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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/980,420	10/31/2007	Makoto Shiomi	12480-000028/US/DVA	6802

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EXAMINER	
DINH, DUC Q	

ART UNIT	PAPER NUMBER
2629	

MAIL DATE	DELIVERY MODE
01/27/2011	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.

Office Action Summary	Application No.	Applicant(s)	
	11/980,420	SHIOMI ET AL.	
	Examiner	Art Unit	
	DUC Q. DINH	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 December 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) *1,2,10,11,20,23,27,28,31,32,34-36 and 39-59* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *2,11,20,24,28,32 and 36* is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *1,10,19,23,27,31,35 and 39-59* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *10/31/07,5/22/08,9/9/08,12/16/09,2/24/10*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Applicant's election without traverse of Group II, claims 2, 11, 20, 24, 28, 32 and 36 in the response filed on December 22/, 2010 is acknowledged, Accordingly, Claims 1, 10, 19, 23, 27, 31, 35 and 39-59 are withdrawn from consideration and claims 2, 11, 20, 24, 28, 32 and 36 are considered and being examined as follow.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 32 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title. 2. Claim 6 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. A computer-readable information storage medium...The broadest reasonable interpretation of a claim drawn to a computer readable medium 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.

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.

Claims 24 and 28 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

"a program adapted to cause a computer to execute..." and "a computer signal...." The Federal Circuit held that the mere manipulations of abstract Ideas are not patentable. Schrader, 22 F.3d at 292-93, 30 USPQ2d at 1457-58. If a claimed process manipulates only numbers, abstract concepts or ideas, or signals representing any of the foregoing, the claim is not being applied to appropriate subject matter. Schrader, 22 F.3d at 294-95, 30 USPQ2d at 1458-59. The Federal Circuit also recognizes that the fact that a nonstatutory method is carried out on a programmed computer does not make the process • claim statutory. Grams, 888 F.2d at 841, 12 USPQ2d at 1829(claim 16 ruled nonstatutory even though it was a computer- implemented process).

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Regarding claim 24, the phrase "a program adapted to cause a computer to execute " renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 2, 11, 20, 24, 28, 32 and 36 are rejected under 35 U.S.C. 102(e) as being anticipated by Naito et al. (U.S Patent No 6,704,008), hereinafter Naito.

In reference to **claims 2** and 11 and 24, Naito discloses a display in Fig. 1, comprising:

a first correction section (120), adapted to correct a grayscale level of at least one pixel (P2; Fig. 2) to facilitate a transition from a current grayscale level to a desired grayscale level; (Fig. 1, col. 4, lines 13-25) and

a second correction section (130), adapted to reduce unacceptable peak components (reduce of red components of the corrected pixel P2) in a spatial domain of the corrected at least one pixel (col. 4,lines 53-57); the second correction is adapted to reduce an unacceptable peak in spatial domain form the corrected at least one pixel (DSg is a signal of unacceptable between the grey scale of the R component between pixel P2 and P1; see Fig. 2 and associated text in col. 4-6).

In reference to **claim 20**, Naito discloses that the display is a liquid crystal display (150) and the at least one pixel includes at least one liquid crystal element of a liquid crystal display of a normally black, vertical align mode (in Fig. 1).

In reference to **claim 36**, Naito discloses a grayscale level is increased from a desired grayscale level to facilitate a transition from a current grayscale (R=40 in Fig. 2) level to a desired grayscale level (increase +10 for R of P2).

In reference to claims 28 and 32, Naito discloses a circuit diagram comprising computer readable medium and program to perform the image processing as claimed.

6. Claims 2, 11, 20, 24, 28, and 32 are rejected under 35 U.S.C. 102(e) as being anticipated by Kawanabe et al. (U.S Patent No. 7,158,107), hereinafter Kawanabe.

In reference to claims **claims 2** and 11 24 and 36Kawanabe discloses a display in Figs 1 and 2 comprising:

a first correction section (103), adapted to correct a grayscale level of at least one pixel (at least one pixel of the current frame N-th frame; see col. 2, lines 7-12) to facilitate a transition from a current grayscale level to a desired grayscale level; (see Figs 3-4 and also Figs. 18-22) and

a second correction section (104), adapted to reduce unacceptable peak (grayscale differences) in a spatial domain of the corrected at least one pixel (Figs 3-4 and associated text) and Kawanabe discloses second correction is adapted to reduce an unacceptable peak in spatial domain form the corrected at least one pixel (col. 2, lines 7-12).

In reference to claim 20, Kawanabe discloses that the display is a liquid crystal display (150) and the at least one pixel includes at least one liquid crystal element of a liquid crystal display of a normally black, vertical align mode (col. 6, lines 20-35).

In reference to claims 28 and 32, Kawanabe discloses a circuit diagram comprising computer readable medium and program to perform the image processing as claimed (see Figs 1-2, 18-22).

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DUC Q. DINH whose telephone number is (571)272-7686. The examiner can normally be reached on Mon-Fri from 8:00.AM-4:00.PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, AMR A. AWAD can be reached on (571)272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Duc Q Dinh/
Primary Examiner, Art Unit 2629