

Exhibit 1002

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**UTILITY
PATENT APPLICATION
TRANSMITTAL**

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.	PIT-114US
First Inventor	Shen
Title	Document Imaging System Having a Ca
Express Mail Label No.	

APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

ADDRESS TO: Commissioner for Patents
P.O. Box 1450
Alexandria VA 22313-1450

1. **Fee Transmittal Form** (e.g., PTO/SB/17)
2. **Applicant claims small entity status.**
See 37 CFR 1.27.
3. **Specification** [Total Pages 16]
Both the claims and abstract must start on a new page
(For information on the preferred arrangement, see MPEP 608.01(a))
4. **Drawing(s)** (35 U.S.C. 113) [Total Sheets 9]
5. **Oath or Declaration** [Total Sheets 2]
 - a. Newly executed (original or copy)
 - b. A copy from a prior application (37 CFR 1.63(d))
(for continuation/divisional with Box 18 completed)
 - i. **DELETION OF INVENTOR(S)**
Signed statement attached deleting inventor(s)
name in the prior application, see 37 CFR
1.63(d)(2) and 1.33(b).
6. **Application Data Sheet.** See 37 CFR 1.76
7. **CD-ROM or CD-R** in duplicate, large table or
Computer Program (Appendix)
 Landscape Table on CD
8. **Nucleotide and/or Amino Acid Sequence Submission**
(if applicable, items a. - c. are required)
 - a. Computer Readable Form (CRF)
 - b. Specification Sequence Listing on:
 - i. CD-ROM or CD-R (2 copies); or
 - ii. Paper
 - c. Statements verifying identity of above copies

ACCOMPANYING APPLICATION PARTS

9. **Assignment Papers** (cover sheet & document(s))
Name of Assignee Pathway Innovations & Technologies,
Inc.
10. **37 CFR 3.73(b) Statement** **Power of Attorney**
(when there is an assignee)
11. **English Translation Document** (if applicable)
12. **Information Disclosure Statement** (PTO/SB/08 or PTO-1449)
 Copies of citations attached
13. **Preliminary Amendment**
14. **Return Receipt Postcard** (MPEP 503)
(Should be specifically itemized)
15. **Certified Copy of Priority Document(s)**
(if foreign priority is claimed)
16. **Nonpublication Request** under 35 U.S.C. 122(b)(2)(B)(i).
Applicant must attach form PTO/SB/35 or equivalent.
17. Other: _____

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76:

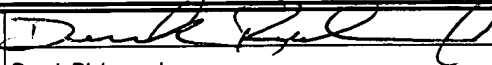
Continuation Divisional Continuation-in-part (CIP) of prior application No.: _____

Prior application information: Examiner _____ Art Unit: _____

19. CORRESPONDENCE ADDRESS

The address associated with Customer Number: 23122 OR Correspondence address below

Name				
Address				
City	State	Zip Code		
Country	Telephone	Email		

Signature		Date	April 4, 2012
Name (Print/Type)	Derek Richmond	Registration No. (Attorney/Agent)	45,771

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

15915 U.S. PTO
040412


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Application Data Sheet 37 CFR 1.76		Attorney Docket Number	PIT-114US
		Application Number	
Title of Invention	DOCUMENT IMAGING SYSTEM HAVING A CAMERA-SCANNER APPARATUS AND PERSONAL COMPUTER BASED PROCESSING SOFTWARE		
<p>The application data sheet is part of the provisional or nonprovisional application for which it is being submitted. The following form contains the bibliographic data arranged in a format specified by the United States Patent and Trademark Office as outlined in 37 CFR 1.76. This document may be completed electronically and submitted to the Office in electronic format using the Electronic Filing System (EFS) or the document may be printed and included in a paper filed application.</p>			

Secrecy Order 37 CFR 5.2

<input type="checkbox"/>	Portions or all of the application associated with this Application Data Sheet may fall under a Secrecy Order pursuant to 37 CFR 5.2 (Paper filers only. Applications that fall under Secrecy Order may not be filed electronically.)
--------------------------	---

Applicant Information:

Applicant 1					
Applicant Authority		<input checked="" type="radio"/> Inventor		<input type="radio"/> Legal Representative under 35 U.S.C. 117	
				<input type="radio"/> Party of Interest under 35 U.S.C. 118	
Prefix	Given Name	Middle Name	Family Name	Suffix	
	Ji		Shen		
Residence Information (Select One) <input checked="" type="radio"/> US Residency <input type="radio"/> Non US Residency <input type="radio"/> Active US Military Service					
City	San Diego	State/Province	CA	Country of Residence	US
Citizenship under 37 CFR 1.41(b)		US			
Mailing Address of Applicant:					
Address 1	5470 Harvest Run Drive				
Address 2					
City	San Diego	State/Province	CA		
Postal Code	92130	Country	US		
Applicant 2					
Applicant Authority		<input checked="" type="radio"/> Inventor		<input type="radio"/> Legal Representative under 35 U.S.C. 117	
				<input type="radio"/> Party of Interest under 35 U.S.C. 118	
Prefix	Given Name	Middle Name	Family Name	Suffix	
	Dongbing		Zhang		
Residence Information (Select One) <input type="radio"/> US Residency <input checked="" type="radio"/> Non US Residency <input type="radio"/> Active US Military Service					
City	Shanghai	Country Of Residence	CN		
Citizenship under 37 CFR 1.41(b)		CN			
Mailing Address of Applicant:					
Address 1	1060 Jinshajiang Road, Room 1504, Putuo District				
Address 2					
City	Shanghai	State/Province			
Postal Code		Country	CN		
All Inventors Must Be Listed - Additional Inventor Information blocks may be generated within this form by selecting the Add button. 					

Correspondence Information:

Enter either Customer Number or complete the Correspondence Information section below. For further information see 37 CFR 1.33(a).
<input type="checkbox"/> An Address is being provided for the correspondence information of this application.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	PIT-114US
		Application Number	
Title of Invention	DOCUMENT IMAGING SYSTEM HAVING A CAMERA-SCANNER APPARATUS AND PERSONAL COMPUTER BASED PROCESSING SOFTWARE		
Customer Number	23122		
Email Address		<input type="button" value="Add Email"/>	<input type="button" value="Remove Email"/>

Application Information:

Title of the Invention	DOCUMENT IMAGING SYSTEM HAVING A CAMERA-SCANNER APPARATUS AND PERSONAL COMPUTER BASED PROCESSING SOFTWARE		
Attorney Docket Number	PIT-114US	Small Entity Status Claimed	<input checked="" type="checkbox"/>
Application Type	Nonprovisional		
Subject Matter	Utility		
Suggested Class (if any)		Sub Class (if any)	
Suggested Technology Center (if any)			
Total Number of Drawing Sheets (if any)	9	Suggested Figure for Publication (if any)	

Publication Information:

<input type="checkbox"/>	Request Early Publication (Fee required at time of Request 37 CFR 1.219)
<input type="checkbox"/>	Request Not to Publish. I hereby request that the attached application not be published under 35 U.S.C. 122(b) and certify that the invention disclosed in the attached application has not and will not be the subject of an application filed in another country, or under a multilateral international agreement, that requires publication at eighteen months after filing.

Representative Information:

Representative information should be provided for all practitioners having a power of attorney in the application. Providing this information in the Application Data Sheet does not constitute a power of attorney in the application (see 37 CFR 1.32). Enter either Customer Number or complete the Representative Name section below. If both sections are completed the Customer Number will be used for the Representative Information during processing.			
Please Select One:	<input checked="" type="radio"/> Customer Number	<input type="radio"/> US Patent Practitioner	<input type="radio"/> Limited Recognition (37 CFR 11.9)
Customer Number	23122		

Domestic Benefit/National Stage Information:

This section allows for the applicant to either claim benefit under 35 U.S.C. 119(e), 120, 121, or 365(c) or indicate National Stage entry from a PCT application. Providing this information in the application data sheet constitutes the specific reference required by 35 U.S.C. 119(e) or 120, and 37 CFR 1.78(a)(2) or CFR 1.78(a)(4), and need not otherwise be made part of the specification.			
Prior Application Status	Expired	<input type="button" value="Remove"/>	
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)
PCT/US2011/022549	non provisional of	61/298912	2010-01-28
Prior Application Status	Pending	<input type="button" value="Remove"/>	
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)
	non provisional of	PCT/US2011/022549	2011-01-26

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	PIT-114US
	Application Number	
Title of Invention	DOCUMENT IMAGING SYSTEM HAVING A CAMERA-SCANNER APPARATUS AND PERSONAL COMPUTER BASED PROCESSING SOFTWARE	

Additional Domestic Benefit/National Stage Data may be generated within this form by selecting the **Add** button.

Foreign Priority Information:

This section allows for the applicant to claim benefit of foreign priority and to identify any prior foreign application for which priority is not claimed. Providing this information in the application data sheet constitutes the claim for priority as required by 35 U.S.C. 119(b) and 37 CFR 1.55(a).

Remove			
Application Number	Country ¹	Parent Filing Date (YYYY-MM-DD)	Priority Claimed
			<input checked="" type="radio"/> Yes <input type="radio"/> No
Additional Foreign Priority Data may be generated within this form by selecting the Add button.			

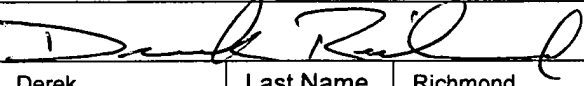
Assignee Information:

Providing this information in the application data sheet does not substitute for compliance with any requirement of part 3 of Title 37 of the CFR to have an assignment recorded in the Office.

Assignee 1			
If the Assignee is an Organization check here. <input checked="" type="checkbox"/>			
Organization Name	Pathway Innovations and Technologies, Inc.		
Mailing Address Information:			
Address 1	9833 Pacific Heights Blvd., Suite D		
Address 2			
City	San Diego	State/Province	CA
Country	US	Postal Code	92121
Phone Number		Fax Number	
Email Address			
Additional Assignee Data may be generated within this form by selecting the Add button.			

Signature:

A signature of the applicant or representative is required in accordance with 37 CFR 1.33 and 10.18. Please see 37 CFR 1.4(d) for the form of the signature.

Signature			Date (YYYY-MM-DD)	2012-04-04	
First Name	Derek	Last Name	Richmond	Registration Number	45771

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	PIT-114US
	Application Number	
Title of Invention	DOCUMENT IMAGING SYSTEM HAVING A CAMERA-SCANNER APPARATUS AND PERSONAL COMPUTER BASED PROCESSING SOFTWARE	

This collection of information is required by 37 CFR 1.76. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 23 minutes to complete, including gathering, preparing, and submitting the completed application data sheet form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

PIT-114US

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appln. No: To be assigned
Applicant: Ji Shen et al.
Filed: Concurrently herewith
Title: DOCUMENT IMAGING SYSTEM HAVING A CAMERA-SCANNER APPARATUS
AND PERSONAL COMPUTER BASED PROCESSING SOFTWARE
TC/A.U.: To be assigned
Examiner: To be assigned

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 C.F.R. §§ 1.97 and 1.98 and to the duty of disclosure set forth in 37 C.F.R. § 1.56, the Examiner in charge of the above-identified application is requested to consider and make of record the references listed on the PTO/SB/08 form submitted herewith. A copy of each reference listed on the PTO/SB/08 form, other than U.S. patents, is enclosed

Although the information submitted herewith may be "material" to the Examiner's consideration of the subject application, this submission is not intended to constitute an admission that such information is "prior art" as to the claimed invention.

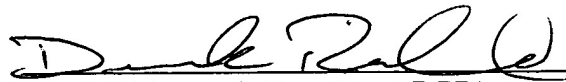
In accordance with 37 C.F.R. § 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made.

PIT-114US

PATENT

This Information Disclosure Statement is being filed concurrently with the above-referenced application.

Respectfully submitted,



Derek Richmond, Reg. No. 45,771
Attorney for Applicants

DR/mc

Enclosures: PTO/SB/08
International Search Report

Dated: April 4, 2012

P.O. Box 980
Valley Forge, PA 19482-0980
(610) 407-0700

The Director is hereby authorized to charge or credit Deposit Account No. 18-0350 for any additional fees, or any underpayment or credit for overpayment in connection herewith.

1517540



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
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 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/506,208	04/04/2012	Ji Shen	PIT-114US	3359
23122	7590	11/06/2012	EXAMINER	
RATNERPRESTIA			RUST, ERIC A	
P.O. BOX 980			ART UNIT	PAPER NUMBER
VALLEY FORGE, PA 19482-0980			2674	
			MAIL DATE	DELIVERY MODE
			11/06/2012	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)	
	13/506,208	SHEN ET AL.	
	Examiner	Art Unit	
	ERIC A. RUST	2674	

-- 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 26 September 2012.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.
- 4) 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

- 5) Claim(s) 1-20 is/are pending in the application.
- 5a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 6) Claim(s) _____ is/are allowed.
- 7) Claim(s) 1-2 and 4-20 is/are rejected.
- 8) Claim(s) _____ is/are objected to.
- 9) Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

- 10) The specification is objected to by the Examiner.
- 11) The drawing(s) filed on 26 September 2012 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).

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) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 04/04/2012.
- 3) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 4) Other: _____.

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DETAILED ACTION

1. Claims 1-20 are pending in this application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2 and 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. 2006/0012830 A1 to Aiso in view of U.S. Patent No. RE42,898 E to Shimizu et al. (hereinafter, Shimizu).

In regard to claim 1, Aiso discloses a method of acquiring an image of a target to provide an output video image comprising a plurality of frame images, the method comprising: connecting a slave digital image sensing unit to a master personal processor, the master personal processor receiving a series of frame images from the slave digital image sensing unit (**Aiso, Abstract, and Fig. 7**);

displaying and/or storing the manipulated series of frame images as an output video image without changing resolution of the output frame images (**Aiso, Abstract, Fig. 7, and [0043]**),

wherein the slave digital image sensing unit is removably connected to the master personal processor via a master personal processor port (**Aiso, [0043]**).

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Aiso does not disclose using the master personal processor to manipulate the series of frame images, including zooming in or out without changing resolution of the frame images.

Shimizu, however, discloses manipulating images, including zooming in or out without changing resolution of the frame images (**Shimizu, col. 5, lines 30-51, preserve zoom image with same size and resolution**).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the disclosure of Shimizu with the disclosure of Aiso in order to preserve output images to the same size and resolution to the standard angle view (**Shimizu, col. 5, lines 30-51**).

In regard to claim 2, which depends from claim 1, neither Aiso nor Shimizu disclose executing the manipulation in response to a user request in real time.

The Examiner, however, takes Official Notice that executing the manipulation in response to a user request in real time is well known and expected in the art, and it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the cited references for such.

One of ordinary skill in the art would have been motivated to modify the cited references in such a way so as to give the user more options.

In regard to claim 4, which depends from claim 3, Aiso discloses wherein the personal processor is housed in an external personal computer, further comprising

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using an external personal computer to provide the processor used to manipulate the series of frame images (**Aiso, Fig. 1 and Fig. 3**).

In regard to claim 5, which depends from claim 4, Aiso discloses wherein the manipulation further comprises at least one of the operations selected from the group consisting of: re-sizing the image; panning the image in a selected direction; rotating the image in a selected direction and annotating the image (**Aiso, Fig. 3, correct positional shift**).

4. Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aiso and Shimizu in view of U.S. Patent Application Publication No. 2005/0177783 A1 to Agrawala et al. (hereinafter, Agrawala).

In regard to claim 6, which depends from claim 5, neither Aiso nor Shimizu disclose wherein annotating an image is conducted during re-sizing the image.

Agrawala, however, discloses wherein annotating an image is conducted during re-sizing the image (**Agrawala, [0043] – [0043]**).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the disclosure of Agrawala with the disclosure of Shimizu and Aiso in order to enable the user to add annotations similar in size to the existing document information (**Agrawala, [0042]**).

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In regard to claim 7, which depends from claim 5, Shimizu discloses wherein the at least one operation is conducted without changing a resolution of the output frame images (**Shimizu, col. 5, lines 30-51**).

5. Claims 8-9, 12-13, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aiso in view of U.S. Patent Application Publication No. 2005/0206912 A1 to Megawa et al. (hereinafter, Megawa).

In regard to claim 8, Aiso discloses a method of acquiring an image of a target comprising:

capturing a video image comprising the series of frame images in one instantaneous snapshot of a subject's entire surface area without line-by-line scanning (**Aiso, Abstract, Fig. 7**)

Aiso does not disclose using an external processor to compare a resolution of each frame image of the video image with the reference resolution and adjusting the resolution of each frame image to correspond to the reference resolution; and determining a reference resolution at which each frame image of a series of frame images will be maintained and storing the reference resolution in a non-transitory medium; after comparing the resolution of each frame image, storing and/or displaying in real-time each frame image on a display.

Megawa, however, discloses setting a resolution for images (**Megawa, [0041]**).

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It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the disclosure of Megawa with the disclosure of Aiso in order to enable the user to add annotations similar in size to the existing document information (**Agrawala, [0042]**).

In regard to claim 9, which depends from claim 8, Aiso discloses wherein the external processor is housed in a personal computer (**Aiso, Fig. 1 and Fig. 3**).

In regard to claim 12, which depends from claim 8, Aiso does not specifically disclose displaying panning the image in a selected direction without changing a resolution of the output frame images.

The Examiner, however, takes Official Notice that executing the manipulation in response to a user request in real time is well known and expected in the art, and it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the cited references for such.

One of ordinary skill in the art would have been motivated to modify the cited references for such so that a user because it is common practice in the art of cameras.

In regard to claim 13, which depends from claim 8, Aiso discloses further comprising when displaying each frame image on a display rotating the image in a selected direction without changing a resolution of the output frame images (**Aiso, Fig. 3, correct positional shift**).

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In regard to claim 16, which depends from claim 8, Aiso discloses further comprising when displaying each frame image on a display, performing an image manipulation selected from the group consisting of: re-sizing the image, re-sizing a selected portion of the frame to provide a visual effect of rotating the image in three dimensions, panning the image in a selected direction, rotating the image in a selected direction, and annotating the image (**Aiso, Fig. 3, correct positional shift**).

6. Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aiso and Megawa in view of Shimizu.

In regard to claim 10, which depends from claim 8, neither Aiso nor Megawa specifically disclose further comprising when displaying each frame image on a display re-sizing the image without changing a resolution of the output frame images.

Shimizu, however, discloses manipulating images, including zooming in or out without changing resolution of the frame images (**Shimizu, col. 5, lines 30-51, preserve zoom image with same size and resolution**).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the disclosure of Shimizu with the disclosure of Megawa and Aiso in order to preserve output images to the same size and resolution to the standard angle view (**Shimizu, col. 5, lines 30-51**).

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In regard to claim 11, which depends from claim 10, Aiso discloses further comprising re-sizing a selected portion of the frame to provide a visual effect of rotating the image in three dimensions (**Aiso, Fig. 3**).

7. Claims 14-15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aiso and Megawa in view of Agrawala.

In regard to claim 14, which depends from claim 8, neither Aiso nor Megawa disclose further comprising when displaying each frame image on a display annotating the image without changing a resolution of the output frame images.

Agrawala, however, discloses wherein annotating an image is conducted during re-sizing the image (**Agrawala, [0043] – [0043]**).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the disclosure of Agrawala with the disclosure of Megawa and Aiso in order to enable the user to add annotations similar in size to the existing document information (**Agrawala, [0042]**).

In regard to claim 15, which depends from claim 14, Agrawala discloses wherein annotating an image is conducted during a step of re-sizing the image (**Agrawala, [0042]**).

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In regard to claim 17, which depends from claim 16, Agrawala discloses wherein annotating an image is conducted during a step of re-sizing the image (**Agrawala, [0042]**).

8. Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aiso and Shimizu in view of U.S. Patent No. 5,894,529 to Ting.

In regard to claim 18, Ting discloses a document imaging apparatus comprising a miniaturized digital image sensing unit externally coupled to a computer comprising optics having an infinite focal length (**Ting, Fig. 3**); a suspension arm for supporting the digital imaging unit at a distance from a target to be imaged (**Ting, Fig. 3**).

Ting does not specifically disclose a personal computer containing a software programming unit wherein the personal computer is configured to control all actions of the miniaturized digital image sensing unit and cause the digital imaging unit to; a display for displaying the images; and

Aios, however, discloses a personal computer containing a software programming unit wherein the personal computer is configured to control all actions of the miniaturized digital image sensing unit and cause the digital imaging unit to; a display for displaying the images (**Aiso, Abstract, and Fig. 7**).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the disclosure of Aios with the disclosure of Ting in order to create

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high-resolution image data from multiple image data of comparatively low resolution
(Aiso, [0002]).

Neither Aiso nor Shimizu specifically disclose zooming in or zoom out in real-time while maintaining a resolution value of each of the real-time images constant.

Shimizu, however, discloses manipulating images, including zooming in or out without changing resolution of the frame images (**Shimizu, col. 5, lines 30-51, preserve zoom image with same size and resolution**).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the disclosure of Shimizu with the disclosure of Aiso and Ting in order to preserve output images to the same size and resolution to the standard angle view (**Shimizu, col. 5, lines 30-51**).

In regard to claim 19, which depends from claim 18, Ting discloses wherein the processor is housed in a folding suspension arm (**Ting, Fig. 3, item 16**).

In regard to claim 20, which depends from claim 18, Aiso discloses wherein the processor is housed in an external personal computing system (**Aiso, Fig. 1 and Fig. 3**).

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Allowable Subject Matter

9. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. The following is an examiner's statement of reasons for allowance: the cited references do not anticipate or render obvious identifying a first resolution for the received plurality of frame images; identifying a second resolution for the reference resolution; in the case of a manipulated frame image having a higher resolution, as manipulated, than the second resolution, reducing the resolution of the frame image to that of the second resolution; in the case of the manipulated frame image having a lower resolution, as manipulated, than the second resolution, using the processor to further manipulate the frame image to reduce pixilation.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ERIC A. RUST whose telephone number is (571)-270-3380. The examiner can normally be reached on Monday - Friday, 8:00 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benny Tieu can be reached on (571)-272-7490. The fax phone number for the organization where this application or proceeding is assigned is 571-270-4380.

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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.

/ERIC A RUST/

Examiner, Art Unit 2674

10/31/2012

Notice of References Cited	Application/Control No. 13/506,208	Applicant(s)/Patent Under Reexamination SHEN ET AL.	
	Examiner ERIC A. RUST	Art Unit 2674	Page 1 of 1

U.S. PATENT DOCUMENTS

*	Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A US-RE42,898	11-2011	Shimizu et al.	348/240.99
*	B US-2005/0206912	09-2005	Megawa, Shunichi	358/001.1
	C US-			
	D US-			
	E US-			
	F US-			
	G US-			
	H US-			
	I US-			
	J US-			
	K US-			
	L US-			
	M US-			


FOREIGN PATENT DOCUMENTS

*	Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N				
	O				
	P				
	Q				
	R				
	S				
	T				

NON-PATENT DOCUMENTS

*	Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)				
	U				
	V				
	W				
	X				

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Search Notes 	Application/Control No. 13506208	Applicant(s)/Patent Under Reexamination SHEN ET AL.
	Examiner ERIC A RUST	Art Unit 2674

SEARCHED

Class	Subclass	Date	Examiner
358	1.1	10/31/2012	/EAR/

SEARCH NOTES

Search Notes	Date	Examiner
EAST inventor search	10/31/2012	/EAR/
EAST keyword search	10/31/2012	/EAR/
EAST search is attached	10/31/2012	/EAR/

INTERFERENCE SEARCH

Class	Subclass	Date	Examiner

 /ERIC A RUST/
 Examiner.Art Unit 2674

10/31/2012

Receipt date: 04/04/2012

13506208 - GAU: 2674

PIT-114US

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appln. No: To be assigned
Applicant: Ji Shen et al.
Filed: Concurrently herewith
Title: DOCUMENT IMAGING SYSTEM HAVING A CAMERA-SCANNER APPARATUS
AND PERSONAL COMPUTER BASED PROCESSING SOFTWARE
TC/A.U.: To be assigned
Examiner: To be assigned

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 C.F.R. §§ 1.97 and 1.98 and to the duty of disclosure set forth in 37 C.F.R. § 1.56, the Examiner in charge of the above-identified application is requested to consider and make of record the references listed on the PTO/SB/08 form submitted herewith. A copy of each reference listed on the PTO/SB/08 form, other than U.S. patents, is enclosed

Although the information submitted herewith may be "material" to the Examiner's consideration of the subject application, this submission is not intended to constitute an admission that such information is "prior art" as to the claimed invention.

In accordance with 37 C.F.R. § 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made.

Receipt date: 04/04/2012

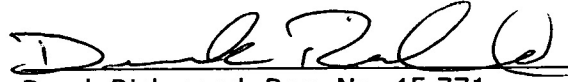
13506208 - GAU: 2674

PIT-114US

PATENT

This Information Disclosure Statement is being filed concurrently with the above-referenced application.

Respectfully submitted,



Derek Richmond, Reg. No. 45,771
Attorney for Applicants

DR/mc


Enclosures: PTO/SB/08
International Search Report

Dated: April 4, 2012

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Valley Forge, PA 19482-0980
(610) 407-0700

The Director is hereby authorized to charge or credit Deposit Account No. 18-0350 for any additional fees, or any underpayment or credit for overpayment in connection herewith.

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<p><i>Index of Claims</i></p> 	<p>Application/Control No.</p> <p>13506208</p>	<p>Applicant(s)/Patent Under Reexamination</p> <p>SHEN ET AL.</p>
	<p>Examiner</p> <p>ERIC A RUST</p>	<p>Art Unit</p> <p>2674</p>

✓	Rejected
=	Allowed

-	Cancelled
÷	Restricted

N	Non-Elected
I	Interference

A	Appeal
O	Objected

Claims renumbered in the same order as presented by applicant
 CPA
 T.D.
 R.1.47

CLAIM		DATE							
Final	Original	10/31/2012							
	1	✓							
	2	✓							
	3	○							
	4	✓							
	5	✓							
	6	✓							
	7	✓							
	8	✓							
	9	✓							
	10	✓							
	11	✓							
	12	✓							
	13	✓							
	14	✓							
	15	✓							
	16	✓							
	17	✓							
	18	✓							
	19	✓							
	20	✓							

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Amendment Dated February 5, 2013
Reply to Office Action of November 6, 2012

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appln. No: 13/506,208
Applicant: Ji Shen
Filed: April 4, 2012
Title: DOCUMENT IMAGING SYSTEM HAVING A CAMERA-SCANNER APPARATUS
AND PERSONAL COMPUTER BASED IMAGE PROCESSING SOFTWARE
T.C./A.U.: 2674
Examiner: Eric A. Rust
Confirmation No.: 3359
Docket No.: PIT-114US

AMENDMENT

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Responsive to the Office Action dated November 6, 2012, please amend the above-identified application as follows:

- Amendments to the Specification** begin on page _____ of this paper.
- Amendments to the Claims** are reflected in the listing of claims which begins on page 2 of this paper.
- Amendments to the Drawings** begin on page _____ of this paper and include an attached replacement sheet(s).
- Amendments to the Abstract** are on page _____ of this paper. A clean version of the Abstract is on page _____ of this paper.
- Remarks/Arguments** begin on page 6 of this paper.

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Amendments to the Claims: This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

1. (Currently Amended) A method of acquiring an image of a target to provide an output video image comprising a plurality of frame images, the method comprising:
 - connecting a slave digital image sensing unit to a master personal processor, the master personal processor receiving a series of frame images from the slave digital image sensing unit;
 - using the master personal processor to manipulate the series of frame ~~images~~ images, including zooming in or out without changing resolution of the frame images;
 - in the case of the manipulated series of frame images having a higher resolution than a reference resolution, reducing the resolution of each of the manipulated series of frame images to that of the reference resolution;
 - displaying and/or storing the manipulated series of frame images as an output video image without changing resolution of the ~~output~~ manipulated series of frame images,
 - wherein the slave digital image sensing unit is removably connected to the master personal processor via a master personal processor port.

2. (Original) The method of claim 1, further comprising executing the manipulation in response to a user request in real time.

3. (Currently Amended) ~~The method of claim 2, further comprising:~~ A method of acquiring an image of a target to provide an output video image comprising a plurality of frame images, the method comprising:
 - connecting a slave digital image sensing unit to a master personal processor, the master personal processor receiving a series of frame images from the slave digital image sensing unit;
 - using the master personal processor to manipulate the series of frame images, including zooming in or out without changing resolution of the frame images, wherein the manipulation of the series of frame images is executed in response to a user request in real time;
 - identifying a first resolution for the received plurality of frame images;
 - identifying a second resolution for the reference resolution;

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in the case of a manipulated frame image having a higher resolution, as manipulated, than the second resolution, reducing the resolution of the frame image to that of the second resolution;

in the case of the manipulated frame image having a lower resolution, as manipulated, than the second resolution, using the processor to further manipulate the frame image to reduce pixilation;

displaying and/or storing the manipulated series of frame images as an output video image without changing the resolution of the manipulated series of frame images,

wherein the slave digital image sensing unit is removably connected to the master personal processor via a master personal processor port.

4. (Original) The method of claim 3, wherein the personal processor is housed in an external personal computer, further comprising using an external personal computer to provide the processor used to manipulate the series of frame images.

5. (Original) The method of claim 4 wherein the manipulation further comprises at least one of the operations selected from the group consisting of:

re-sizing the image;

panning the image in a selected direction;

rotating the image in a selected direction; and

annotating the image.

6. (Original) The method of claim 5 wherein annotating an image is conducted during re-sizing the image.

7. (Original) The method of claim 5 wherein the at least one operation is conducted without changing a resolution of the output frame images.

8. (Original) A method of acquiring an image of a target comprising:

determining a reference resolution at which each frame image of a series of frame images will be maintained and storing the reference resolution in a non-transitory medium;

capturing a video image comprising the series of frame images in one instantaneous snapshot of a subject's entire surface area without line-by-line scanning and using an external processor to compare a resolution of each frame image of the video image with the reference

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resolution and adjusting the resolution of each frame image to correspond to the reference resolution; and

after comparing the resolution of each frame image, storing and/or displaying in real-time each frame image on a display.

9. (Original) The method of claim 8 wherein the external processor is housed in a personal computer.

10. (Original) The method of claim 8 further comprising when displaying each frame image on a display re-sizing the image without changing a resolution of the output frame images.

11. (Original) The method of claim 10 further comprising re-sizing a selected portion of the frame to provide a visual effect of rotating the image in three dimensions.

12. (Original) The method of claim 8 further comprising when displaying each frame image on a display panning the image in a selected direction without changing a resolution of the output frame images.

13. (Original) The method of claim 8 further comprising when displaying each frame image on a display rotating the image in a selected direction without changing a resolution of the output frame images.

14. (Original) The method of claim 8 further comprising when displaying each frame image on a display annotating the image without changing a resolution of the output frame images.

15. (Original) The method of claim 14 wherein annotating an image is conducted during a step of re-sizing the image.

16. (Original) The method of claim 8 further comprising when displaying each frame image on a display, performing an image manipulation selected from the group consisting of:

re-sizing the image,

re-sizing a selected portion of the frame to provide a visual effect of rotating the image in three dimensions,

panning the image in a selected direction,

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rotating the image in a selected direction, and
annotating the image.

17. (Original) The method of claim 16 wherein annotating an image is conducted during a step of re-sizing the image.
18. (Currently Amended) A document imaging apparatus comprising
a personal computer containing a software programming ~~unit~~unit;
a miniaturized digital image sensing unit externally coupled to the personal computer comprising optics having an infinite focal length;
wherein the personal computer is configured to control all actions of the miniaturized digital image sensing unit and cause the digital imaging unit to zoom in or zoom out in real-time while maintaining a resolution ~~value of each of the of a series of~~ series of real-time images constant;
in the case of the resolution of the series of real-time images having a higher resolution than a reference resolution, reducing the resolution of each of the series of real-time images to that of the reference resolution;
a display for displaying the images; and
a suspension arm for supporting the digital imaging unit at a distance from a target to be imaged.
19. (Original) The document imaging apparatus as recited in claim 18 wherein the processor is housed in a folding suspension arm.
20. (Original) The document imaging apparatus as recited in claim 18 wherein the processor is housed in an external personal computing system.

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Remarks/Arguments:

Claims 1-20 are pending in this application. Claims 1-2 and 4-20 stand rejected. Claim 3 is objected to. Applicants herein amend claims 1, 3, and 18. Support for these claim amendments can be found throughout the application as originally filed. No new matter is added. Reconsideration is respectfully requested in view of the above amendments and the following remarks.

Allowable Subject Matter

Claim 3 is objected to as being dependent upon a rejected base claim. Applicants acknowledge with appreciation the indication, on page 11 of the Office Action, that claim 3 would be allowable if rewritten in independent form, including all of the limitations of the base claim and any intervening claims. Applicants herein amend claim 3 to be in independent form, as indicated by the Office Action. Accordingly, Applicants respectfully submit that claim 3 is allowable. Therefore, Applicants respectfully request that the objection of claim 3 be withdrawn.

Claims 4-7 each ultimately depend from claim 3, and, therefore, include all the features thereof. Accordingly, Applicants respectfully submit that claims 4-7 are allowable for at least the reasons their respective base claim is allowable. Therefore, Applicants respectfully request that the rejection of claims 4-7 be withdrawn.

Claim Rejections Under 35 USC § 103

Claims 1-2 and 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Pub. No. 2006/0012830 to Aiso (Aiso) in view of U.S. Patent No. RE42,898 to Shimizu et al. (Shimizu); claims 6-7 are rejected as being unpatentable over Aiso and Shimizu in view of U.S. Patent Pub. No. 2005/0177783 to Agrawala et al. (Agrawala); claims 8-9, 12-13, and 16 are rejected as being unpatentable over Aiso in view of U.S. Patent Pub. No. 2005/0206912 to Megawa et al. (Megawa); claims 10-11 are rejected as being unpatentable over Aiso and Megawa in view of Shimizu; claims 14-15 and 17 are rejected as being unpatentable over Aiso and Megawa in view of Agrawala; and claims 18-20 are rejected as being unpatentable over Aiso and Shimizu in view of U.S. Patent No. 5,894,529 to Ting (Ting). Applicants respectfully

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submit that claims 1-2 and 8-20 are allowable over the applied references for the reasons set forth below.

Claims 1-2 and 18-20

Independent claim 1 includes features which are not disclosed, taught, or suggested by the applied references, such as:

... in the case of the manipulated series of frame images having a higher resolution than a reference resolution, reducing the resolution of each of the manipulated series of frame images to that of the reference resolution; ...

Claim 1 recites a method of acquiring an image of a target to provide an output video image. The method includes connecting a slave digital image sensing unit to a master personal processor; using the master personal processor to manipulate a series of frame images; and reducing the resolution of each of the manipulated series of frame images to that of a reference resolution when the manipulated series of frame images has a higher resolution than the reference resolution. The manipulated series of frame images are displayed or stored as an output video without changing the resolution of the manipulated series of frame images.

Applicants respectfully submit that the applied references fail to disclose, teach, or suggest at least the above features of claim 1.

The Office Action alleges that Aiso discloses a method of acquiring an image of a target to provide an output image. The Office Action, on page 3, acknowledges that Aiso does not disclose the claimed personal processor for manipulating the series of frame images without changing resolution of the frame images. Applicants agree. The Office Action points to Shimizu to disclose manipulating images without changing resolution of the frame images.

Without conceding the rejections, Applicants herein amend claim 1 to expedite prosecution. Applicants respectfully submit that the combination of Aiso and Shimizu fails to disclose current claim 1. Aiso discloses an image processing system (see paragraph [0041] of Aiso). The image processing system establishes weights for each of multiple frame image data (see paragraph [0053] of Aiso). Using these weights, the image processing system combines

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the multiple frame image data to create image data of higher resolution than the frame image data (see paragraph [0053] of Aiso). Unlike claim 1, however, Aiso does not disclose manipulating a series of frame images. Further, Aiso fails to disclose reducing a manipulated series of images to a reference resolution. Rather, Aiso discloses combining multiple frame images to create a higher resolution image data.

Shimizu discloses an electronic zoom input method (see col. 1, lines 49-64 of Shimizu). The method includes a standard angle view 1AS, an intermediate angle view 1AM, and a wide angle view 1AW (see col. 5, lines 30-38 and FIG. 1 of Shimizu). Standard angle view provides a standard size and resolution of the output image of the zoom system (see col. 5, lines 31-32 of Shimizu). The image area of the circumferential part of the image that corresponds to the outside part of the standard angle view can be compressed to preserve the output images to the same size and resolution of the standard angle view (see col. 5, lines 44-49 of Shimizu).

Shimizu, therefore, discloses a method in which two angle views (i.e., an intermediate angle view and a wide angle view) within a single image can be compressed to produce the same size and resolution as the standard angle view produced within that same image. This is different from claim 1 because claim 1 recites comparing the resolution of a series of frame images to a reference resolution. In claim 1, when the series of frame images has a resolution that is higher than the reference resolution, the resolution for the series of frame images is reduced to that of the reference resolution. Thus, Shimizu is different from claim 1 because there is nothing in Shimizu that discloses reducing the resolution of a series of images to a reference resolution.

For the above reasons, Applicants respectfully submit that Aiso, either alone or in combination with the applied references, fails to disclose, teach, or suggest "... in the case of the manipulated series of frame image having a higher resolution than a reference resolution, reducing the resolution of each of the manipulated series of frame images to that of the reference resolution;" Therefore, Applicants respectfully request that the rejection of claim 1 be withdrawn.

Independent claim 18, while not identical to claim 1, includes features substantially similar to the allowable features discussed above with respect to claim 1. Furthermore, Ting fails to make up for the deficiencies of Aiso and Shimizu with respect to claim 1. Accordingly,

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Applicants respectfully submit that claim 18 is allowable for at least reasons similar to the reasons set forth above with respect to claim 1. Therefore, Applicants respectfully request that the rejection of claim 18 be withdrawn.

Claims 2 and 19-20 each depend from one of claims 1 and 18, and, therefore, include all the features thereof. Accordingly, Applicants respectfully submit that claims 2 and 19-20 are allowable for at least the reasons their respective base claims are allowable. Therefore, Applicants respectfully request that the rejections of claims 2 and 19-20 be withdrawn.

Claims 8-17

Independent claim 8 includes features which are not disclosed, taught, or suggested by the applied references, such as:

... using an external processor to compare a resolution of each frame image of the video image with the reference resolution and adjusting the resolution of each frame image to correspond to the reference resolution ...

Claim 8 recites a method of acquiring an image of a target. The method includes determining a reference resolution at which each frame image of series of frame images will be maintained; capturing a video image comprising the series of frame images; and adjusting the resolution of each frame image to correspond to the reference resolution.

Applicants respectfully submit that the applied references fail to disclose, teach, or suggest at least the above features of claim 8.

The Office Action alleges that Aiso discloses a method of acquiring a target. The Office Action acknowledges that Aiso does not disclose using an external processor to compare a resolution of each frame image with a reference resolution and adjusting the resolution of each frame image to correspond to the reference resolution. The Office Action further acknowledges that Aiso fails to disclose determining a reference resolution at which each frame image of a series of frame images will be maintained. Applicants agree. The Office Action points to paragraph [0041] of Megawa to disclose the remaining features of claim 8. Applicants respectfully disagree.

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The Office Action, on page 5, alleges that Megawa discloses setting a resolution for images. Assuming, *arguendo*, that the Office Action is correct and Megawa discloses the setting of a resolution for images, Applicants respectfully submit that the combination of Aiso and Megawa still fails to disclose the features recited in claim 8. In addition to setting a resolution for images, claim 8 recites comparing a resolution of each frame image with a reference resolution. Further, claim 8 recites adjusting resolution of each frame image to correspond to the reference resolution. Megawa differs from claim 8 because Megawa does not disclose comparing each frame image with a reference resolution. In fact, Megawa is entirely devoid of any mention of a reference resolution. Further, Megawa fails to disclose adjusting the resolution of each frame image to correspond to the reference resolution. Instead, at best, and as indicated by the Office Action, Megawa merely discloses setting a resolution for images.

For the above reasons, Applicants respectfully submit that Aiso, either alone or in combination with Megawa, fails to disclose, teach, or suggest "... using an external processor to compare a resolution of each frame image of the video image with the reference resolution and adjusting the resolution of each frame image to correspond to the reference resolution" Therefore, Applicants respectfully request that the rejection of claim 8 be withdrawn.

Claims 9-17 each ultimately depend from claim 8. The addition of Shimizu and Agrawala fail to make up for the deficiencies of Aiso and Megawa with respect to the base claims from which these claims depend. Accordingly, Applicants respectfully submit that claims 9-17 are allowable for the reasons set forth above with respect to claim 8. Therefore, Applicants respectfully request that the rejection of claims 9-17 be withdrawn.

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Conclusion:

In view of the above amendments and remarks, Applicants respectfully submit that the application is in condition for allowance. Notification of allowance is respectfully requested.

Respectfully submitted,



Stephen J. Weed, Reg. No. 45,202
Richard A. Howe, Reg. No. 66,688
Attorneys for Applicant

SJW/RAH/mc

Dated: February 5, 2013

P.O. Box 980
Valley Forge, PA 19482
(610) 407-0700

The Director is hereby authorized to charge or credit Deposit Account No. **18-0350** for any additional fees, or any underpayment or credit for overpayment in connection herewith



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NOTICE OF ALLOWANCE AND FEE(S) DUE

23122 7590 04/18/2013
 RATNERPRESTIA
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 VALLEY FORGE, PA 19482-0980

EXAMINER	
RUST, ERIC A	
ART UNIT	PAPER NUMBER

2674

DATE MAILED: 04/18/2013

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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13/506,208	04/04/2012	Ji Shen	PIT-114US	3359
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TITLE OF INVENTION: capturing real-time video with zooming capability and scanning high resolution still images of documents using the same apparatus

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	\$890	\$0	\$0	\$890	07/18/2013

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the ENTITY STATUS shown above. If the ENTITY STATUS is shown as SMALL or MICRO, verify whether entitlement to that entity status still applies.

If the ENTITY STATUS is the same as shown above, pay the TOTAL FEE(S) DUE shown above.

If the ENTITY STATUS is changed from that shown above, on PART B - FEE(S) TRANSMITTAL, complete section number 5 titled "Change in Entity Status (from status indicated above)".

For purposes of this notice, small entity fees are 1/2 the amount of undiscounted fees, and micro entity fees are 1/2 the amount of small entity fees.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

Complete and send this form, together with applicable fee(s), to: **Mail** Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

23122 7590 04/18/2013
RATNERPRESTIA
P.O. BOX 980
VALLEY FORGE, PA 19482-0980

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/506,208	04/04/2012	Ji Shen	PIT-114US	3359

TITLE OF INVENTION: capturing real-time video with zooming capability and scanning high resolution still images of documents using the same apparatus

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	\$890	\$0	\$0	\$890	07/18/2013

EXAMINER	ART UNIT	CLASS-SUBCLASS
RUST, ERIC A	2674	358-001200

<p>1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).</p> <p><input type="checkbox"/> Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.</p> <p><input type="checkbox"/> "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.</p>	<p>2. For printing on the patent front page, list</p> <p>(1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 _____</p> <p>(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 _____</p> <p>3 _____</p>
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3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : Individual Corporation or other private group entity Government

<p>4a. The following fee(s) are submitted:</p> <p><input type="checkbox"/> Issue Fee</p> <p><input type="checkbox"/> Publication Fee (No small entity discount permitted)</p> <p><input type="checkbox"/> Advance Order - # of Copies _____</p>	<p>4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)</p> <p><input type="checkbox"/> A check is enclosed.</p> <p><input type="checkbox"/> Payment by credit card. Form PTO-2038 is attached.</p> <p><input type="checkbox"/> The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).</p>
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5. **Change in Entity Status** (from status indicated above)

- Applicant certifying micro entity status. See 37 CFR 1.29
- Applicant asserting small entity status. See 37 CFR 1.27
- Applicant changing to regular undiscounted fee status.

NOTE: Absent a valid certification of Micro Entity Status (see form PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.

NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.

NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.**

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Notice of Allowability	Application No. 13/506,208	Applicant(s) SHEN ET AL.	
	Examiner ERIC A. RUST	Art Unit 2674	AIA (First Inventor to File) Status No

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

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. This communication is responsive to the Amendment filed 02/05/2013.
 A declaration(s)/affidavit(s) under 37 CFR 1.130(b) was/were filed on _____.

2. An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

3. The allowed claim(s) is/are 1-21. As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/oph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

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

Certified copies:

a) All b) Some *c) None of the:

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)).

* Certified copies not received: _____.

Interim copies:

a) All b) Some c) None of the: Interim copies of the priority documents have been received.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. Notice of References Cited (PTO-892)
2. Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
3. Examiner's Comment Regarding Requirement for Deposit
of Biological Material
4. Interview Summary (PTO-413),
Paper No./Mail Date _____ .

5. Examiner's Amendment/Comment
6. Examiner's Statement of Reasons for Allowance
7. Other _____.

/ERIC A RUST/
Examiner, Art Unit 2674

Application/Control Number: 13/506,208

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Art Unit: 2674

DETAILED ACTION

EXAMINER'S AMENDMENT

1. An Examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to Applicants, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. The title has been amended as follows:

The new title is "capturing real-time video with zooming capability and scanning high resolution still images of documents using the same apparatus."

End of amendment.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ERIC A. RUST whose telephone number is (571)-270-3380. The examiner can normally be reached on Monday - Friday, 8:00 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benny Tieu can be reached on (571)-272-7490. The fax phone number for the organization where this application or proceeding is assigned is 571-270-4380.

Application/Control Number: 13/506,208

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Art Unit: 2674

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.

/ERIC A RUST/

Examiner, Art Unit 2674

04/07/2013