



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.
12/704,684	02/12/2010	Timothy Hughes	P09,0382 (26965-4428)	6686
26574	7590	11/02/2016	EXAMINER	
SCHIFF HARDIN, LLP PATENT DEPARTMENT 233 S. Wacker Drive-Suite 6600 CHICAGO, IL 60606-6473			WILLIAMS, TERESA S	
			ART UNIT	PAPER NUMBER
			3686	
			NOTIFICATION DATE	DELIVERY MODE
			11/02/2016	ELECTRONIC

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.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patents-CH@schiffhardin.com
jbombien@schiffhardin.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte TIMOTHY HUGHES and
TALLAL CHARLES MAMISCH

Appeal 2014-003292
Application 12/704,684¹
Technology Center 3600

Before MURRIEL E. CRAWFORD, BART A. GERSTENBLITH, and
CYNTHIA L. MURPHY, *Administrative Patent Judges*.

CRAWFORD, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants seek our review under 35 U.S.C. § 134 of the Examiner's final decision rejecting claims 1–11. We have jurisdiction over the appeal under 35 U.S.C. § 6(b).

We REVERSE.

¹ Appellants identify Siemens Aktiengesellschaft as the real party in interest (Appeal Br. 1).

Claim 1 is illustrative:

1. A method for generating a tomographic image, comprising the steps of:

placing the patient in a tomographic data acquisition unit and operating the tomographic data acquisition unit to acquire tomographic data representing a first tomographic image of a layer, containing cartilaginous tissue of the patient at a first point in time after subjecting said cartilaginous tissue of the patient to a physical strain at which said cartilaginous tissue still exhibits an effect of said physical strain, said first tomographic image being comprised of pixels;

determining a region of said cartilaginous tissue in said first tomographic image;

operating said tomographic data acquisition unit to acquire tomographic data representing a second tomographic image of the layer of the patient at a second point in time following said first point in time, at which said effect of said physical strain is no longer exhibited by said cartilaginous tissue, said second tomographic image being comprised of pixels;

determining said region of said cartilaginous tissue in said second tomographic image;

generating a diagnostic tomographic image, comprised of pixels, by assigning, to each pixel in said diagnostic tomographic image, a difference value between a corresponding pixel of said first tomographic image and a corresponding pixel of said second tomographic image; and

in a processor, automatically determining a validation number by adding respective values of all pixels in said region of cartilaginous tissue in said diagnostic tomographic image, and emitting said validation number from said processor as an indicator of a degree of pathology of said cartilaginous tissue.

Appellants appeal the following rejections:

1. Claims 1, 2, 8, 10, and 11 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Rousso (US 2009/0304582 A1; pub. Dec. 10, 2009) in view of Baumann (US 7,817,777 B2; iss. Oct. 19, 2010).
2. Claims 5–7 and 9 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Rousso, Baumann, and Pelletier (US 2008/0139922 A1; pub. June 12, 2008).
3. Claim 3 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Rousso, Baumann, and Celler (US 7,103,204 B1; iss. Sept. 5, 2006).
4. Claim 4 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Rousso, Baumann, and Hempel (US 2008/0317213 A1; pub. Dec. 25, 2008).

ISSUE

Did the Examiner establish that it would have been obvious to modify the method of Rousso so as to acquire a first tomographic image of a layer containing cartilaginous tissue after subjecting the tissue to physical strain and a second tomographic image of a layer containing cartilaginous tissue with no physical strain and using those images as an indicator of a degree of pathology of said cartilaginous tissue?

ANALYSIS

Appellants argue that there is no teaching in Rousso whatsoever to obtain a radionuclide image, or any other type of image, from cartilaginous tissue of a patient at two separate times, one of which is a time at which the

cartilaginous tissue exhibits the effect of a physical strain, and another time being when the cartilaginous tissue no longer exhibits that effect (Appeal Br. 9).

The Examiner does not argue that Rousso teaches this subject matter. Rather, the Examiner argues that Rousso's method treats patients, while taking radio imaging for diagnosing. The rationale for using the Rousso reference is that it teaches taking tomographic images, the image collection time ranges, cartilaginous tissue, pixel-level detection, and validating the pixel level (Fin. Act. 4–5). The Examiner also states that Rousso's protocol gives detail of the significance of acquiring a series of medical images kinetically to pin point tissue pain while diagnosing patients, as mentioned in paragraphs 582–584, 2272–2279, and 2376 (Ans. 3).

While it may be true that Rousso discloses a method in which a series of images are taken over time, the Examiner has not established that Rousso discloses that a first image is taken while cartilage is under strain and a second image is taken while cartilage is not under strain and that those images are used to generate a diagnostic image that is used to indicate a degree of pathology, as required by claim 1. Therefore, we will not sustain the rejection of claim 1 and claims 2–7 dependent therefrom.

We will also not sustain the rejection as it is directed to claim 11 because the recitations of claim 11 are substantially similar to claim 1.

We will not sustain the rejection as it is directed to claim 8, and claims 9 and 10 dependent therefrom, because Rousso does not disclose a processor configured to generate a diagnostic image from a first image, which is taken while cartilage is under strain, and a second image, which is

Appeal 2014-003292
Application 12/704,684

taken while cartilage is not under strain, and using those images to generate a diagnostic image to indicate a degree of pathology.

DECISION

We reverse the Examiner's § 103 rejections.

REVERSED