. 24, 2004) and in view of the common sense of one of ordinary skill in the art of processing documents. (Ans. 9.)

2. Claims 1-8, 17-19, 21, 23-26, 28-29, and 31-35 are provisionally rejected under obviousness-type (non-statutory) double patenting in light of US Application No. 11/461,164 (claims 1-24). (Ans. 5-8.)

ISSUE 1

Improper Issuance of a Final Office Action

Appellants argue that the issuance of the Final Office Action was premature because (i) the claims were grouped together by the Examiner for analysis (App. Br. 5), (ii) specific limitations in certain claims were not addressed (App. Br. 5), and (iii) the Examiner did not provide a response to most of Appellants' argument presented in an amendment (App. Br. 5-6).

Issue 1: Does the PTAB have jurisdiction over whether the issuance of a Final Office Action was premature and improper?

ANALYSIS

Appellants present arguments and seek our review of the Examiner's issuance of a Final Office Action (App. Br. 5-6). The propriety of the issuance of a Final Office Action is, however, a matter reviewable by petition to the Technology Center Director. *See* 37 C.F.R. § 1.444; MPEP §§ 818.03(c), 1002.02(c)(2), and 1201. Petitionable issues are not subject to review by the Board. *See In re Berger*, 279 F.3d 975, 984-85 (Fed. Cir. 2002). Accordingly, we have no opinion concerning the propriety of the issuance of the Final Office Action.

ISSUE 2

35 U.S.C. 103(a) Rejection of claims: 1-8 and 17-19

Appellants contend that the claim limitation "indexing the features by their respective locations, thereby generating an index table," which features "indicate two-dimensional aspects of the paper document" is not taught or suggested by Page. (App. Br. 7-8.)

Issue 2: Has the Examiner erred in determining that Page, in view of the knowledge and motivation of one of ordinary skill in the art of computer programming, teaches or suggests "indexing the features by their respective locations, thereby generating an index table," which features "indicate two-dimensional aspects of the paper document" as recited in independent claim 1?

ANALYSIS

We have reviewed the Examiner's rejections in light of Appellants' arguments that the Examiner has erred. We are unpersuaded by Appellants' argument (App. Br. 7-9) that Page, in view of the knowledge and motivation of one of ordinary skill in the art of computer programming, fails to teach or suggest "indexing the features by their respective locations, thereby generating an index table," which features "indicate two-dimensional aspects of the paper document" as recited in independent claim 1.

Appellants contend there is no disclosure in Page describing an index that is indexed by the "respective locations" of features in a paper document, where the features "indicate two-dimensional aspects" of the paper document, as claimed. According to Appellants, Page merely discloses

creating an index of data sets of printed documents, where the index is simply based on what keywords are present in the data sets. (App. Br. 8; citing Page, ¶ [0042].) Further, Appellants contend that Page does not describe the concept of indexing, much less "indexing" identified "features by their respective locations, thereby generating an index table" as claimed. Appellants argue that "[a]t best, [Page] at paragraph 65 states that portions of an electronic image are arranged in locations corresponding to printed media." (App. Br. 8.) Appellants note that Page discloses hyper linking a portion of a first electronic image to another portion of a second electronic image, and contend that adding a hyper link between two documents does not illustrate "identifying features on the paper document that indicate two-dimensional aspects of the paper document." (App. Br. 9; citing Page, ¶ [0045] and ¶ [0051].) According to Appellants, Page's system does not "identify" two-dimensional aspects since it merely describes a human editor that determines which portions of documents are to be hyperlinked. (App. Br. 9; citing Page, ¶ [0048].)

However, the Examiner finds that Page meets the disputed claim limitation, because Page expressly teaches a searchable INDEX created in the database (¶ [0042], ¶¶ [0006, 0045, and 0047]) and Page teaches that features are stored based on "location" (¶ [0065]). Further, the Examiner finds that given the broadest reasonable interpretation consistent with Appellants' Specification, the term "two dimensional geometric relationship" allows for a text based look up/query. (Ans. 19; citing Spec. ¶ [0248].) Specifically, the Examiner notes that Appellants' Specification at ¶ [0248] discloses

> [t]he system 3400 is configured for content-based retrieval, where two-dimensional geometric relationships between objects are represented in a way that *enables look-up in a text-based index (or any other searchable indexes)* **(i.e., a Search Engine).** In other words, the claimed 'two dimensional geometric relationship' allow for text based look up" and that "the claimed 2D relationship is simply a relationship for text searching (see specification page 66. [paragraph 0248]).

(Ans. 19-20, emphasis in original.) The Examiner further finds that "since the 'features' of Page are in fact stored in a searchable relational database then this is the same (or practically the same)." (*Id*.) Moreover, the Examiner finds that Page teaches a search engine on top of a relational database ([0005]) where requests come in the form of a query (e.g., a set of words that are related to a desire topic) ([0026]) and Page shows the media is used to store "relationships between electronic image portions." (Ans. 20; Page, ¶ [0045] and ¶ [0051], i.e. two-dimensional relationships). We agree with the Examiner's findings and conclusions.

Therefore, Page, in view of the common sense of one of ordinary skill in the art of processing documents, teaches or suggests "indexing the features by their respective locations, thereby generating an index table," which features "indicate two-dimensional aspects of the paper document" as recited in independent claim 1. We agree with the Examiner. Thus, Appellants have not persuaded us the Examiner erred in finding Page discloses the claim limitation as recited in independent claim 1.

Appellants have not presented any substantially different arguments for independent claim 17, which requires the same disputed claim limitations as claim 1. Accordingly, we sustain the rejection of independent claim 17 under 35 U.S.C. § 103(a). Similarly, Appellants have not presented any

substantive arguments with respect to dependent claims 2-8 and 18-19, thus, these claims fall with their respective independent claims. Therefore, we sustain the rejection of claims 1-8 and 17-19 under 35 U.S.C. § 103(a).

ISSUE 3

35 U.S.C. 103(a) Rejection of claims: 21, 23-26, 28-29, and 31-35

Appellants contend that the claim limitation "determining, from the received image patch, a query term that indicates two-dimensional relationships between objects in the target document" is not taught or suggested in Page. (App. Br. 10.)

Issue 3: Has the Examiner erred in determining that Page, in view of the common sense of one of ordinary skill in the art of processing documents, teaches or suggests "determining, from the received image patch, a query term that indicates two-dimensional relationships between objects in the target document" as recited in independent claim 21?

ANALYSIS

We are unpersuaded by Appellants' argument (App. Br. 10) that Page, in view of the common sense of one of ordinary skill in the art of processing documents, teaches or suggests "determining, from the received image patch, a query term that indicates two-dimensional relationships between objects in the target document" as recited in independent claim 21.

Appellants contend that Page merely discloses creating electronic representations of received printed documents. However, no subsequent query term is "determined" from the received printed documents, as

claimed. Page's printed documents are received merely to create the electronic representations that form a data set of the printed documents from which searches are performed. (App. Br. 10; citing Page, ¶ [0028].) According to Appellants, Page's search queries are simply traditional keyword-based searches (Page, ¶ [0027]), and do not include "a query term that indicates two-dimensional relationships between objects in the target document." Appellants further contend that Page teaches "[r]eceiving 'relational database' queries" and that a "search engine attempts to return relevant information in response to a request *from the user,"* but in contrast, the claimed invention "determin[es] from the received image patch, a query term that indicates two-dimensional relationships between objects in the target document" (i.e., the query does not come from the user). (App. Br. 10-11, emphasis in original.)

However, as discussed above, the Examiner finds Appellants' Specification at ¶ [0248] discloses

> "[t]he system 3400 is configured for content-based retrieval, where two-dimensional geometric relationships between objects are represented in a way that *enables look-up in a text-based index (or any other searchable indexes)* **(i.e., a Search Engine).** In other words, the claimed 'two dimensional geometric relationship' allow for text based look up" and that "the claimed 2D relationship is simply a relationship for text searching (see specification page 66. [paragraph 0248])."

(Ans. 22-23, emphasis in original.) Appellants' Specification further shows a two-dimensional geographic relationship that is extracted from "features" in a "paper document" and where the two-dimensional relationships are simply "query terms" (i.e. queries/searches) such that these queries capture the two-dimensional relationships. (Ans. 23.) The Examiner finds that Page

captures and indexes the "two-dimensional bar codes or conventional characters," illustrating that Page shows media is used to store "relationships between electronic image portions." (Ans. 23; citing Page, ¶ [0045] and ¶ [0051], i.e. two-dimensional relationships). We agree with the Examiner's findings and conclusions.

Thus, Appellants have not persuaded us the Examiner erred in finding Page discloses the invention as recited in independent claim 21.

Appellants have not presented any substantially different arguments for independent claim 29, which requires the same disputed claim limitation as claim 21. Accordingly, we sustain the rejection of independent claim 29 under 35 U.S.C. § 103(a). Similarly, Appellants have not presented any substantive arguments with respect to dependent claims 23-26, 28, and 31-35, thus, these claims fall with their respective independent claims. Therefore, we sustain the rejection of claims 21, 23-26, 28-29, and 31-35 under 35 U.S.C. § 103(a).

DECISION

The Examiner's decision to reject claims 1-8, 17-19, 21, 23-26, 28-29, and 31-35 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)(1)(iv).

AFFIRMED

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