Paper No. 33

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte YOSHIYUKI ITO and TOSHIYUKI ISHII

Appeal No. 2002-1056
Application No. 08/772,888

HEARD: April 15, 2003

Before KRASS, RUGGIERO, and SAADAT, Administrative Patent Judges.

RUGGIERO, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal from the final rejection of claims 1-37, which are all of the claims pending in the present application. An amendment filed March 6, 2000 after final rejection, which amended claim 7, was approved for entry by the Examiner.

The claimed invention relates to a method and apparatus for recording image data in which an automatic determination is made as to whether the image data to be recorded has either a relatively large or a relatively small amount of data. Image data that is determined to have a relatively large amount of data is recorded in the outer peripheral region of the recording medium, while image data determined to have a relatively small amount of data is recorded in the inner peripheral region of the recording medium. According to Appellants (Specification, pages 5-8), the above-described recording technique results in an increased data transfer rate since random storage of data is diminished, thereby reducing the need for the recording and reproducing heads to excessively move back and forth between tracks.

Claim 1 is illustrative of the invention and reads as follows:

> 1. A method for recording at least image data on a disk shaped recording medium to decrease random storage of image data having relatively large amounts of data and reduce access time of said image data, comprising the steps of:

> determining automatically whether the image data has a relatively large amount of data or a relatively small amount of data;
>
> recording the image data having a relatively large amount of data in an outer peripheral region of said disk-shaped recording medium in order to decrease random storage of image data having relatively large amounts of data and reduce access time of said image data; and
>
> recording the image data, having a relatively small amount of data in an inner peripheral region of said disk-shaped recording medium.

The Examiner relies on the following prior art:

Misawa et al. (Misawa)	5,444,482	Aug. 22, 1995
Sarbadhikari et al. (Sarbadhikari)	5,477,264	Dec. 19, 1995
Birk	5,510,905	Apr. 23, 1996 (filed Sep. 28, 1993)
Lyu	5,801,777	Sep. 01, 1998 (filed Sep. 05, 1996)

Claims 1-3, 5-10, 12, 14, 16-18, 22-25, 27-29, 33, 35, and 36 stand finally rejected under 35 U.S.C. § 102(e) as being anticipated by Birk. Claims 4, 11, 13, 15, 19-21, 26, 30-32, 34, and 37 stand finally rejected under 35 U.S.C. § 103(a). As evidence of obviousness, the Examiner offers Birk alone with respect to claim 4, Birk in view of Misawa with respect to claims 11, 13, 15, 20, 21, 26, 31, 32, and 34, Birk in view of Lyu with

respect to claims 19 and 30, and Birk in view of Sarbadhikari with respect to claim 37.

Rather than reiterate the arguments of Appellants and the Examiner, reference is made to the Briefs[1] and Answer for the respective details.

OPINION

We have carefully considered the subject matter on appeal, the rejections advanced by the Examiner, and the evidence of anticipation and obviousness relied upon by the Examiner as support for the rejections. We have, likewise, reviewed and taken into consideration, in reaching our decision, Appellants' arguments set forth in the Briefs along with the Examiner's rationale in support of the rejections and arguments in rebuttal set forth in the Examiner's Answer.

It is our view, after consideration of the record before us, that the Birk reference does not fully meet the invention as set forth in claims 1-3, 5-10, 12, 14, 16-18, 22-25, 27-29, 33, 35, and 36. With respect to the Examiner's obviousness rejection, we

[1] The Appeal Brief was filed August 14, 2000 (Paper no. 25). In response to the Examiner's Answer dated October 25, 2000 (Paper No. 26), a Reply Brief was filed December 28, 2000 (Paper No. 27), which was acknowledged and entered by the Examiner as indicated in the communication dated March 14, 2001 (Paper No. 28).

are also of the view that the evidence relied upon and the level of skill in the particular art would not have suggested to one of ordinary skill in the art the obviousness of the invention as recited in claims 4, 11, 13, 15, 19-21, 26, 30-32, 34 and 37. Accordingly, we reverse.

We consider first the rejection of claims 1-3, 5-10, 12, 14, 16-18, 22-25, 27-29, 33, 35, and 36 under 35 U.S.C. § 102(e) as being anticipated by Birk. Anticipation is established only when a single prior art reference discloses, expressly or under the principles of inherency, each and every element of a claimed invention as well as disclosing structure which is capable of performing the recited functional limitations. RCA Corp. v. Applied Digital Data Systems, Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir.); cert. dismissed, 468 U.S. 1228 (1984); W.L. Gore and Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 1554, 220 USPQ 303, 313 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).

With respect to independent claims 1-3 and 5-8, the Examiner attempts to read the various limitations on the disclosure of Birk. In particular, the Examiner directs attention to the

illustration in Figure 2 of Birk along with the accompanying description beginning at column 4, line 62.

Appellants' arguments in response assert a failure of Birk to disclose every limitation in independent claims 1-3 and 5-8 as is required to support a rejection based on anticipation. At pages 8 and 9 of the Brief and pages 4-6 of the Reply Brief, Appellants' arguments focus on the contention that, contrary to the Examiner's interpretation of the disclosure of Birk, there is no disclosure of the reduction of access time of the image data having a relatively large amount of data that is stored in the outer peripheral region of the disk as claimed. In Appellants' view, Birk actually increases the access time of image data that would otherwise be stored in outer peripheral disk regions since, in Birk's described storage technique, such data is partitioned and stored in outer region and inner region track pairs requiring multiple accesses to retrieve the data.

After reviewing the Birk reference in light of the arguments of record, we are in general agreement with Appellants' position as expressed in the Briefs. The relevant portion of each of the

appealed independent claims requires the recording of image data having a relatively large amount of data in an outer peripheral region of a disk "... in order to decrease random storage of image data having relatively large amounts of data and reduce access time of said image data...." In addressing this language, the Examiner offers an interpretation of the claim language "said image data" as encompassing all of the image data input into the recording system including image data which would otherwise be stored totally in the inner regions of a disk. Under this interpretation, the Examiner asserts (Answer, pages 12 and 13) that Birk reduces access time since this data, otherwise totally stored on the slower access time disk inner region, is partitioned and portions are stored on the faster access time outer disk regions.

It is our view, however, that no basis exists for the claim language interpretation articulated in the Examiner's Answer. We do not dispute the Examiner's interpretation of the track pairing storage technique of Birk which concludes that access time would be reduced for image data that would otherwise be totally stored

on the innermost tracks of a disk. It is apparent to us, however, that the "reduce access time of said image data" feature of the appealed claims must be interpreted as referring to the image data which has been determined to have a relatively large amount of data and which is stored on the outer regions of the disk. In our view, the only reasonable reading of the language "reduce access time of said image data" would be, at the very least, that this language be interpreted as referring to the image data appearing in the immediately preceding portions of the sub-paragraph in which it appears, i.e. the image data determined as having a relatively large amount of data.

Further, while the Examiner is correct that claims are to be given their broadest possible interpretation, any such interpretation must be consistent with the specification. It is clear to us from a reading of Appellants' specification that a fair and reasonable interpretation of the language of the appealed claims requires a reduction of access time for image data determined to have a relatively large amount of data and stored in the outer peripheral regions of a disk.

In view of the above discussion, since all of the claim limitations are not present in the disclosure of Birk, we do not sustain the Examiner's 35 U.S.C. § 102(e) rejection of independent claims 1-3 and 5-8, nor of claims 9, 10, 12, 14, 16-18, 22-25, 27-29, 33, 35, and 36 dependent thereon.

Turning to a consideration of the Examiner's 35 U.S.C. § 103(a) rejection of dependent claims 4, 11, 13, 15, 19-21, 26, 30-32, 34 and 37 based on the various combinations of Birk with the Misawa, Lyu, and Sarbadhikari references, we do not sustain this rejection as well. For all of the reasons discussed supra, the

Examiner has failed to establish a prima facie case of obviousness since we find no teaching or suggestion in any of the applied secondary references that would overcome the innate deficiencies of Birk in disclosing the reduction of access time of image data determined to have a relatively large amount of data and stored in the outer peripheral region of a disk, a feature present in each of independent claims 1-3 and 5-8.

In summary, we have not sustained either of the Examiner's 35 U.S.C. § 102(e) or 35 U.S.C. § 103(a) rejections of the claims on appeal. Therefore, the decision of the Examiner rejecting claims 1-37 is reversed.

REVERSED

ERROL A. KRASS Administrative Patent Judge	)	
JOSEPH F. RUGGIERO Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
MAHSHID D. SAADAT Administrative Patent Judge	)	

jfr/vsh

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