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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte DUNCAN L. MEWHERTER,AMY D. TRAVIS, KOAH-HSING WANG, and ROBERT C. WEIR

Appeal 2012-007692\(^1\)
Application 10/685,192
Technology Center 2100


HOMERE, Administrative Patent Judge.

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\(^1\) The real party in interest is International Business Machines Corp. (App. Br. 1.) In Appeal 2009-009636, dated April 01, 2011, an earlier panel affirmed the Examiner’s rejections of claims 1-22. (App. Br. 1.)
STATEMENT OF THE CASE


We affirm and designate our affirmance of the rejection under 35 U.S.C. § 101 as a new ground of rejection.

Appellants’ Invention

Appellants invented a method and system for converting a slide from a slide show presentation application into a raster image having linked therewith a descriptive text (e.g., title) in a non-presentation application. (Spec. 8, ll. 2-12, Spec. 10, l. 20 - Spec. 11, l. 5.)

Illustrative Claims

Independent claims 1 and 16 further illustrate the invention as follows:

1. A system for converting slide show presentations for use within non-presentation applications, the system comprising:
   a computing system with at least one processor and memory;
   a slide show produced by a slide show presentation application and stored in a native format; and,
   a slide show conversion process executing in the memory of the computing system and configured for coupling to a non-presentation application and programmed both to extract contextual data from a slide from said slide show in its native format, to convert the slide in said slide show to raster imagery for use in said non-presentation application and to place a text form of the contextual data in proximity to the raster imagery of the slide show.
16. A machine readable storage medium having stored thereon a computer program for converting a slide show presentation for use within a non-presentation application, the computer program comprising a routine set of instructions for causing the machine to perform the steps of:

extracting a slide title for a first slide in a slide show presentation produced by a slide show presentation application executing in memory of a computer;

converting said first slide with said slide title into a raster image;

disposing both said slide title and said raster image of said slide in a markup language document; and,

repeating said extracting, converting and disposing steps for a selected group of other slides in the slide show presentation.

Prior Art Relied Upon

The Examiner relies on the following prior art as evidence of unpatentability:

<table>
<thead>
<tr>
<th>Inventor</th>
<th>Publication No.</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chatterjee</td>
<td>US 7,162,691 B1</td>
<td>Jan. 9, 2007</td>
</tr>
</tbody>
</table>

Rejections on Appeal

The Examiner rejects the claims on appeal as follows:

2. Claims 1-5 stand rejected under 35 U.S.C. § 112, first paragraph as failing to comply with the written description requirement.

3. Claims 1-9, 12, 14-19, and 22 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Erol and Chakraborty.


ANALYSIS

We consider Appellants’ arguments *seriatim* as they are presented in the principal Brief, pages 5-13.

*Nonstatutory Subject Matter Rejection*

Dispositive Issue 1: Under 35 U.S.C. § 101, did the Examiner err in concluding that claims 16-22 encompass transitory media such as “signals, carrier waves, etc.” (Ans. 5), i.e., that claims 16-22 are directed to nonstatutory subject matter?

Appellants argue that the claimed “machine-readable storage medium” is distinguished from a machine-readable medium\(^2\) because the former is limited to a medium for permanently storing information, whereas the latter includes a transitory medium such as a carrier wave. (App. Br.

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\(^2\) The term “machine-readable medium” is equivalent to the more commonly used term “computer-readable medium.”
6-7). Consequently, Appellants submit that because the recited storage medium stores computer-readable instructions that, when executed, cause a computer to perform certain functions, thereby establishing structural and functional interrelationships between the computer and the stored instructions, the claim is directed to statutory subject matter. (App. Br. 5-7.)

Appellants also assert that the Board previously has interpreted “machine-readable storage medium” to cover only statutory subject matter. (App. Br. 5-6 (citing Ex parte Mehta, No. 2008-004853 (BPAI Nov. 18, 2009) (nonprecedential); Ex parte Dureau, No. 2009-007211 (BPAI Aug. 23, 2010) (nonprecedential); and Ex parte Bash, No. 2009-007202 (BPAI Dec. 20, 2010) (nonprecedential)).) Appellants, thus, contend that “those skilled in the art, as well as the Honorable Board . . . recognize there is a difference between a transmission medium (e.g., light, electricity, EMF, etc.) and a storage medium (e.g., memory, hard disk, CD-ROM, etc.).” (App. Br. 7.)

In response, the Examiner finds that, because Appellants’ Specification fails to limit expressly the term “machine readable storage medium” to exclude signals, carrier waves, etc., the term encompasses transitory propagating signals. (Ans. 5, 22.) The Examiner bases in-part this finding on guidance provided in U.S. Patent & Trademark Office, Subject Matter Eligibility of Computer-Readable Media, 1351 Off. Gaz. Pat. Office 212 (Feb. 23, 2010) (hereinafter Subject Matter Eligibility of Computer-Readable Media). (Ans. 21-22.) There, the Office states that

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“[t]he broadest reasonable interpretation of a claim drawn to a computer readable medium (also called machine readable medium and other such variations) typically covers forms of non-transitory tangible media and transitory propagating signals per se in view of the ordinary and customary meaning of computer readable media, particularly when the specification is silent.” *Id.*

We agree with the conclusion reached by the Examiner. Appellants do not dispute the Examiner’s and the Office’s position, as set forth in *Subject Matter Eligibility of Computer-Readable Media*, that the broadest reasonable interpretation of “computer readable medium” typically encompasses non-statutory subject matter. Instead, Appellants argue that the insertion of the word “storage” into the term necessarily excludes transitory media from the scope of the term.⁴

We do not find this argument persuasive. In particular, we do not find any limitation on the form of the “machine-readable storage medium” in Appellants’ Specification. In fact, as the Examiner points out, the Specification does not use the term “medium” or “media” at all. (Ans. 22.) Given this silence in the Specification, we turn to extrinsic evidence to

⁴ Although not binding on this Board, we do find noteworthy that the Office recently mandated in training to its examiners that, in such cases, a claim reciting computer-readable storage media must be construed under the broadest reasonable interpretation as encompassing a signal per se unless amended to avoid such language. U.S. Patent & Trademark Office, *Evaluating Subject Matter Eligibility Under 35 USC § 101* (Aug. 2012 Update); pp. 11-14, available at http://www.uspto.gov/patents/law/exam/101_training_aug2012.pdf.
determine the meaning of “machine-readable storage medium.” See Phillips v. AWH Corp., 415 F.3d 1303, 1313 (Fed. Cir. 2005) (en banc) (“[T]he ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application.”); see also SunRace Roots Enter. Co. v. SRAM Corp., 336 F.3d 1298, 1302 (Fed. Cir. 2003); Brookhill-Wilk 1, LLC v. Intuitive Surgical, Inc., 334 F.3d 1294, 1298 (Fed. Cir. 2003) (“In the absence of an express intent to impart a novel meaning to the claim terms, the words are presumed to take on the ordinary and customary meanings attributed to them by those of ordinary skill in the art.”). In this regard, we are compelled to note the

5 Based on these cases there are several factors to consider when determining whether a “computer readable storage medium” type claim avoids encompassing a non-statutory signal:

(1) Extrinsic evidence relevant to the meaning as would be understood by one skilled in the art at the time of the effective filing date of the patent application. As opposed to the voluminous extrinsic evidence dated 2002 and thereafter, which is discussed in this decision, before 2002 there is little evidence that the ordinary and customary meaning of such “storage medium” terms encompassed a signal.

(2) Whether there is express intent in applicant’s specification to limit the term, i.e., applicant’s specification is not silent as to the meaning of such terms.

(3) Whether the claim expressly limits the medium to “non-transitory” embodiments.

(4) Whether the claim implicitly limits the medium to “non-transitory” embodiments. The most common form of this is the use of “means plus function” elements in the claim (i.e., a true Beuregard type claim). Such means plus function elements are limited by statute to the corresponding
growing body of evidence (discussed infra) demonstrating that the ordinary
and customary meaning of “computer readable storage medium” to a person
of ordinary skill in the art was broad enough to encompass both non-
transitory and transitory media.

This extrinsic evidence is largely in the form of published
applications, including applications assigned to the same assignee as the
appeal before us (i.e., International Business Machines Corp.), which use the
identical term “machine-readable storage medium.” Such extrinsic evidence
includes (emphasis added):

US 20030097554 A1; Filing Date: 20011121
Assignee: International Business Machines Corporation.
Paragraph [0022]

Whether contained in the computer system or elsewhere,
the instructions may be stored on a variety of machine
readable storage media, such as a DASD storage (e.g. a
conventional “hard drive” or a RAID array), magnetic
tape, electronic read-only memory, an optical storage
device (e.g., CD ROM, WORM, DVD, digital optical
tape), paper “punch” cards, or other suitable computer
readable media including transmission media such as
digital, analog, and wireless communication links.

US 20030208338 A1; Filing Date: 20020503
Assignee: International Business Machines Corporation.
Paragraph [0017]

[Same sentence as above in US 20030097554 A1].

structure in the specification and equivalents thereof. Such a structure
requirement limits the claim to non-transitory embodiments.
We also consider extrinsic evidence in the form of published applications assigned to other assignees (including but not limited to industry participants, such as Hewlett-Packard, Sun, Cisco, Oracle, and Siemens) and which use similar terms (emphasis added):

“Whether contained in the computer system or elsewhere, the instructions may be stored on a variety of machine readable storage media, such as a DASD storage (for example, a conventional ‘hard drive’ or a RAID array), magnetic tape, electronic read-only memory, an optical storage device (for example, CD ROM, WORM, DVD, digital optical tape), paper ‘punch’ cards, or other suitable computer readable media including transmission media such as digital, analog, and wireless communication links.” US 20050021386 A1 at [0027], filed July 23, 2003, assigned to Hewlett-Packard Company.

“Additionally, a data signal embodied in a carrier wave (e.g., in a network including the Internet) may be the computer readable storage medium.” US 20040244009 A1 at [0055], filed June 28, 2001, assigned to Sun Microsystems, Inc.

“Another example of a computer-readable storage medium is a signal that carries software across a network.” US 20080077710 A1 at [0166], filed May 1, 2003, assigned to Cisco Technologies, Inc.

“Additionally, a data signal embodied in a carrier wave (e.g., in a network including the Internet) can be the computer readable storage medium.” US 20040255307 A1 at [0032], filed May 27, 2003, assigned to Oracle International Corp.
“Additionally, a data signal embodied in a carrier wave (e.g., in a network including the Internet) can be the computer readable storage medium.” US 20020143962 A1 at [0021], filed March 14, 2001, assigned to Siemens Information and Communication Networks, Inc.

“Additionally, a data signal embodied in a carrier wave (e.g., in a network including the Internet) can be the computer readable storage medium.” US 20110171948 A1 at [0033], filed March 21, 2003, assigned to Portal Software, Inc.

“Further, computer readable storage medium may also encompass data signals embodied in a carrier wave such as the data signals embodied in a carrier wave carried in a network.” US 20100115149 A1 at [0060], filed December 2, 2002, assigned to Plantronics, Inc.

“This program can be recorded on a computer-readable storage medium so that it is executed in a general purpose digital computer system. Such a storage medium may include magnetic storage media (for example, ROMs, floppy discs, hard disks, etc.), optically-readable media (for example, CD-ROMs, DVDs, etc.), and media such as carrier waves (for example, transferring data through the Internet).’’ US 20060265749 A1 at [0087], filed May 20, 2003.

“Additionally, a data signal embodied in a carrier wave (e.g., in a network including the Internet) may be the computer readable storage medium.” US 20060242241 A1 at [0199], filed January 29, 2002, assigned to Neoteris, Inc.
“The data structures and code described in this detailed description are typically stored on a computer readable storage medium, which may be any device or medium that can store code and/or data for use by a computer system. This includes, but is not limited to, magnetic and optical storage devices such as disk drives, magnetic tape, CDs (compact discs) and DVDs (digital versatile discs or digital video discs), and computer instruction signals embodied in a transmission medium (with or without a carrier wave upon which the signals are modulated).” US 20050204306 A1 at [0053], filed September 15, 2003.

“Additionally, a data signal embodied in a carrier wave (e.g., in a network including the Internet) may be the computer readable storage medium.” US 20050037367 A9 at [0029], filed August 25, 2003, assigned to Affymetrix, Inc.

“The data structures and code described in this description can be stored on a computer readable storage medium, which may be any device or medium that can store code and/or data for use by a computer system. This includes, but is not limited to, magnetic and optical storage devices such as disk drives, magnetic tapes, CD (compact discs) and DVD (digital video disks), and computer instruction signals embodied in a transmission medium.” US 20050007567 A1 at [0093], filed July 10, 2003, assigned to Fortis Systems, Inc.

“Further, computer readable storage medium may also encompass data signals embodied in a carrier wave such as the data signals embodied in a carrier wave carried in a network.” US 20020180725 A1 at [0082], filed April 23, 2002, assigned to Quantum3D, Inc.
The term ‘computer-readable storage medium’ refers to any medium that participates in providing the symbolic representations of operations to a processor for execution. Such media may take many forms, including, without limitation, volatile memory, nonvolatile memory, flash memory, electronic transmission media, and the like.” US 20040236726 A1 at [0027], filed May 19, 2003, assigned to Teracruz, Inc.

“Additionally, a data signal embodied in a carrier wave (e.g., in a network, e.g., internet, intranet, and the like) may be the computer readable storage medium.” US 20030175815 A1 at [0102], filed March 26, 2003, assigned to Caliper Technologies Corp.

We do not believe that the extrinsic evidence provided by Appellants, namely the definition of “storage medium” from the McGraw-Hill Dictionary of Scientific and Technical Terms, requires a different result. Appellants argue that

a storage medium is well-known to mean ‘any device or recording medium into which data can be copied and held until some later time, and from which the entire original data can be obtained.’ By comparison, a signal cannot hold data until some later time due to its transitory nature. This clearly indicates that a ‘storage medium’ is not a transitory medium, but a tangible medium and thus is statutory matter.

(App. Br. 7 (citing Mc-Graw-Hill Dictionary of Scientific and Technical Terms) (emphasis in original).) But a signal with embedded data fully comports with this definition, for data can be copied and held by a transitory recording medium, albeit temporarily, for future recovery of the embedded data.
We also agree with the Examiner that the *Mehta*, *Dureau*, and *Bash* decisions do not compel a different result. As a preliminary matter, none of these opinions has been designated as precedential, and therefore, none of the opinions is binding on this panel. Moreover, as the Examiner points out, these opinions are distinguishable from the present case. (Ans. 20-21.) For example, the Specifications at issue in *Dureau* and *Bash* contained express language that excluded transitory media from the definition of storage medium. (Ans. 20-21.) And in none of these three cases did the Board take into account published-patent-application evidence discussed above. Further, *Mehta* has an effective filing date of May 25, 2000, and the later dated extrinsic evidence cited supra is inapplicable.

Given the significant amount of available guidance and evidence supra, we conclude that those of ordinary skill in the art would understand the claim term “machine-readable storage medium” would include signals *per se*. Further, where, as here, the broadest reasonable interpretations of all the claims each covers a signal *per se*, the claims must be rejected under 35 U.S.C. § 101 as covering non-statutory subject matter. *See* In re Nuijten, 500 F.3d 1346, 1356-57 (Fed. Cir. 2007) (transitory embodiments are not directed to statutory subject matter); *Subject Matter Eligibility of Computer-Readable Media, supra*; U.S. Patent & Trademark Office, *Interim Examination Instructions for Evaluating Subject Matter Eligibility Under 35 U.S.C. § 101*, Aug. 24, 2009; p. 2, available at http://www.uspto.gov/web/offices/pac/dapp/opa/2009-08-25_interim_101_instructions.pdf; U.S. Patent & Trademark Office,
We note that Appellants are not precluded from amending these claims to overcome this rejection. Guidance on this point is provided in U.S. Patent & Trademark Office, Subject Matter Eligibility of Computer Readable Media, 1351 Off. Gaz. Pat. Office 212 (Feb. 23, 2010) (“A claim drawn to such a computer readable medium that covers both transitory and non-transitory embodiments may be amended to narrow the claim to cover only statutory embodiments to avoid a rejection under 35 U.S.C. § 101 by adding the limitation ‘non-transitory’ to the claim.”). See also U.S. Patent & Trademark Office, Evaluating Subject Matter Eligibility Under 35 USC § 101 (August 2012 Update) (pp. 11-14), available at http://www.uspto.gov/patents/law/exam/101_training_aug2012.pdf (noting that while the recitation “non-transitory” is a viable option for overcoming the presumption that those media encompass signals or carrier waves, merely indicating that such media are “physical” or tangible” will not overcome such presumption).

In reaching our decision, we rely on additional evidence not of record. Therefore, we designate this portion of our decision as a new ground of rejection.
Written Description Rejection

Dispositive Issue 2: Under 35 U.S.C. § 112, first paragraph, did the Examiner err by finding that claims 1-5 fail to comply with the written description requirement?

Appellants argue that the Examiner erred in finding that the limitation of placing a text form of contextual data in proximity to the raster imagery of the slide show is not supported adequately by Appellants’ original disclosure. In particular, Appellants submit that one of ordinary skill in the art would have recognized the recitation of linking the image to the title within a markup language document (Spec. 11, II. 1-5) adequately supports the disputed limitation. (App. Br. 10-11.)

In response, the Examiner finds that the cited disclosure of extracting a title from a slide and linking it to an image in a webpage in no way supports the newly claimed limitation of placing the title of the slide in proximity to the image. (Ans. 24-25.)

On the record before us, we find no error in the Examiner’s finding that the cited claims fail to comply with the written description requirement.6 Appellants’ Specification states the following:

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6 To satisfy the written description requirement, a patent specification must describe the claimed invention in sufficient detail that one skilled in the art can reasonably conclude that the inventor had possession of the claimed invention. See, e.g., Moba, B.V. v. Diamond Automation, Inc., 325 F.3d 1306, 1319 (Fed. Cir. 2003); Vas-Cath, Inc. v. Mahurkar, 935 F.2d 1555, 1563 (Fed. Cir. 1991). However, a showing of possession alone does not cure the lack of a written description. Enzo Biochem, Inc. v. Gen-Probe, Inc., 323 F.3d 956, 969 (Fed. Cir. 2002). Much of the written description
Within the non-presentation application, in block 250 the title can be linked to the image within the markup language document and the title further can be used separately from the image such as within a meeting agenda. (Spec. 11, II. 2-5.)

The cited portion of Appellants’ Specification indicates that the title of the slide and the image can be linked to each other within the non-presentation application. However, we note that, while the claimed “proximity” recitation requires that the title and the image are linked, it also requires that they are located near each other. Therefore, the Specification’s mere disclosure that the image and the title are linked within the same application does not go far enough to convey with reasonable clarity to ordinarily skilled artisans that Appellants possessed the proximity requirement as claimed when the application was filed. Although the written description requirement under § 112 does not demand (1) any particular form of disclosure, or (2) the Specification recite the claimed invention verbatim, a description that merely renders the invention obvious does not satisfy the requirement. Therefore, to the extent that the recited

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7 Ariad Pharm., Inc. v. Eli Lilly & Co., 598 F.3d 1336, 1352 (Fed. Cir. 2010) (en banc) (citations omitted). Our reviewing court guides that “[a] description which renders obvious the invention for which an earlier filing
“proximity” feature would have been obvious from this disclosure, we conclude that such conjecture would have been insufficient to support Appellants’ allegation that they possessed the disputed claim limitation at the time of the invention.

Consequently, we agree with the Examiner that the cited disclosure does not describe the disputed limitation in sufficient detail to thereby apprise the ordinarily skilled artisan that Appellants possessed the claimed subject matter at the time of the invention. It follows that the Examiner did not err in rejecting claims 1-5 as failing to comply with the written description requirement.

Obviousness Rejections

Dispositive Issue 3: Under 35 U.S.C. § 103, did the Examiner err by finding that the combination of Erol and Chakraborty teaches or suggests placing a text form of contextual data in proximity to a raster imagery of a slide show, as recited in claim 1?

Appellants argue that the Examiner erred in finding that Chakraborty’s disclosure remedies the Examiner’s admitted deficiencies of Erol set forth in the disputed limitations emphasized above. In particular,

date is sought is not sufficient.” *Lockwood*, 107 F.3d at 1572 (quoting *Jepson v. Coleman*, 314 F.2d 533, 536 (CCPA 1963)). “[I]t is ‘not a question of whether one skilled in the art might be able to construct the patentee’s device from the teachings of the disclosure.... Rather, it is a question whether the application necessarily discloses that particular device’” (*Id.*).
Appellants argue that Chakraborty’s disclosure of combining in a single file an extracted title stored in a first partial AIU file, and an extracted image stored in a second partial AIU file does not teach or suggest that the title and the image are proximate to each other. (App. Br. 12-13.)

In response, the Examiner finds that because Appellants construe the title being in proximity of the image as the two being linked (not necessarily in a non-presentation application), Chakraborty’s disclosure of combining in a single file an extracted text portion stored in a separate file with an image portion stored in another file teaches the disputed limitations. (Ans. 26-27.)

On the record before us, we agree with the Examiner’s findings and ultimate conclusion of obviousness. First, we agree with the Examiner’s finding that the recitation whereby the raster imagery is for use within a non-presentation application, as set forth in the preamble and the body of the claim, is a statement of intended use. (Ans. 26.) Our reviewing court has held that a statement of intended use in an apparatus claim cannot distinguish over a prior art apparatus that discloses all the recited structural limitations and is capable of performing the recited function. See In re Schreiber, 128 F.3d 1473, 1477 (Fed. Cir. 1997). We also note that “[a]n intended use or purpose usually will not limit the scope of the claim because such statements usually do no more than define a context in which the invention operates.” See Boehringer Ingelheim Vetmedica, Inc. v. Schering-Plough Corp., 320 F.3d 1339, 1345 (Fed. Cir. 2003). Although “[s]uch statements often . . . appear in the claim’s preamble,” a statement of intended
use or purpose can appear elsewhere in a claim. *In re Stencil*, 828 F.2d 751, 754 (Fed. Cir. 1987).

Second, we find that the recited intended use limitation is met fully by an equivalent prior art structure disclosed in Chakraborty, which appears to be capable of performing the recited function. In particular, we find that by combining the partial files into the single file (Fig. 1), Chakraborty’s disclosure teaches or suggests linking the title and the image stored in the single combined AIU file (e.g., XML file), which is capable of being used as a non-presentation application. ([0021]-[0024], [0037], [0055]). It follows that the Examiner did not err in finding that the combination of Erol and Chakraborty teaches the disputed limitations.

Because claims 2-22 are not argued separately, they fall together with claim 1 for the same reasons discussed above. *See* 37 C.F.R. § 41.37(c)(1)(vii).

**DECISION**

We affirm the Examiner’s rejection of claims 16-22 under 35 U.S.C. § 101 as being directed to nonstatutory subject matter.

We affirm the Examiner’s rejection of claims 1-5 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.

We affirm the Examiner’s rejections of claims 1-22 under 35 U.S.C. § 103(a) as being unpatentable.
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
37 C.F.R. § 41.50(b)