



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.
11/928,128	10/30/2007	Karl Ola THORN	PS07 0816US1	6930
58342	7590	01/30/2013	EXAMINER	
WARREN A. SKLAR (SOER)			DIEP, TRUNG T	
RENNER, OTTO, BOISSELLE & SKLAR, LLP			ART UNIT	
1621 EUCLID AVENUE			PAPER NUMBER	
19TH FLOOR			2664	
CLEVELAND, OH 44115			MAIL DATE	
			DELIVERY MODE	
			01/30/2013	
			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 KARL OLA THORN

Appeal 2011-013465
Application 11/928,128
Technology Center 2600

Before THU A. DANG, JAMES R. HUGHES,
and GREGORY J. GONSALVES, *Administrative Patent Judges*.

DANG, *Administrative Patent Judge*.

DECISION ON APPEAL

I. STATEMENT OF THE CASE

Appellant appeals under 35 U.S.C. § 134(a) from a Final Rejection of claims 1-3, 5-15, and 17-20 (App. Br. 2). Claims 4 and 16 have been canceled (*id.*). We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

A. INVENTION

Appellant's invention is directed to a system and method of rendering a digital image on a display and using the motion of the user to select discrete portions of the image for manipulation, such as red eye removal and application of text tags; wherein, the system captures the motion of the user as an indication of which object within the image shall be manipulated (Abstract; Spec. 3:20-30 and 9:6-13).

B. ILLUSTRATIVE CLAIM

Claim 1 is exemplary:

1. A system for enabling a user viewing a digital image rendered on a display screen to select a discrete portion of a digital image for manipulation, the system comprising:

the display screen:

an image control system driving rendering of the digital image on the display screen;

an image analysis module that determines a plurality of discrete portions of the digital image which may be subject to manipulation, each of the discrete portions of the digital image comprising an image depicted within the digital image meeting selection criteria, wherein the discrete

portions of the digital image are determined by identifying, within the digital image, each image meeting the selection criteria;

a user monitor digital camera having a field of view directed towards the user; and

a indicator module receiving a sequence of images from the user monitor digital camera and driving repositioning an indicator between the plurality of discrete portions of the digital image in accordance with motion detected from the sequence of images.

C. REJECTIONS

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Suda	U.S. 6,388,707 B1	May 14, 2002
Li	U.S. 7,453,506 B2	Nov. 18, 2008
Sugimoto	U.S. 7,646,415 B2	Jan. 12, 2010
Wilf	WO 00/16243	March 23, 2000

Claims 1-3, 5, 6, 13-15, and 17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Suda in view of Li.

Claims 7 and 9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Suda in view of Li and Sugimoto.

Claims 8, 10-12, and 18-20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Suda in view of Li and Wilf.

II. ISSUE

The dispositive issue before us is whether the Examiner has erred in determining that the combination of Suda and Li teaches or would have suggested “an image analysis module that determines *a plurality of discrete portions of the digital image which may be subject to manipulation*” (claim 1, emphasis added).

III. FINDINGS OF FACT

The following Findings of Fact (FF) are shown by a preponderance of the evidence.

Suda

1. Suda discloses an image pickup apparatus that detects the line of sight of a photographer on a finder screen and moves a range finding and photometry region to this detected position; wherein, automatic focusing (AF) and automatic exposure (AE) function operations are performed in accordance with the results of the range finding and photometry (Fig. 1A; col. 6, ll. 34-50). Thereby, regardless of the position of the main subject within the frame the image pickup apparatus uses the line of sight of the photographer to select the main subject of the frame (image) (col. 1, ll. 55-64 and col. 2, ll. 21-45).

2. The image pickup apparatus includes a light sensor and a line-of-sight detection circuit for detecting the position of a line of sight of the photographer; wherein, an infrared ray emitting diode (IRED) 2 emits infrared rays to irradiate the eyeball EYE of the photographer, a light receiving sensor 4 receives the infrared rays emitted by the IRED 2 and

reflected by the eyeball EYE, and a line-of-sight detection circuit 6 analyzes the position of the line of sight of the eye of the photographer (*id.*).

3. A microcomputer 29 controls a frame generating circuit 27 in order to change the positions of the focal point detection and the photometry regions based on the information about the detected line of sight or point of interest (col. 8, ll. 55-58).

4. When the point of interest 405 is detected using the photographer's line of sight, the microcomputer 29 sets the focal point detection and photometry regions 402 to a predetermined size relative to the coordinates of the detected point of interest; wherein, the point of interest frames the image of the selected subject OB (Figs. 4a-d; col. 14, ll.55-59).

Li

5. Li discloses a digital camera having a face portion detecting mode that detects the face portions of four women W_1 - W_4 and frames them f_1 - f_4 on a display for selection by the photographer; wherein, the selected frame is enlarged and solely displayed on the screen (Figs. 4A-C; col. 7, ll. 46-64).

IV. ANALYSIS

Claims 1-3, 5-6, 13-15, and 17

Appellant contends that “Suda does not disclose or suggest the claimed image analysis module ... that determines discrete image portions each meeting the selection criteria” (App. Br. 6). Appellant argues that “one of ordinary skill in the art would not modify Suda, which emphasizes *focusing on a single facial image*, based on Li, which permits previewing *multiple facial images*” (*id.*) and that “Suda actually *teaches away* from the

claimed invention in that a single focal point must be determined for multiple subjects in the field of view” (App. Br. 7); yet, “the focusing operation [of Suda] actually is applied as to the *entire image* based on such focal point” (App. Br. 9). Appellant contends further that since “the reasonable interpretation of the claimed manipulation of a digital image is a post-capture process,” Suda’s “pre-capture focusing ... is not reasonably interpreted as an image manipulation” (App. Br. 9).

However, the Examiner notes that he “relied upon Suda reference to provide an image pickup apparatus for capturing a single subject in the image scene wherein the image scene may include only [the] subject and/or may include more objects” and “upon Li reference in teaching the multiple faces portion detecting unit which the unit is capable of detecting multiple faces” (Ans. 15). The Examiner notes further that “the claim language does not specifically define what manipulation would actually be; as such adjusting focal point of the selected point of interest in the image can be broadly interpreted as image manipulation” (Ans. 16-17) and that “the claimed invention claims a plurality of discrete portions of the digital image which ‘may be subject to manipulation,’” “which ... could not be interpreted as each of the ‘discrete portion’ is subject to manipulation” (Ans. 17, emphasis added).

We give the claim its broadest reasonable interpretation consistent with the Specification. *See In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997). Claim 1 does not place any limitation on what “manipulation” means, includes, or represents. We find the language, “which may be subject to manipulation,” merely represents a possible intended use of the plurality of discrete portions. Thus, we give “an image analysis module that

determines a plurality of discrete portions of the digital image which may be subject to manipulation” its broadest reasonable interpretation as the image analysis module determines a plurality of discrete portions of the digital image and is *capable of* manipulating data related to the plurality of discrete portions of the digital image, as consistent with the Specification and claim 1.

Suda discloses an image pickup apparatus that detects the position of the line of sight of the photographer and moves range finding and photometry regions corresponding to the detected position or point of interest (FF 1). In particular, the line-of-sight detection circuit detects the position of a line of sight of the photographer (FF 2). The microcomputer controls a frame generating circuit in order to change the positions of the focal point detection and photometry regions based on the information about the detected line of sight (FF 3). More particularly, when a point of interest which frames a subject within the image is detected using the photographer’s line of sight, the microcomputer sets the focal point detection and photometry regions to have a predetermined size relative to the coordinates of the detected point of interest (FF 4).

We find that the line-of-sight detection circuit and the microcomputer determine at least one discrete portion defined by the focal point detection and photometry regions having a predetermined size relative to the coordinates of the detected point of interest. That is, we find Suda’s line-of-sight detection circuit and the microcomputer comprises “an image analysis module that determines ... [a] discrete portion[] of the digital image which may be subject to manipulation” (claim 1).

In addition, Li discloses a digital camera having a face portion detecting mode that detects the face portions of four women and frames the face portions on a display; wherein, the selected frame is enlarged and solely displayed (FF 5). We find that the camera having a face portion detecting mode comprises a module that determines the plurality of objects within an image, such as the faces of the four women. In particular, we find that Li's camera also comprises "an image analysis module that determines a plurality of discrete portions of the digital image which may be subject to manipulation" (claim 1).

Though Appellant also contends that "Suda actually **teaches away** from the claimed invention" (App. Br. 7), our reviewing court has held that "[a] reference may be said to teach away when a person of ordinary skill, upon [examining] the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant." *Para-Ordnance Mfg., Inc. v. SGS Importers Int'l., Inc.*, 73 F.3d 1085, 1090 (Fed. Cir. 1995) (quoting *In re Gurley*, 27 F.3d 551, 553 (Fed. Cir. 1994)).

We find Appellant's identified support does not rise to *a direction divergent* from the claimed invention since the combined teachings of Suda and Li discloses detection of subjects or points of interests (discrete portions) within a digital image. Here, the Appellant appears to have viewed the reference from a different perspective than the Examiner. The issue here is not whether Suda determines a plurality of discrete portions of the digital image but rather whether a person of ordinary skill, upon reading Suda, would be discouraged from using the face portion detection method as taught by Li.

We also agree with the Examiner's explicit motivation that combining the references would be obvious since one would desire "to obtain a plurality of specified portions of the subjects in the captured image ... [to] greatly enhance the camera capability" (Ans. 6). The Supreme Court has stated that "[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results." *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 416 (2007).

Thus, we find no error in the Examiner's finding that the combination of Suda's system (including line-of-sight detection circuit and microprocessor) that determines points of interests in the image with the digital camera, as disclosed in Li, that detects objects such as faces within an image, produces an apparatus having a module that determines a plurality of discrete portions of the digital image which would be obvious (Ans. 6; FF).

Accordingly, we find that Appellant has not shown that the Examiner erred in rejecting claim 1 under 35 U.S.C. § 103(a) over Suda in view of Li. Further, independent claims 5, 13, and 17 having similar claim language and claims 2, 3, 6, 14, and 15 (depending from claims 1, 5, and 13) which have not been argued separately, fall with claim 1.

Claims 7 and 9

Appellant argues that claims 7 and 9 are patentable over the cited prior art for the same reasons asserted with respect to claim 1 and that "Sugimoto does not disclose or suggest the above deficiencies of Suda and Li" (App. Br. 10).

As noted *supra*, however, we find that Suda and Li *at least suggest* all the features of independent claims 1 and 5. We therefore affirm the Examiner's rejection of claims 7 and 9 under 35 U.S.C. § 103 over Suda in

Appeal 2011-013465
Application 11/928,128

view of Li and Sugimoto for the same reasons expressed with respect to parent claim 5, *supra*.

Claims 8, 10-12, and 18-20

Appellant argues that claims 8, 10-12, and 18-20 are patentable over the cited prior art for the same reasons asserted with respect to claim 1 and that “Wilf does not disclose or suggest the above deficiencies of Suda and Li” (*id.*).

As noted *supra*, however, we find that Suda and Li *at least suggest* all the features of independent claims 1, 5, and 13. We therefore affirm the Examiner’s rejection of claims 8, 10-12, and 18-20 under 35 U.S.C. § 103 over Suda in view of Li and Wilf for the same reasons expressed with respect to parent claims 1, 5, and 13, *supra*.

V. CONCLUSION AND DECISION

The Examiner’s rejection of claims 1-3, 5-15, and 17-20 under 35 U.S.C. § 103(a) 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

tkl