



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 12/598,168 | 10/29/2009 | Hiroyuki Itagaki | 1141/80959 | 6914 |
| 23432 | 7590 | 12/30/2016 | EXAMINER | |
| COOPER & DUNHAM, LLP 30 Rockefeller Plaza 20th Floor NEW YORK, NY 10112 | | | REYES, REGINALD R | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3686 | |
| | | | MAIL DATE | DELIVERY MODE |
| | | | 12/30/2016 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte HIROYUKI ITAGAKI and TAKASHI NISHIHARA

Appeal 2015-002702
Application 12/598,168¹
Technology Center 3600

Before HUBERT C. LORIN, BIBHU R. MOHANTY, and
MATTHEW S. MEYERS, Administrative Patent Judges.

LORIN, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Hiroyuki Itagaki, et al. (Appellants) seek our review under 35 U.S.C. § 134 of the final rejection of claims 1–11 and 13–15. We have jurisdiction under 35 U.S.C. § 6(b) (2002).

SUMMARY OF DECISION

We REVERSE and enter a NEW GROUND OF REJECTION.

¹ The Appellants identify Hitachi Medical Corporation as the real party in interest. App. Br. 3.

THE INVENTION

Claim 1, reproduced below, is illustrative of the subject matter on appeal.

1. A magnetic resonance imaging apparatus comprising:

an image acquisition unit configured to divide an imaging region of an object to be examined into a plurality of stations of respective station positions, and acquire a plurality of images having different image types for each station, while moving a table on which the object is mounted, station by station;

a display control unit configured to display the plurality of images in a predetermined display format; and

a classification processing unit configured to classify the plurality of images by image types and station position, based on imaging condition including imaging parameters,

wherein the display control unit displays the plurality of images by image types in spatial order of station positions, based on the classification result by the classification processing unit.

THE REJECTIONS

The Examiner relies upon the following as evidence of unpatentability:

| | | |
|---------|--------------------|---------------|
| Giger | US 2001/0043729 A1 | Nov. 22, 2001 |
| Hayashi | US 2002/0013524 A1 | Jan. 31, 2002 |
| Schmitz | US 2002/0087071 A1 | Jul. 4, 2002 |
| Perren | US 2003/0004518 A1 | Jan. 2, 2003 |

The following rejections are before us for review:

1. Claims 1–8, 10, 11, 13, and 14 are rejected under 35 U.S.C. §103(a) as being unpatentable over Giger, Perren, and Hayashi.

2. Claims 9 and 15 are rejected under 35 U.S.C. §103(a) as being unpatentable over Giger, Perren, Hayashi, and Schmitz.

ISSUES

Did the Examiner err in rejecting claims 1–8, 10, 11, 13, and 14 under 35 U.S.C. §103(a) as being unpatentable over Giger, Perren, and Hayashi?

Did the Examiner err in rejecting claims 9 and 15 under 35 U.S.C. §103(a) as being unpatentable over Giger, Perren, Hayashi, and Schmitz?

ANALYSIS

The rejection of claims 1–8, 10, 11, 13, and 14 under 35 U.S.C. §103(a) as being unpatentable over Giger, Perren, and Hayashi.

The claimed subject matter involves a multi-station magnetic resonance imaging apparatus (MRI). The Examiner’s position appears to be that this is shown in para. 6 of Perren. *See* Ans. 3: “Giger does not explicitly teach that the object to be examined into a plurality of stations of respective station positions. However Perren in paragraph 6 teaches”

We have reviewed para. 6 of Perren. It describes “a method for the determination of reduction parameters for the subsequent adjustment of a reduction device to reduce the fragments of a fractured bone” It is not apparent to us what in para. 6 of Perren equates to or would lead one of ordinary skill to a multi-station MRI as is involved in the claimed subject matter. We agree with the Appellants that:

Perren has nothing to do with examining an object at a plurality of stations. Instead, Perren generates a mirror image of a first bone from a plane of symmetry which is determined from positions of a first set of points on a first bone obtained by comparing a contour of the first

bone on a first side of a patient's body with respect to a corresponding second bone on an opposite side of the patient's body.

Reply Br. 10.

Because the evidence relied upon does not disclose or lead one of ordinary skill in the art to a multi-station MRI to which all the claims are limited to, a prima facie case of obviousness has not been made out in the first instance by a preponderance of the evidence. Accordingly, the rejection is not sustained.

The rejection of claims 9 and 15 under 35 U.S.C. §103(a) as being unpatentable over Giger, Perren, Hayashi, and Schmitz.

This rejection of dependent claims is also not sustained for the same reason discussed above.

NEW GROUND OF REJECTION

Claims 1–11 and 13–15 are rejected under 35 U.S.C. § 101 as being directed to judicially-excepted subject matter.

Alice Corp. Pty. Ltd. v. CLS Bank International, 134 S. Ct. 2347 (2014) identifies a two-step framework for determining whether claimed subject matter is judicially-excepted from patent eligibility under § 101.

According to *Alice* step one, “[w]e must first determine whether the claims at issue are directed to a patent-ineligible concept,” such as an abstract idea. *Alice*, 134 S. Ct. at 2355.

Taking claim 1 as representative of the claims on appeal, the claimed subject matter is directed to classification. Classification is a building block of human ingenuity. As such the classification concept is an abstract idea.

Step two is “a search for an ‘inventive concept’—*i.e.*, an element or combination of elements that is ‘sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.’” *Id.* (alteration in original) (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1294 (2012)).

We see nothing in the subject matter claimed that transforms the abstract idea of classification into an inventive concept.

The classification as claimed is more particularly *image* classification. But applying the concept of classification to images in particular does not make the classification concept any less abstract. At best it provides a practical application for the classification concept in the image domain. But a recitation of practical application for an abstract idea is insufficient to transform an abstract idea into an inventive concept. *Cf. CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1371 (Fed. Cir. 2011) (“The Court [Parker v. Flook, 437 U.S. 584 (1978)] rejected the notion that the recitation of a practical application for the calculation could alone make the invention patentable.”).

Claim 1 describes a multi-station MRI, comprising an image acquisition unit, a display control unit, a classification processing unit. Each unit is “configured” to perform certain functions. Notwithstanding, that no “unit” claimed is structurally limited, e.g., there is no requirement that the multi-station MRI as a whole or any “unit” of it be computer-implemented, the multi-station MRI as claimed is generic. Claim 1 apparatus is a typical multi-station MRI. Any multi-station MRI available at the time the application was filed would have satisfied this. The Specification supports

that view. *See* Spec. para 2 (“Among magnetic resonance imaging apparatuses (hereinafter referred to as MRI apparatuses), there is a kind comprising the multi-station imaging method which performs imaging ...”). *See* Spec., para. 12. In effect, the classification abstract idea to which claim 1 is directed to is applied to the images a generic multi-station MRI necessarily produces. But merely reciting a generic multi-station MRI so as to apply the classification abstract idea to its images is insufficient to transform the classification abstract idea into an inventive concept. *Cf. Alice*, 134 S. Ct. at 2358. “[T]he mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention. Stating an abstract idea “while adding the words ‘apply it’” is not enough for patent eligibility.”

Arguably, the claim 1 apparatus differs from the typical generic multi-station MRI by including a classification processing unit; that is, “a classification processing unit configured to classify the plurality of images by image types and station position, based on imaging condition including imaging parameters.” But the “unit” as claimed is described in general functional terms, i.e., to classify images a generic multi-station MRI necessarily produces, that does no more than place the classification abstract idea in a particular context. Further classifying said images by “image types and station position, based on imaging condition including imaging parameters” does little to patentably transform the classification abstract idea. The “unit” as claimed performs a classification that, apart from the particular context within which it is placed, could be performed mentally or manually. Nothing about the unit as claimed, or the apparatus claimed as a

whole, suggests claim 1 provides a solution that is necessarily rooted in multi-station MRIs in order to overcome a problem specifically arising in the realm of multi-station MRIs. *Cf. DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1257 (Fed. Cir. 2014) (“[a] claimed solution [that] is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks.”) The multi-station MRI as claimed does not operate in an unconventional manner to achieve an improvement in its functionality. *See Amdocs (Israel) Limited v. Openet Telecom, Inc*, No. 2015-1180, 2016 WL 6440387, *10 (Fed. Cir. Nov. 1, 2016). It merely recites the performance of some long-known practice of classifying images with the requirement to perform said classification to images from a typical generic multi-station MRI. Classifying images is not transformed into an inventive concept by simply applying it to the images a typical multi-station MRI necessarily produces.

For the foregoing reasons, we find that claim 1 covers claimed subject matter that is judicially-excepted from patent eligibility under § 101. The other independent claim — method claim 11 parallels claim 1 — similarly covers claimed subject matter that is judicially-excepted from patent eligibility under § 101. The dependent claims describe various classification schemes which do little to patentably transform the abstract idea.

Therefore, we enter a new ground of rejection of claims 1–11 and 13–15 under 35 U.S.C. § 101.

For the foregoing reasons, the rejections are reversed but the claims are newly rejected under § 101.

CONCLUSIONS

The rejection of claims 1–8, 10, 11, 13, and 14 under 35 U.S.C. §103(a) as being unpatentable over Giger, Perren, and Hayashi is reversed.

The rejection of claims 9 and 15 under 35 U.S.C. §103(a) as being unpatentable over Giger, Perren, Hayashi, and Schmitz is reversed.

Claims 1–11 and 13–15 are newly rejected under 35 U.S.C. § 101 as being directed to judicially-excepted subject matter.

DECISION

The decision of the Examiner to reject claims 1–11 and 13–15 is reversed.

Claims 1–11 and 13–15 are newly rejected.

NEW GROUND

This decision contains a new ground of rejection pursuant to 37 C.F.R. § 41.50(b). 37 C.F.R. § 41.50(b) provides “[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review.” 37 C.F.R. § 41.50(b) also provides that the Appellants, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of the appeal as to the rejected claims:

- (1) *Reopen prosecution.* Submit an appropriate amendment of the claims so rejected or new evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the proceeding will be remanded to the examiner. . . .

Appeal 2015-002702
Application 12/598,168

(2) *Request rehearing.* Request that the proceeding be reheard under § 41.52 by the Board upon the same record. . . .

REVERSED; 37 C.F.R. § 41.50(b)