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UTILITY PATENT APPLICATION TRANSMITTAL <i>(Only for new nonprovisional applications under 37 CFR 1.53(b))</i>	Attorney Docket No.	6338.253
	First Named Inventor	Dale R. Thornberry
	Title	System and Process for Roof Measurement Using Aerial Imagery
	Express Mail Label No.	Electronically Transmitted

APPLICATION ELEMENTS <i>See MPEP chapter 600 concerning utility patent application contents.</i>	ADDRESS TO: Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450
1. ☐ Fee Transmittal Form (PTO/SB/17 or equivalent) 2. ☒ Applicant asserts small entity status. See 37 CFR 1.27 3. ☐ Applicant certifies micro entity status. See 37 CFR 1.29. Applicant must attach form PTO/SB/15A or B or equivalent. 4. ☒ Specification [Total Pages <u>37</u>] Both the claims and abstract must start on a new page. (See MPEP § 608.01(a) for information on the preferred arrangement) 5. ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets <u>21</u>] 6. ☐ Inventor's Oath or Declaration [Total Pages _____] (including substitute statements under 37 CFR 1.64 and assignments serving as an oath or declaration under 37 CFR 1.63(e)) a. ☐ Newly executed (original or copy) b. ☐ A copy from a prior application (37 CFR 1.63(d)) 7. ☒ Application Data Sheet * See note below. See 37 CFR 1.76 (PTO/AIA/14 or equivalent) 8. ☐ CD-ROM or CD-R in duplicate, large table, or Computer Program (Appendix) ☐ Landscape Table on CD 9. 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 PAPERS 10. ☐ Assignment Papers (cover sheet & document(s)) Name of Assignee _____ 11. ☐ 37 CFR 3.73(c) Statement ☐ Power of Attorney (when there is an assignee) 12. ☐ English Translation Document (if applicable) 13. ☐ Information Disclosure Statement (PTO/SB/08 or PTO-1449) ☐ Copies of citations attached 14. ☐ Preliminary Amendment 15. ☐ Return Receipt Postcard (MPEP § 503) (Should be specifically itemized) 16. ☐ Certified Copy of Priority Document(s) (if foreign priority is claimed) 17. ☐ Nonpublication Request Under 35 U.S.C. 122(b)(2)(B)(i). Applicant must attach form PTO/SB/35 or equivalent. 18. ☐ Other: _____ _____ _____ _____ _____

***Note:** (1) Benefit claims under 37 CFR 1.78 and foreign priority claims under 1.55 **must** be included in an Application Data Sheet (ADS).
(2) For applications filed under 35 U.S.C. 111, the application must contain an ADS specifying the applicant if the applicant is an assignee, person to whom the inventor is under an obligation to assign, or person who otherwise shows sufficient proprietary interest in the matter. See 37 CFR 1.46(b).

19. CORRESPONDENCE ADDRESS					
☒ The address associated with Customer Number: <u>30589</u> OR ☐ Correspondence address below					
Name	DUNLAP CODDING, P.C.				
Address	P.O. Box 16370				
City	Oklahoma City	State	OK	Zip Code	73113
Country	USA	Telephone	405-607-8600	Email	mbrockhaus@dunlapcoddington.com
Signature				Date	09/05/2013
Name (Print/Type)	Marc A. Brockhaus			Registration No. (Attorney/Agent)	40,923

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.

Pictometry EX2025
Roof v. Pictometry
IPR2023-00435

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	6338.253
		Application Number	
Title of Invention	System and Process for Roof Measurement Using Aerial Imagery		
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.			

Secrecy Order 37 CFR 5.2

☐ 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.)	
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Inventor Information:

Inventor 1					Remove	
Legal Name						
Prefix	Given Name	Middle Name	Family Name	Suffix		
	Dale	R.	Thornberry			
Residence Information (Select One) ☒ US Residency ☐ Non US Residency ☐ Active US Military Service						
City	Carmel	State/Province	IN	Country of Residence	US	
Mailing Address of Inventor:						
Address 1		13890 Wildcat Dr.				
Address 2						
City	Carmel	State/Province	IN			
Postal Code	46033	Country	US			
Inventor 2					Remove	
Legal Name						
Prefix	Given Name	Middle Name	Family Name	Suffix		
	Chris	T.	Thornberry			
Residence Information (Select One) ☒ US Residency ☐ Non US Residency ☐ Active US Military Service						
City	Indianapolis	State/Province	IN	Country of Residence	US	
Mailing Address of Inventor:						
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Address 2						
City	Indianapolis	State/Province	IN			
Postal Code	46231	Country	US			
Inventor 3					Remove	
Legal Name						
Prefix	Given Name	Middle Name	Family Name	Suffix		
	Mark	F.	Garringer			
Residence Information (Select One) ☒ US Residency ☐ Non US Residency ☐ Active US Military Service						

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Application Data Sheet 37 CFR 1.76		Attorney Docket Number		6338.253	
		Application Number			
Title of Invention	System and Process for Roof Measurement Using Aerial Imagery				
City	Eaton	State/Province	IN	Country of Residence	US
Mailing Address of Inventor:					
Address 1		516 E. South			
Address 2					
City	Eaton	State/Province	IN		
Postal Code	47338	Country	US		
All Inventors Must Be Listed - Additional Inventor Information blocks may be generated within this form by selecting the Add button.					Add

Correspondence Information:

Enter either Customer Number or complete the Correspondence Information section below. For further information see 37 CFR 1.33(a).			
☐ An Address is being provided for the correspondence information of this application.			
Customer Number	30589		
Email Address	mbrockhaus@dunlapcoddington.com	Add Email	Remove Email

Application Information:

Title of the Invention	System and Process for Roof Measurement Using Aerial Imagery		
Attorney Docket Number	6338.253	Small Entity Status Claimed	☒
Application Type	Nonprovisional		
Subject Matter	Utility		
Total Number of Drawing Sheets (if any)	21	Suggested Figure for Publication (if any)	

Publication Information:

☐ Request Early Publication (Fee required at time of Request 37 CFR 1.219)
☐ 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). Either enter 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:	☒ Customer Number	☐ US Patent Practitioner	☐ Limited Recognition (37 CFR 11.9)

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Application Data Sheet 37 CFR 1.76		Attorney Docket Number	6338.253
		Application Number	
Title of Invention	System and Process for Roof Measurement Using Aerial Imagery		
Customer Number	30589		

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.

Prior Application Status	Pending	Remove			
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)		
	Continuation of	13/774478	2013-02-22		
Prior Application Status	Patented	Remove			
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)	Patent Number	Issue Date (YYYY-MM-DD)
13/774478	Continuation of	12/470984	2009-05-22	8401222	2013-03-19

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 priority to a foreign application. 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(d). When priority is claimed to a foreign application that is eligible for retrieval under the priority document exchange program (PDX)ⁱ the information will be used by the Office to automatically attempt retrieval pursuant to 37 CFR 1.55(h)(1) and (2). Under the PDX program, applicant bears the ultimate responsibility for ensuring that a copy of the foreign application is received by the Office from the participating foreign intellectual property office, or a certified copy of the foreign priority application is filed, within the time period specified in 37 CFR 1.55(g)(1).

Remove			
Application Number	Country ⁱ	Filing Date (YYYY-MM-DD)	Access Code ^j (if applicable)

Additional Foreign Priority Data may be generated within this form by selecting the **Add** button.

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	6338.253
		Application Number	
Title of Invention	System and Process for Roof Measurement Using Aerial Imagery		

Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications

This application (1) claims priority to or the benefit of an application filed before March 16, 2013 and (2) also contains, or contained at any time, a claim to a claimed invention that has an effective filing date on or after March 16, 2013. ☐ NOTE: By providing this statement under 37 CFR 1.55 or 1.78, this application, with a filing date on or after March 16, 2013, will be examined under the first inventor to file provisions of the AIA.
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Authorization to Permit Access:

☒ Authorization to Permit Access to the Instant Application by the Participating Offices
If checked, the undersigned hereby grants the USPTO authority to provide the European Patent Office (EPO), the Japan Patent Office (JPO), the Korean Intellectual Property Office (KIPO), the World Intellectual Property Office (WIPO), and any other intellectual property offices in which a foreign application claiming priority to the instant patent application is filed access to the instant patent application. See 37 CFR 1.14(c) and (h). This box should not be checked if the applicant does not wish the EPO, JPO, KIPO, WIPO, or other intellectual property office in which a foreign application claiming priority to the instant patent application is filed to have access to the instant patent application. In accordance with 37 CFR 1.14(h)(3), access will be provided to a copy of the instant patent application with respect to: 1) the instant patent application-as-filed; 2) any foreign application to which the instant patent application claims priority under 35 U.S.C. 119(a)-(d) if a copy of the foreign application that satisfies the certified copy requirement of 37 CFR 1.55 has been filed in the instant patent application; and 3) any U.S. application-as-filed from which benefit is sought in the instant patent application. In accordance with 37 CFR 1.14(c), access may be provided to information concerning the date of filing this Authorization.

Applicant Information:

Providing assignment information in this section does not substitute for compliance with any requirement of part 3 of Title 37 of CFR to have an assignment recorded by the Office.		
Applicant 1		
If the applicant is the inventor (or the remaining joint inventor or inventors under 37 CFR 1.45), this section should not be completed. The information to be provided in this section is the name and address of the legal representative who is the applicant under 37 CFR 1.43; or the name and address of the assignee, person to whom the inventor is under an obligation to assign the invention, or person who otherwise shows sufficient proprietary interest in the matter who is the applicant under 37 CFR 1.46. If the applicant is an applicant under 37 CFR 1.46 (assignee, person to whom the inventor is obligated to assign, or person who otherwise shows sufficient proprietary interest) together with one or more joint inventors, then the joint inventor or inventors who are also the applicant should be identified in this section.		
Clear		
☒ Assignee	☐ Legal Representative under 35 U.S.C. 117	☐ Joint Inventor
☐ Person to whom the inventor is obligated to assign.	☐ Person who shows sufficient proprietary interest	

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Application Data Sheet 37 CFR 1.76		Attorney Docket Number	6338.253
		Application Number	
Title of Invention	System and Process for Roof Measurement Using Aerial Imagery		

If applicant is the legal representative, indicate the authority to file the patent application, the inventor is:

Name of the Deceased or Legally Incapacitated Inventor :

If the Applicant is an Organization check here. ☒

Organization Name Pictometry International Corp.

Mailing Address Information For Applicant:

Address 1	100 Town Centre Drive		
Address 2			
City	Rochester	State/Province	NY
Country	US	Postal Code	14623-4260
Phone Number		Fax Number	
Email Address			

Additional Applicant Data may be generated within this form by selecting the Add button.

Non-Applicant Assignee Information:

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

Assignee 1				
Complete this section only if non-applicant assignee information is desired to be included on the patent application publication in accordance with 37 CFR 1.215(b). Do not include in this section an applicant under 37 CFR 1.46 (assignee, person to whom the inventor is obligated to assign, or person who otherwise shows sufficient proprietary interest), as the patent application publication will include the name of the applicant(s).				
If the Assignee is an Organization check here. ☐				
Prefix	Given Name	Middle Name	Family Name	Suffix

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	6338.253
		Application Number	
Title of Invention	System and Process for Roof Measurement Using Aerial Imagery		

Mailing Address Information For Non-Applicant Assignee:			
Address 1			
Address 2			
City		State/Province	
Country i		Postal Code	
Phone Number		Fax Number	
Email Address			
Additional Assignee Data may be generated within this form by selecting the Add button.			

Signature:

NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications.					
Signature				Date (YYYY-MM-DD)	2013-09-05
First Name	Marc A.	Last Name	Brockhaus	Registration Number	40923
Additional Signature may be generated within this form by selecting the Add button.					

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.**

Filed Electronically on September 5, 2013

**SYSTEM AND PROCESS FOR ROOF MEASUREMENT USING AERIAL
IMAGERY**

INCORPORATION BY REFERENCE

[001] The present patent application is a continuation of the patent application identified by U.S. Serial No. 13/774,478, filed February 22, 2013, which is a continuation of the patent application identified by U.S. Serial No. 12/470,984, filed May 22, 2009, of which the entire content of which is hereby incorporated herein by reference.

FIELD OF INVENTION

[002] The present invention is in the field of measuring roofing dimensions and other attributes, and more particularly pertains to the use of aerial imagery in that field.

BACKGROUND

[003] Roof measuring, for example, dimension, length and areas has been done for many years, such as in connection with for estimating and bidding roofing jobs. Also, for many years, companies and products have offered such estimation services and reporting software reports using aerial imagery on which roof line outlines are traced, dimensions and areas are automatically based on those tracings, and vertical elevations (via pitch or otherwise) are included in mathematical models.

[004] The present invention is an improvement on such aerial imagery, systems and processes, providing non-obvious features that enhance convenience, flexibility, and/or accuracy.

SUMMARY

[005] The claims, and only the claims, define the invention. The present invention includes several, but not necessarily all, of creating a first layer and a second layer, in computer memory and substantially overlapping at least a segment of line from said first layer with at least a segment of another line from said second layer, wherein said first non-dimensional attribute is different from said second non-dimensional attribute; and/or an interactive computer file, said interactive computer file including: length numeric values and at least one user length field enabling a client with said interactive file to override at least one of said length numeric values, where said area operator may automatically recalculate area based on said length field override; and/or, providing at least one computer input field for a user to input first location data generally corresponding to the location of the building; on said imagery of an area providing a visual marker that is moveable on said computer monitor around a region, said marker initially corresponding to said first location data, wherein said marker may be moved to a final location on top of the building to more precisely identify the location of the building roof structure; and providing a computer input capable of signaling user-acceptance of the final location of said marker; and/or other features, optionally combined in various ways as set forth in the claims.

BRIEF DESCRIPTION OF THE DRAWINGS

[006] FIG. 1 is one example of a flow chart of acts according to the present invention.

[007] FIG. 2 is another example of a flow chart of acts according to the present invention.

[008] FIG. 3 is another example of a flow chart of acts according to the present invention.

[009] FIG. 4A is one example of a computer screen shot to enter an address.

[0010] FIG. 4B is one example of a computer screen shot depicting imagery and a marker based on an address.

[0011] FIG. 4C is a computer screen shot like FIG. 4B with the marker moved over a selected building.

[0012] FIG. 4D is a computer screen shot and/or reporting confirming selection of a building.

[0013] FIG. 5A is an example of reporting.

[0014] FIG. 5B is another example of a screen shot and/or reporting.

[0015] FIG. 5C is another example of a screen shot and/or reporting.

[0016] FIG. 5D is another example of a screen shot and/or reporting.

[0017] FIG. 5E is another example of a screen shot and/or reporting.

[0018] FIG. 5F is another example of a screen shot and/or reporting.

[0019] FIG. 5G is another example of a screen shot and/or reporting.

[0020] FIG. 5H is another example a screen shot and/or of reporting.

- [0021]** FIG. 5I is another example of a screen shot and/or reporting.
- [0022]** FIG. 6 is another example of a screen shot and/or reporting.
- [0023]** FIG. 7A is a top plan view of aerial imagery of a building roof structure.
- [0024]** FIG. 7B is a display of the imagery of FIG. 7A with some optional features.
- [0025]** FIG. 7C depicts the imagery of FIG. 7A with shadowing.
- [0026]** FIG. 7D depicts FIG. 7C with the addition of computer generated line.

BRIEF DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0027] For the purposes of promoting an understanding of the principles of the invention, reference will now be made to the examples, sometimes referred to as embodiments, illustrated and/or described herein. Those are mere examples. It will nevertheless be understood that no limitation of the scope of the invention is thereby intended. Such alterations and further modifications in the described processes, systems or devices, any further applications of the principles of the invention as described herein, are contemplated as would normally occur to one skilled in the art to which the invention relates, now and/or in the future in light of this document.

[0028] As used in the claims and the specification, the following terms have the following definitions:

[0029] The term "adjustment roof plane" means a roof plane, having at least three border lines, that may be hidden (partially or totally) from view from

some or all aerial imagery and which may be included to add to (or subtract from) an aggregate roof area or other attributes.

[0030] The term "aerial imagery" means pictures, normally including photographs (visual light, infrared, color, black and white, or otherwise) taken from an overhead view (straight down, oblique, or otherwise) with respect to a building roof. This may include imagery taken from airplanes, satellites, balloons, or otherwise.

[0031] The term "attributes" means one or more distinguishing or identifying characteristic.

[0032] The term "border line" means a line segment, straight, curved, free form or otherwise that generally corresponds with the edge of a roof plane.

[0033] The term "building" means a real estate structure, such as for example, a house, condominium, office building, outbuilding, garage, warehouse, factory or otherwise.

[0034] The term "client" means a person or entity that orders or obtains an aerial imagery report.

[0035] The term "computer input" means data, information and/or signals provided by a computer user. This may include numbers, words, mouse clicks, "enter", check boxes, dialog boxes, and otherwise.

[0036] The term "computer monitor" includes any computer screen or other visual output, including projectors, flat panel screens, LCD screens, LED screens and otherwise that provide visual output from a computer.

[0037] The term "computer processing means" means computer hardware and software, including computer memory, microprocessors, computer code and computer logic to provide digital computing.

[0038] The term "contrast" means discernable relative differences in lightness and darkness.

[0039] The term "deliverable" means that which is or may be delivered to a client, including printed and/or electronic reports and information.

[0040] The term "digital" means using numeric digits, specifically including binary digits.

[0041] The term "direct proportion" means that one or more variables that change as a function as another value in a generally linear function.

[0042] The term "dissects" means to sub-divide into two or more parts.

[0043] The term "electronic drawing" means to draw lines and/or shapes electronically via computer. This can include pixel-based drawings, vector-based drawings, and/or otherwise.

[0044] The term "field" means a location for computer data input and/or output of a value having at least one corresponding associated place in computer memory.

[0045] The term "final location" is the relative spot for placing a marker. This normally corresponds to unique latitude and longitude coordinates.

[0046] The term "generating" means to make or create.

[0047] The term "imagery database" means a computer database containing aerial imagery computer files and the associated location coordinates.

[0048] The term "interactive computer file" is a computer file in which a user may input and/or override one or more numeric values stored in memory as part of the file.

[0049] The term "internet-based imagery" means imagery, such as aerial imagery, which is accessible through an internet access connection. One popular example is Google® Earth.

[0050] The term "latitude and longitude coordinates" mean numeric coordinates for a location on the planet corresponding to latitude (east, west) and longitude (north, south).

[0051] The term "layer" means a part of a graphic computer file that visually overlays one or more other parts and which has at least partially transparent portions allowing visualizations of parts/layers below it.

[0052] The term "lines" means a straight, curved, and/or free form segment.

[0053] The term "location data" means information which uniquely identifies geographic position. This may include latitude and longitude coordinates, street addresses and/or otherwise.

[0054] The term "non-dimensional attribute" means an attribute other than a numeric value, such as other than length, width, height, or area.

[0055] The term "numeric values" means alphanumeric numbers, and/or their binary equivalent.

[0056] The term "operator" means a mathematical function including, but not limited to multiplication, division, addition, subtraction, sum, average, square root and/or the foregoing with or without constant and/or co-efficient.

[0057] The term "orientation" means the direction of something with respect to something else.

[0058] The term "outline" means the path or collection of lines generally coinciding with the outside of a shape.

[0059] The term "outline drawing" means drawing of lines around an outline.

[0060] The term "over said imagery" means position on top of and in alignment with underlying Imagery.

[0061] The term "override" means to substitute or replace one value for another value. This may be done with numeric values, non-dimensional attributes and otherwise.

[0062] The term "perimeter lines" means a line or lines that outline the outer most edge of a roof structure. This can include, but is not limited to, a roof free edge with a gutter and to a roof free edge without a gutter.

[0063] The term "pitch numeric value" is a single numeric value corresponding to the pitch or slope of a portion of roofing.

[0064] The term "proportioning" means to increase or decrease the size of a line, outline or other object to directly proportional to the change in another object.

[0065] The term "region" means a location on earth that is depicted in aerial imagery. Ordinarily, it will include at least one entire building structure, and preferably, will include at least some features, such as streets, trees, or other buildings adjacent the building structure.

[0066] The term "report" means one or more pages or screen shots, or both, made available to a user including aerial imagery and/or data from such imagery. This includes, but is not limited to, one or more interactive computer files.

[0067] The term "roof flashing edge" means an edge where roofing meets with a generally vertical structure, such as a wall, typically with flashing.

[0068] The term "roof free edge with a gutter" means the unbound edge of a roof with a rain drainage gutter.

[0069] The term "roof free edge without a gutter" means the unbound edge of a roof without a rain drainage gutter.

[0070] The term "roof hip" means an edge where two roof planes meet to form a generally upward sloping ridge.

[0071] The term "roof pitch" means the slope of a roof plane. It may be expressed in angles, ratios, or otherwise. This includes stating the rise over run, as well as stating merely the rise in view of an assumed or industry standard run. For example, a slope of 6 inch rise for every 12 inch run (horizontal") may be stated to be a "6" pitch.

[0072] The term "roof plane" means a generally planer, segment of a roof.

[0073] The term "roof ridge" means an edge where two generally upward sloping roof planes meet.

[0074] The term "roof structure" means the top of a building which shelters the building from weather.

[0075] The term "roof valley" means an edge where two generally downward sloping roof planes meet.

[0076] The term "street address data" means the location typically used by postal identification, typically including at least one numeric value and at least one street name, and further typically including a zip code or other postal code and/or a town and state or province.

[0077] The term "street address look up field" means a computer field for entry of street address data.

[0078] The term "substantially overlapping" means that where one line, in whole or in substantial part, coincides with another line in terms of direction and overlap. This may include situations where the respective lines are of substantially different length, or not.

[0079] The term "substituent triangles" means two or more congruent triangles which collectively form a subset of another geometric shape.

[0080] The term "tracing" means drawing around an outline or along a line or feature depicted in Imagery.

[0081] The term "user-acceptance" means an affirmative step or series of steps or computer input, undertaken by user to make a selection.

[0082] The term "vector direction" means, in relative space, either two dimensionally or three dimensionally where a vector is pointing.

[0083] The term "visual marker" is a shape, pointer, label, icon, avatar or other indicator which is movable or displayable on a computer screen and which may be visually differentiated from other objects on the computer screen.

[0084] The term "visually depicting" means to show or illustrate something on a computer monitor as a graphical image.

[0085] Articles and phrases such as, "the", "a", "an", "at least one", and "a first", are not limited to mean only one, but rather are inclusive and open ended to also include, optionally, two or more of such elements.

[0086] The language used in the claims is to only have its plain and ordinary meaning, except as explicitly defined above. Such plain and ordinary meaning is inclusive of all consistent dictionary definitions from the most recently published Webster's dictionaries and Random House dictionaries.

[0087] Referring to the drawing figures, these are only examples of the invention, and the invention is not limited to what is shown in the drawings.

DETAILED DESCRIPTION OF THE DRAWINGS

[0088] Referring to FIG. 1, a process for determining attributes of a roof structure 501 (see FIGS. 4B, 4C) of a real-world three-dimensional building 500 may optionally comprise several acts. This may include viewing on a computer monitor 100 in digital aerial imagery 1 of a region 502 (see FIGS. 4B, 4C) including the roof structure 501. Ordinarily, the roof structure will have one or

more roof planes, and unless the roof is a simple single-plane roof, will have at least two or more roof planes. In FIG. 1, the act of creating of a first layer drawing 2 is undertaken. Such act may be used by the ultimate end-user enabled by the software, but optionally and more preferably is done by a commercial vendor based on an order placed by a user. Such order may be placed by telephone, on-line, such as on computer screen 100 as shown in FIGS. 4A-4D, by mail, email or otherwise.

[0089] The creation of the first line drawing 2 may be done a multitude of ways, in one example is illustrated in FIGS. 5A-5I and FIG. 6, discussed further below. Likewise, in FIG. 1 creating a second layer drawing 3 is another act. For example, in FIG. 5D, various roof planes are denoted by letters A-P. For example, the roof plane 515 denoted by the letter "O" may be drawn in a second layer, whereas roof plane 516 indicated by the letter "D" may be in a first layer. In such example, roof plane 515 and roof plane 516 have substantially overlapping segments 4 (see FIG. 1). For example, along the upper edge of plane 515 appears the number "5" denoting a five foot 20 line; whereas, plane 516 has the substantially overlapping line denoted by "7" indicating a seven foot line segment of roof plane 516. Such seven foot roof segment of plane 516 may comprise a perimeter line (part of the 56.78 feet perimeter length of plane D depicted in table 520 of report 550 of FIG. 5I); whereas, the substantially overlapping five foot length of plane 515 may comprise a second non-dimensional attribute, namely flashing, such as step flashing line (part of the 37.01 feet of step flashing for plane O depicted in table 521 of FIG. 5I). Accordingly, this is one example of

substantially overlapping lines such as segment of line A and segment of line E set forth in the claims, each having respective first and second non-dimensional attributes. This allows for separate reporting of such non-dimensional attributes, such as the length of perimeter, the length of step flashing or otherwise. Such non-dimensional attributes may be of any type. As mere examples that have use in the roofing industry include the non-dimensional attributes of roof ridge, roof hip, roof valley, roof flashing edge, perimeter line, roof free edge with a gutter, and roof free edge without a gutter. For example, line 510a in FIG. 6 is an example of a roof ridge, whereas line 511a and line 513a are each examples of a roof valley. Line 512a in FIG. 6 is an example of a perimeter edge, which also happens to comprise a roof free edge without a gutter. Optionally, while not illustrated, if line 512a had, or were to have, a gutter along it, then it would be in that case a perimeter line and be a roof free edge with a gutter. FIG. 6. also depicts an optional table and/or fields showing the non-dimensional attributes at 507 and the total 15 values for them at 508. This can include the area of roofing 509, the linear ridge feet 510, linear valley feet 511, starter/perimeter linear feet 512, step flashing 513, and/or others.

[0090] Another optional feature is computer processing means for calculating a vector direction corresponding to roof pitch for a roof plane. Optionally, this may be based on at least one of said non-dimensional attributes of roof plane outline lines and their orientation. Such computer processing means typically includes computer logic and/or code with a set of rules to establish such vector. Examples of such vector are shown in FIG. 5E. Specifically, they are

preferably shown as arrows. In the illustrated example, they are ordinarily indicated as arrows pointing in the downward direction, corresponding to the downward direction of rain flow. Optionally, there may be other illustrations, including an upwardly directed arrow, although this is not preferred. For example, vector 516d is shown in a downwardly directed arrow with a number 6 next to it. This depicts the vector corresponding roof plane 516, namely plane D previously discussed. As seen, the value "6" for the pitch is entered at field 516c in the table also showing the area (for that particular roof plane D at field 516a) 357.93 sq. ft. as shown at field 516b. Note further with respect to roof plane 515 (plane "0") as illustrated in the table at field 515a, it likewise has a roof pitch of "6" shown at 515c. The total area of roof plane "0" is 111.35 sq. ft. in this particular example, as shown at 515b.

[0091] An example of computer programming to determine pitch direction is as follows.

[0092] 1.) Pitch will run towards a perimeter line. If only one perimeter line pitch goes towards the perimeter (most standard roofs, all but the ends of hips);

[0093] 2.) If there are multiple perimeters that are not parallel, look for ridge. If there is only a single ridge line and it is parallel to one of the perimeter lines, pitch runs from the ridge towards the perimeter. (Perimeters that are not straight and have small outcroppings where the roof extends further down the same slope).

[0094] 3.) If a shape has no multiple perimeters and multiple ridges where none are parallel, take an average of the ridge angles and see if that direction is

perpendicular to a perimeter line. If so, that direction is the direction of the pitch.
(The end of hip roofs).

[0095] Most planes are resolved by the above acts, 2 and/or 3. Acts 4 and 5, below, are also optional but preferred, and address totally enclosed roof planes which most standard roofs do not have.

[0096] 4.) If there are no perimeter lines and a single ridge line, the pitch is from the ridge.

[0097] 5.) If there are no perimeter lines and multiple ridge lines, once finding the pitch for all other shapes look at the ridges and the shared shapes. If the shared shape has a pitch directly away (is perpendicular) from the shared ridge, use that ridge as if it were 2 (from above). If the other pitch goes at an angle to the ridge, look at other ridges.

[0098] The case where you can make it past act 5 and not have pitch direction is for completely enclosed shapes where all sides are valleys at the intersection of multiple planes, set forth in this optional act:

[0099] 6.) take the average slope of all other planes connected via shared lines and average the slope direction of the planes ,whose pitch runs into the plane in question; use that direction as the pitch direction for the plane.

[00100] Variations on that logic, including changing the order, and/or combining or splitting acts, may optionally be used. For example, rather than beginning with logic looking to run pitch towards a perimeter, the logic could begin to look to first run the pitch vector away from a ridge line, although this is less preferred.

[00101] As illustrated in report 550 as seen in FIG. 5E, the visual depiction of pitch vectors, such as 516d may help visualize the shape, orientation, pitches of the roof structure and/or roof planes.

[00102] Optionally, one or more deliverables to the client include one or more reports such as report 550. Report 550 may include one or more of the features as depicted in the various drawings of FIGS. 5A-5I and/or FIG. 6 and/or FIGS 7A-7D, alone or combination.

[00103] Optionally, such report may be printed on a piece of paper, or provided on a non-interactive computer file such as a .pdf (Adobe® Acrobat®) type image or otherwise, illustrated on a computer screen for the user to print out (web based or otherwise) and/or delivered on recordable media such USB drive, floppy disk, CD, DVD, email attachment or otherwise. However, preferably, such file is delivered as an interactive computer file. For example, referring again to FIG. 5E, the pitch value as shown in the table, such as the 6 pitch for plane D and 516c allows the person, the end-user or otherwise, to enter at least one pitch numeric value. This pitch numeric value may correspond to roof pitch of the roof plane. Hence, in FIG. 5E, one or more of the pitch values in computer fields corresponding to the table, may be empty or null. They may allow a person, such as an end user, to data input via their computer, the pitch value. For example, this may be based on the end user, or one of their agents, taking field measurements of the roof to provide the input. As such, value 516c may be entered to be "6" corresponding to a 6 pitch (e.g., 6" vertical rise for every 12" of horizontal run). Such value "6" may be changed, updated, or overridden.

[00104] As can be appreciated in three-dimensional geometry, given the shape of plane D (516) the value of the pitch ordinarily will affect the overall area of such roofing (see e.g. FIG. 5F, area value 516b).

[00105] Mathematical equations demonstrating-area relationship for a sloped, rectangular roof plane are known, an example of which is set forth below:

$$\text{Area} = W \times Z$$

$$Z = \text{square root of: } (X^2 + Y^2)$$

Where:

W = width

X = horizontal run

Y = vertical rise

Z = hypotenuse of X-Y-Z right triangle.

[00106] Other, geometries may be calculated using known math, coefficients and/or tables. See for example: *Miller, Mark; Miller's Guide to Roofing* (2005) ISBN 0-07-145144-7. Thus, in combination with the perimeter measurements supplied with the report based on the creation of roof plane D from the imagery, the addition of the roof pitch value may lead to the calculation such as in the example 357.93 sq. ft. shown at 516b. Likewise, for plane O, the value of "6" may be entered in the table at 515c to arrive at the area calculation 515b as previously described. It should be appreciated, that optionally these pitch values may be provided by the end user or other persons based on field measurement. However, optionally, they also may be based on measurements

and/or computer calculations precisely, by estimate or otherwise, such as by viewing oblique imagery such as region image 502 shown in FIG. 4B. In such case, for example, a vendor may provide default values (and/or absolute values) for the pitch and the table shown at FIG. 5E. In an interactive computer file with such fields being interactive, and with operators to calculate area taking into account pitch, preferably part of said file, even with such default values based on oblique imagery the end user would be free to override them, such as for example if they determine that field measurements indicate a different pitch.

[00107] Another optional feature may include other attributes deliverable to the client including an interactive computer file. For example, the length values of lines forming an outline of a drawing may be overridden. For example, referring again to 5D, a reference line 514 is depicted. In this one example, it is depicted in the parenthetical quote ("R"), although this is not required. In such case, it is denoted "26" corresponding to 26 ft. in length. Note that all dimensions in this case may be converted to or express in metric, rather than English units, although for purpose of illustration English dimensions are utilized here.

[00108] In such case, even though the referenced dimension 26 is based on scaling that line off of the imagery, such as imagery 506 (see FIG. 6; FIG. 5C) there is an opportunity for greater precision. Such interactive computer file, for example, in the report page shown at FIG. 5D, the value 26 depicted there in connection with the reference may actually be the location of a data entry field. In such case, the field operator may determine that the precise measurements are not 26 feet, but rather are 26.15 feet. In such case, the user operator may enter

in their computer by typing in the value "26.15" the reference line field, thereby overriding it from 26 to 26.15 in this hypothetical. In such case, the interactive computer file may use co-efficient and other ratios to proportion (by multiplication or otherwise) some, or preferably, each of the other lines of an outline in direct proportion to the plane field override. While the foregoing is mentioned in terms of the referenced mentioned 514, optionally the interactive computer file may provide multiple reference directions and/or all line values in their report may, optionally, be interactive and override fields. As mere examples, in FIG. 5D this could include fields for 510a, 511a, 512a and/or otherwise, including without limitation most or all numeric values.

[00109] Moreover, while not illustrated, optional report 550 may include a separate table and/or field entry point apart from the drawing of the building roof structure 501 in which the reference line may be overridden instead or, or in addition to, fields directly overlying the aerial imagery and/or the drawn lines.

[00110] Optionally, but preferably, in addition to the length of the other lines being proportionally recalculated, likewise the area values, such as depicted in the area column of the table at FIG. 5E as well as the area values on FIG. 5F and/or FIG. 6 (see the total roofing area value 509 of 4096.95 sq. ft. may be automatically recalculated. This may be done in a separate application, in the interactive computer file (including with embedded operators), both or otherwise.

[00111] Various area calculations used in connection with computer data processing means are available based on known geometry. These could include things as simple as multiplying length times width of a single rectangle. They also

may include modifying such area to take into account the additional area generated by pitch, as previously discussed. However, while not limited to this, preferably, taking advantage of the pixilated imagery that may be used, one optional feature in determining one or more areas of the respective roof planes is as follows. If you know the points (corners) of the shape and can order them in a clockwise (or optionally, counter-clockwise) fashion following the perimeter or outline of the shape, then the following algorithm can apply. Starting at the first endpoint, 0 (zero), while N+1 is less than the total ordered end points take the triangle made by the 3 points 0, N, and N+1 and compute the area of the triangle created, which is done by the dot product method using vectors created by going from 0 to N and 0 to N+1. Add this area to a running sum.

[00112] Note that when the three ordered endpoints are not in the proper order (they create a convex perimeter or outline of the shape that reduces the overall area as opposed to adding to), the dot product method of finding the area will return a (-)negative area which subtracts from the overall area in the running sum.

[00113] Dot product (2-Dimensional Vectors) can be expressed in the equation:

$$uv = u_1v_1 + u_2v_2$$

[00114] This can be used to find the area of the square that the two vectors produce. Dividing the result by two (2) gives the area of the triangle the two vectors produce.

[00115] Thus, in this way an example is provided of computer data processing means that dissects the outlines of the roof planes into substituent triangles and calculates the area of such triangles. The areas are aggregated to provide the area of respective roof planes, and the areas of such respective roof planes may in turn be aggregated (summed) to arrive at the total area of the roof structure. Examples of this are shown in the table in FIG. 5F and/or table 517 in FIG. 5H. Note also in FIG. 5H the report 550 may also include other tables and information, such as ridge length table 518 and/or valley length table 519.

[00116] Hence, in FIG. 2, aerial imagery 1 is used and perimeter drawings around roof planes are acts. Thereafter, one or more interactive computer files are delivered 6. The user may enter values in the interactive computer file 7, such as pitch, length, or otherwise as discussed. This may result in the act of updating the report 8.

[00117] Another optional feature is to provide for user acceptance of the final location of a roof structure. One optional way to do this is to provide an internet based interface for the customer/user. One example of such is shown in FIGS. 4A-4D. For example, in FIG. 4A, computer screen 100 provides a place to enter an address, such as field 102 for address entry (denoted by label 101). In the illustrated example, the street address "1710 Strand Ave, Tybee Island, GA. 31328" may be entered in field 102 of the computer. The user may enter by clicking or otherwise button 103 to find that address. In response, computer screen 100 may appear like FIG. 4B. As such, it may depict imagery 502 of a region, the region including building 500 with its roof structure 501. Ordinarily,

this includes not only the building structure 500, but also depicts adjacent buildings, trees, streets, and/or other features. Such imagery may come from a variety of places. One example could be Google® Earth imagery database which is web based and provides address location information. Such imagery covers much of the world, although it may or may not be comparatively low resolution imagery. In FIG. 5B, marker 106a is shown in the region 502, corresponding to the street address in field 102. Note further that while marker 106a is close to roof structure 501, it does not directly or perfectly correspond to roof structure 501. As such, the customer or other user may be allowed to move the marker (by click and dragging via computer mouse, arrows, or otherwise) to a final location 106b as depicted in FIG. 4C. Such final location is on top of the building 500 and such movement more precisely identifies the location of the building roof structure 501 to be measured. Optionally, in FIG. 4C when said marker has been moved to final location 106b, the user may activate a selection confirmation, such as confirm selection button 104, enter, checkbox or otherwise. Optionally, to potentially start over the user may be afforded the option of hitting the cancel button 105 or merely logging off. However, if confirmed selection button 104 or other such user acceptance is activated, another screen (and/or report) optionally may be provided, such as screen 100 as depicted in FIG. 4D. While this may be a wide variety in the formats, in the one example provided, some or all of the regional image 502a may be depicted showing the marker in its final location 106b. Also, a checkbox may be providing a further reconfirmation that the users reviewed the image is correct. In this way, the end user/customer will be sure

that when placing an order, the vendor is measuring the correct roof structure as opposed to, for example, measuring the nearby roof structure due to mistake/miscommunication. Optionally, as shown in FIG. 4D, fields may depict the address to be measured 108, the city 109, the state 110, the postal code 111, and otherwise. Optionally, a drop down box 112 may be provided corresponding to the number of planes ordered. Additionally, other options, such as rush processing 113 or other special features may be provided. Also optionally, a reference number or other such job number field 114 or claim number field 115 and/or other fields may be available. Thus, for example, a roofer having a job number and/or bidding pursuant to an insurance claim number and/or an insurance company doing the same may optionally enter data therein. When they do so, optionally, such reference numbers and/or claim numbers may be reprinted or otherwise depicted on the deliverables to the client, such as report 550. This provides convenience to the end user/customer in that they may cross reference their deliverable report to their internal calendaring, docketing, invoicing, and/or job number system.

[00118] Also with reference to FIG. 4D, computer screen 100 and/or the reports may also depict latitude references and/or longitude references corresponding to the street address and/or more precisely to the final location 106b of the marker confirmed by the end user. Again, optionally, such latitude and longitude coordinates may be reflected in one or more of the reports.

[00119] Such translation to latitude and longitude coordinates also provides another optional feature. The present system and method may optionally include

two or more separate imagery databases. For example, a lower resolution and/or less expensive image database such as Google® Earth may be used as a first database, whereas a higher quality, higher resolution and/or more robust image database, such as by Pictometry International (as depicted here) may be used. Other vendors of imagery databases may be used and/or one may use their own image database(s). Thus, by translating the street address stated in longitude and latitude, it is easier to correlate to the second database. In this way, first imagery database from which the final location is selected may be internet based imagery having to corresponding street address look up field. Only further using the latitude and longitude coordinates to access imagery from a second imagery database, such as for example Pictometry's database. Thereafter, using the imagery from the second database can generate in computer memory outline drawings around outlines corresponding to roof planes based on tracing from imagery from said second imagery database. Such outline drawings may include drawings such as depicted in FIGS. 5D, 5E, 5F, 5G and/or FIG. 6 and/or 7B-D for example. Additionally, since the first imagery database may merely be straight down, or plan views, whereas the second imagery may include a variety of oblique images, such as image 502 and 503 in FIG. 5A and/or oblique imagery 504 and 505 in FIG. 5B, as well as diagonal, top down imagery such as image 506 in FIG. 5C. This allows the optional, more complete image reporting to the client in report 505.

[00120] Such oblique imagery also permits the optional feature, as previously discussed, determining vertical measurements and/or roof pitches

based on the imagery, as opposed to based on field measurements. Conversely, one can undertake this without any oblique imagery and/or any determination of vertical measurements or pitch, and instead rely on field measurements or other means for pitch.

[00121] In FIG. 3, the location data 4A is entered. Aerial imagery with a marker is provided 4B. A person moves the marker on the image of the building 4C. User acceptance of that marker position is then signaled 104b.

[00122] Mere examples of other optional features are depicted in FIG. 7A and 7B. A simplified diagrammatic image of building 700 includes roof structure 701. While several roof planes are illustrated, the particular focus is directed to roof planes 715 and 716. As illustrated in FIG. 7B, a first electronic drawing (preferably in a first layer of the drawing) is made over the imagery comprising lines A, B and C. Moreover, a second electronic drawing (preferably, but not necessarily, in a second layer of the drawing) is made over to imagery comprising lines E, F, G and H. Note that in this illustrated example, at least a segment of line A is substantially overlapping with at least a segment of line E. Thus, for example, roof plane 715 outlined by E, F, G and H may comprise a flat roof (0 pitch) porch whereas the remainder of the roof structure 701 may comprise a hip roof over a rectangular house, the hip roof being depicted in a plan view with two triangles and two isosceles rhombuses, as shown.

[00123] Note further that FIG. 7B preferably is depiction of a deliverable, such as a report (and/or a screen shot), and optionally and more preferably is part of an interactive computer file. In this regard, it may include, optionally, table

720 and/or 721, as well as any of the other tables and/or fields and/or features previously depicted in the previous drawings. For example, table 721 includes at least columns with a line and a column for the attribute, which preferably in this context is the non-dimensional attribute. Note in the example of these substantially overlapping lines A and E, A has the attribute of being a gutter free edge, whereas E has the attribute label "common".

[00124] In this regard, the label "common" also corresponds to Line E' in connection with roof plane 717' illustrated in isolation as roof plane 717. Other terms may be used instead of "common", but this indication denotes two lines that are substantially overlapping and in which the main purpose of the line is merely for dissecting a common roof plane, normally for determining square feet area, as opposed to a non-dimensional attribute. This is because such "common" lines, in a sense, are imaginary between roof plane 715 and roof plane 717' and/or 717. Alternatively, in the context of this building the attribute of line E could be "flashing" (instead of line Y being flashing) based on the reasonable assumption that this flat planed porch roof abuts the side of the building and has roof flashing along line Y. However, in such situation by denoting line E as flashing, in lieu of line Y, since they are of common length, this is merely a substitute for the total linear estimate of flashing of the type illustrated, for example at 513 (FIG. 20 6) and/or table 521 (FIG. 51).

[00125] Plane 716 illustrates a minimum number of three lines, A, B and C, to denote the area of plane 716. Conversely, note that plane 715 includes not only three lines, lines E, F and G, but also a fourth line, line H since it is

rectilinear. This is consistent with the claiming of the present invention being open-ended in that at least three lines are required to define a roof plane, but it may be more. Likewise, a plane may be defined by 5, 6, 7 or more lines depending on its particular geometry.

[00126] As mentioned, it is not required, but is preferable that the lines defining the respective plane 715 and 716 are separate from each other, and even more preferable that they be in separate computer file layers overlaying one another. This helps facilitate having differing attributes along a common line as previously described in connection with the substantial overlap of lines A and E. Optionally, in the report the lines may be shown in different colors (and/or patterns) designated for each non-dimensional attribute.

[00127] Moreover, one or more additional adjustment planes, such as adjustment plane 717 prime, also depicted as free standing adjustment plane 717 may optionally be provided. This allows generating computer memory at least one adjustment roofing plane, such as by drawing lines E', X, Y and Z (as well as others). This is useful for a variety of situations, such as, for example, to adjust for portions of the roof structure which are not fully visible from the aerial imagery. This is shown in FIG. 7A and 7B in that due to the overhanging eve of the hip roof of the house in plane 716, part of the porch's roof structure is hidden by the overhanging roof hang. This hidden portion is depicted by roof plane 717' and/or 717.

[00128] It should also be noted that optionally, this adjustment plane does not necessarily have to be graphically depicted, as shown in FIG. 7B. Rather, or

in addition, an additional numeric field 20 may be provided. For example, in FIG. 5F, the planes A-P are shown with their respective areas, and in some total of such areas. In this context, with or without a graphical depiction, an additional "plane" row may be provided denoted "adjustment" or otherwise with a numeric field allowing user entry of an area (square foot or otherwise) number be typed in or otherwise imported. Thus, the adjustment plane 717 (FIG. 7B) even if not graphically depicted, might have known dimensions of, for example, 20 feet wide, with a two foot pitch overhand, resulting in an additional 40 feet of area. In this situation, in the adjustment field the user might simply enter the value "40" in square footage terms for the adjustment field. This adjustment field will be added to the sum total, such as shown in the table of FIG. 5E. Note also that the adjustment value may be negative for a variety of reasons, given the user the ability to override and reduce the total estimation of square footage for reasons of discounting, or other circumstances.

[00129] Thus, for example, in FIG. 7B at table 21, it is denoted in that table as plane 717 with corresponding area of 40 square feet may correspond to a report that it is 20 feet wide (line E prime times 2 feet deep under the eaves, lines X and/or Z, thereby resulting in the calculation of 40 square feet. Or, as described above, alternatively with or without graphic depiction of plane 717, the user might simply enter the value "40" square feet in the area field of table 721.

[00130] FIG. 7C and 7D, using the same structure of 7A and 7B, illustrates another feature which is optional, and may be used alone, or in connection with one or more of the features previously described. In particular, it provides for a

computer data processing means that identifies light and dark contrast between adjacent roof planes, such as roof planes 716 and 718, and based on that automatically generates at least one border line, such as for example line 719 shown in FIG. 7D between such roof plane 716 and 718. In this regard, note that as illustrated in FIG. 7C and D, roof plane 716 is shown as shaded. This represented in imagery of shadowing, typically caused by sun or other lighting casting different degrees of shadow in brightness and darkness depending on the orientation of the roof plane with the source of the light. The generation of various lines, such as line 719, is automatically computer generated. This may be done by a variety of techniques borrowed from the separate field of computer face recognition used in connection with digital images such as for security purposes. This may be done to create some or all of the line values, or more preferably at least starting point default lines drawing by the computer. However, optionally the default generation of the lines can be done after perimeter lines P, around the entire outer perimeter of the roof structure 701, having drawn ordinarily by a human user. This has the advantage of establishing a closed, finite area within the region for which the computer software automatically generates one or more of the lines separating the geometries of the separate roof planes. Preferably, this is done by generating and labeling discreet lines which may be overridden by the user, such as deleting extraneous or erroneous or duplicative lines and/or moving them. Moreover, optionally such lines may be generated as the subparts of geometric shapes set as presumptive default

shapes common in roof planes. This normally would include rectangles, triangles and rhombuses.

[00131] Additionally, such automatic and/or default generation of lines may optionally be coupled with the previously described pitch generation algorithms. In this way, default pitches may be generated by the computer and depicted in the report output. Again, this can be overridden by the user, including the vendor of such report information.

[00132] Note also that in FIG. 7A-7D, the various lettered lines (A, B, C, E, F, G, H), are illustrated here slightly offset from the actual underlying line in the building imagery. In practice, preferably so as to maximize accuracy, there is not such offset. Rather, the offset is depicted here in FIG. 7A-D merely for drawing clarity to separately depict the line in the aerial image from the computer drawn line overlaying the image.

[00133] Another optional feature is that the information, including reporting, may be made to interface electronically (and/or manually) with other products. For example, the information provided here may be uploaded or transferred to Xactimate™ Insurance estimating software known in the prior art. Naturally, this feature, while helpful, is not required.

What is claimed:

1. A process for determining attributes of a roof structure of a real-world three-dimensional building, comprising the acts of:

providing at least one computer input field for a user to input first location data generally corresponding to the location of the building;

providing visual access to an aerial image of a region including the roof structure of the building corresponding to said first location data, the aerial image taken from a straight down overhead view with respect to the roof structure;

on the aerial image of the region, providing a visual marker that is moveable on a computer monitor around said region, said visual marker initially corresponding to said first location data, wherein said visual marker may be moved to a final location on top of the building to more precisely identify the location of the building roof structure, the final location having location coordinates;

providing a computer input capable of signaling user-acceptance of the final location of said marker; and,

providing visual access to one or more oblique images of an aerial imagery database corresponding to location coordinates of the final location.

2. The process of claim 1 and wherein said first location data comprised street address data, and wherein said location coordinates of said final location

are translated to latitude and longitude coordinates.

3. The process of claim 2 and wherein said image corresponding to the first location data is from a first imagery database from which said final location is selected and is internet-based imagery having a corresponding street address look up field, and wherein the aerial imagery database is a second imagery database, and further comprising the act of:

using said latitude and longitude coordinates to access imagery from the second imagery database.

4. The process of claim 3 and further comprising the act of:

generating, in computer memory, outline drawings around outlines corresponding to roof planes based on tracing from said imagery from said second imagery database.

5. The process of claim 4 and wherein said providing acts are provided over an internet interface.

6. The process of claim 5 and further comprising the act of:

providing a printed report that includes an aerial image of the building roof structure.

7. The process of claim 1 and further comprising the act of:

generating, in computer memory, outline drawings around outlines corresponding to roof planes based on tracing from said imagery.

8. The process of claim 1 and wherein said providing acts are provided over an internet interface.

9. The process of claim 1 and further comprising the act of:
providing a printed report that includes an aerial image of the building roof structure.

10. The process of claim 9 and wherein the printed report includes a latitude reference and/or a longitude reference corresponding to the location of the building roof structure.

11. The process of claim 1, wherein the user is a customer.

12. The process of claim 1, wherein the user is a commercial vendor.

13. The process of claim 1, further comprising providing visual access to the one or more images of the aerial imagery database corresponding to the final location data.

14. A non-transient computer memory storing computer logic, that when executed by computer hardware causes the computer hardware to determine attributes of a roof structure of a real-world three-dimensional building by:

providing at least one computer input field for a user to input first location data generally corresponding to the location of the building;

providing visual access to an aerial image of a region including the roof structure of the building corresponding to said first location data, the aerial image taken from a straight down overhead view with respect to the roof structure;

on the aerial image of the region, providing a visual marker that is moveable on a computer monitor around said region, said visual marker initially corresponding to said first location data, wherein said visual marker may be moved to a final location on top of the building to more precisely identify the location of the building roof structure, the final location having location coordinates;

providing a computer input capable of signaling user-acceptance of the final location of said marker; and,

providing visual access to one or more oblique images of an aerial imagery database corresponding to location coordinates of the final location.

15. The non-transient computer memory of claim 14, wherein said first location data comprised street address data, and wherein said location

coordinates of said final location are translated to latitude and longitude coordinates.

16. The non-transient computer memory of claim 15, wherein said aerial image corresponding to the first location data is from a first imagery database from which said final location is selected and is internet-based imagery having a corresponding street address look up field, and wherein the aerial imagery database is a second imagery database, and wherein said computer logic when executed by computer hardware causes the computer hardware to:

use said latitude and longitude coordinates to access imagery from the second imagery database.

17. The non-transient computer memory of claim 16, wherein said computer logic when executed by computer hardware causes the computer hardware to:

generate, in computer memory, outline drawings around outlines corresponding to roof planes based on tracing from said imagery from said second imagery database.

18. The non-transient computer memory of claim 17, wherein said computer logic when executed by computer hardware causes the computer hardware to:

provide a printed report that includes an aerial image of the building roof structure.

19. The non-transient computer memory of claim 14, wherein said computer logic when executed by computer hardware causes the computer hardware to:

generate, in computer memory, outline drawings around outlines corresponding to roof planes based on tracing from said imagery.

20. The non-transient computer memory of claim 14, wherein said providing acts are provided over an internet interface.

ABSTRACT

Processes and systems are disclosed for determining attributes of a roof structure of real-world three-dimensional building(s), including providing computer input field(s) for a user to input location data generally corresponding to the location of the building, providing visual access to a nadir image of a region including the roof structure of the building; on the nadir image of the region, providing a visual marker that is moveable on the computer monitor around the region, the visual marker initially corresponding to the location data but which may be moved to a final location, having location coordinates, on top of the building to more precisely identify the location of the building roof structure; providing a computer input capable of signaling user-acceptance of the final location of the marker; and, providing visual access to one or more oblique images of an aerial imagery database corresponding to location coordinates of the final location.

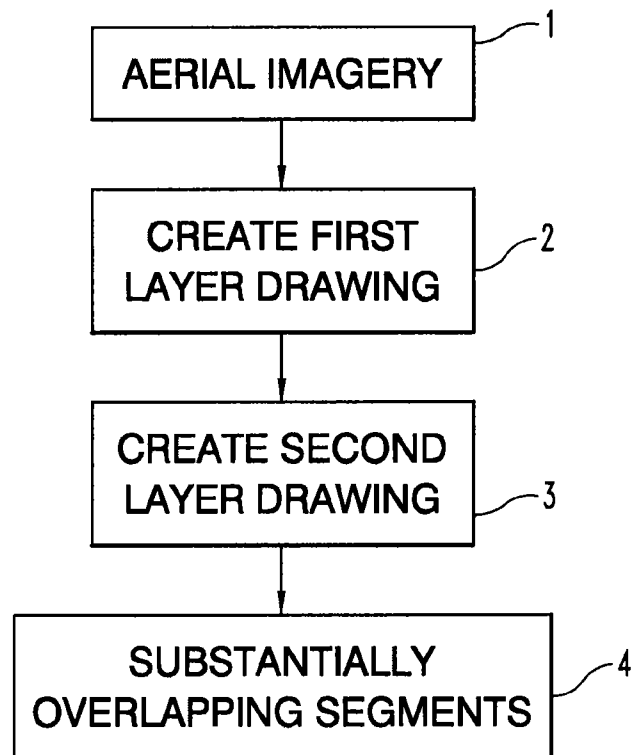


Fig. 1

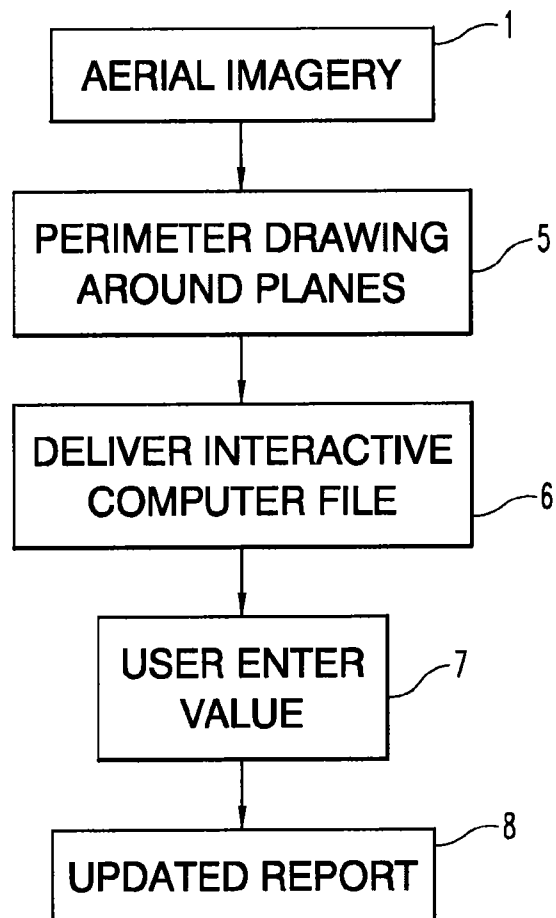


Fig. 2

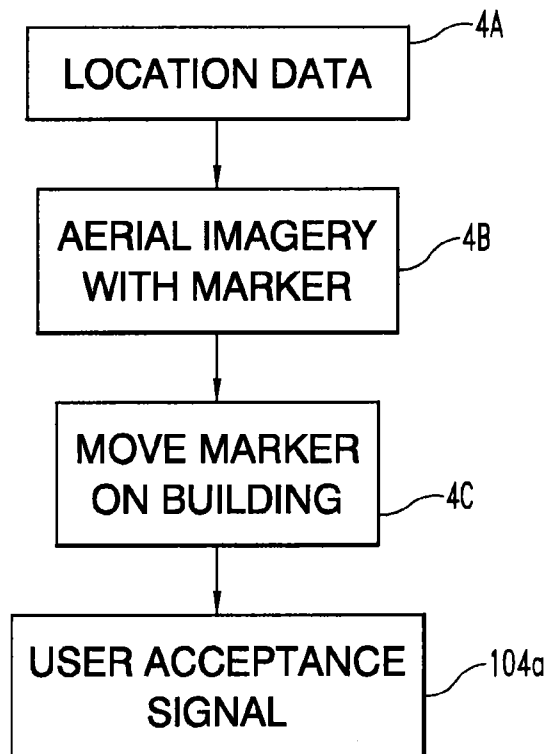


Fig. 3

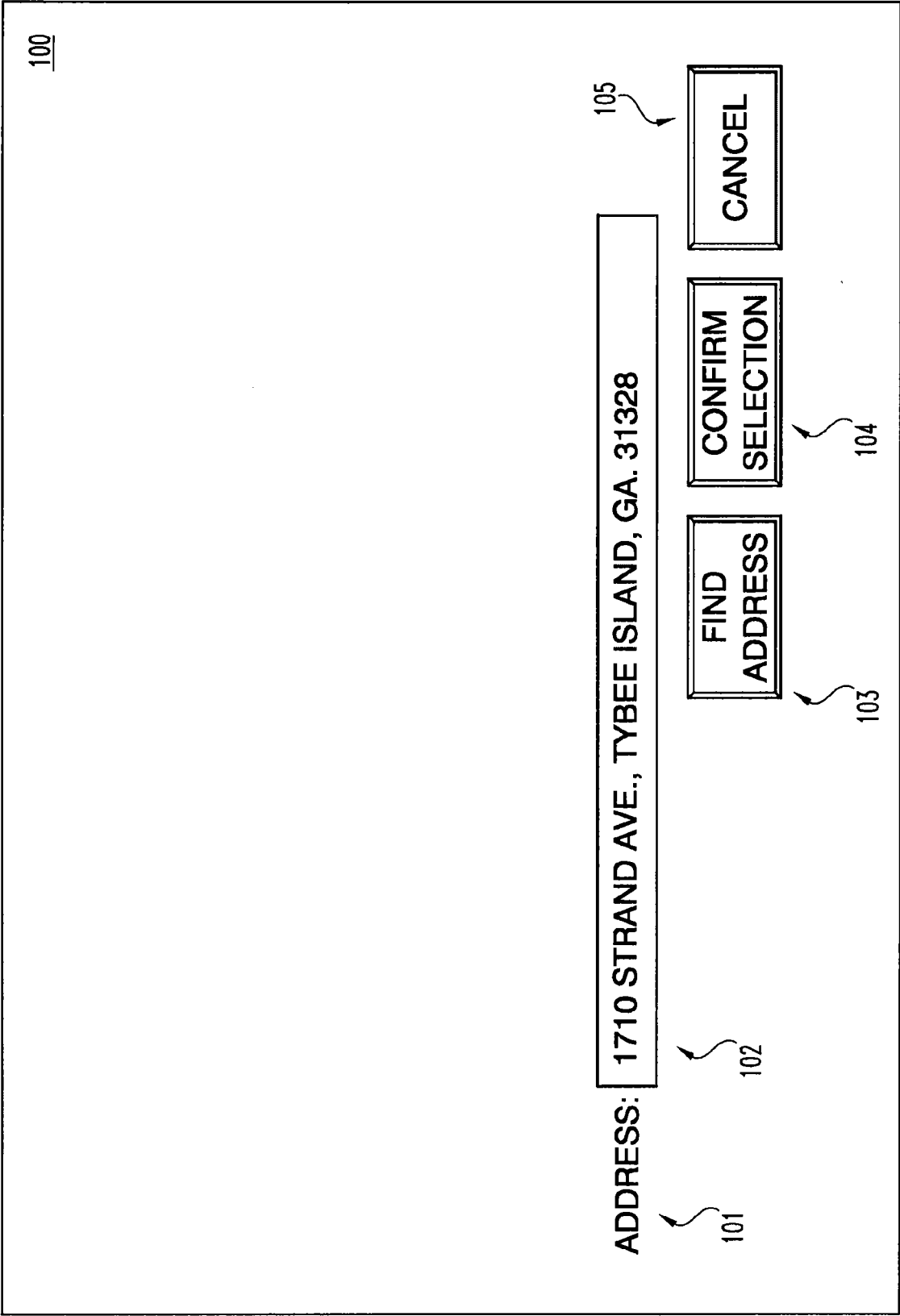


Fig. 4A

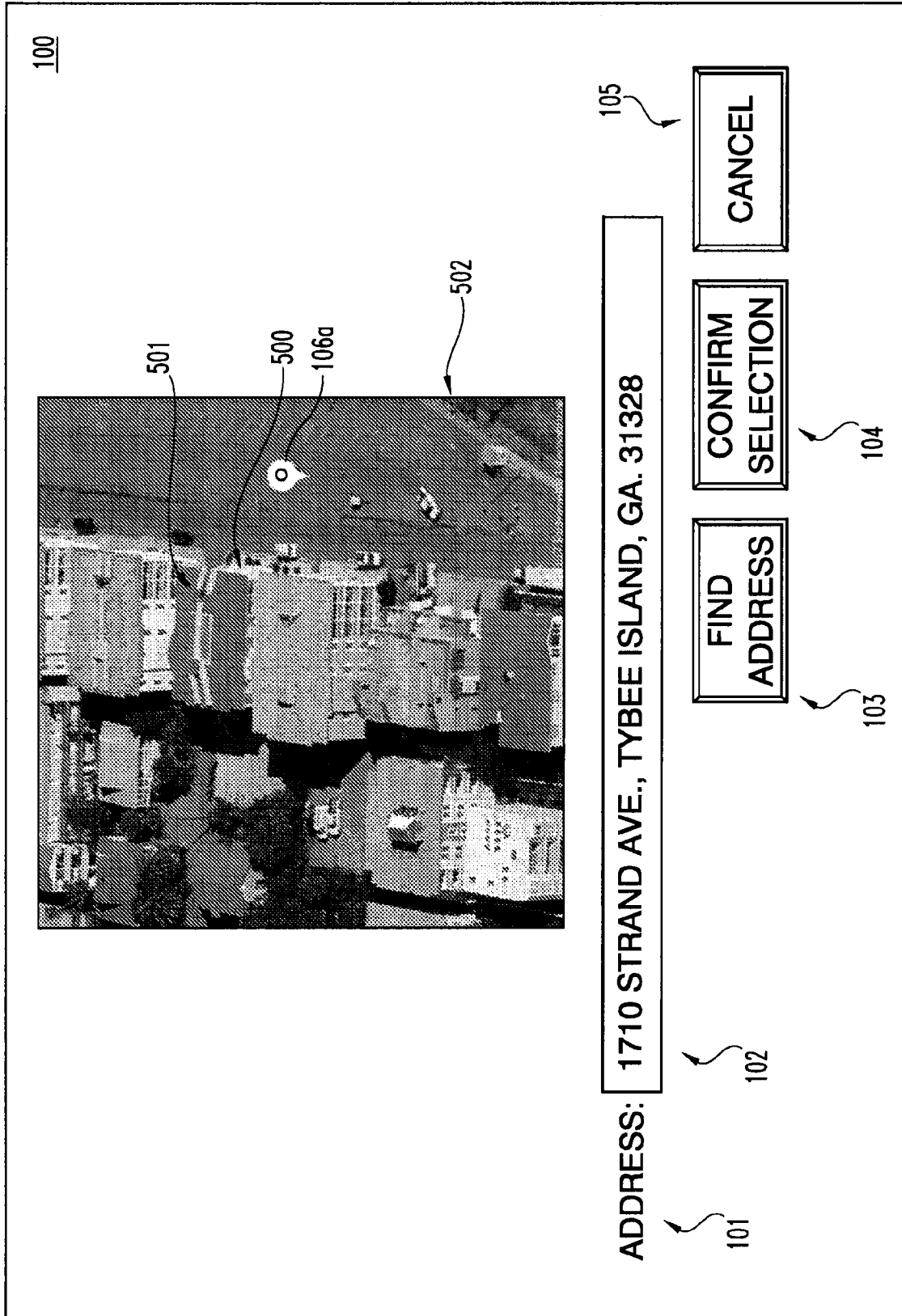


Fig. 4B

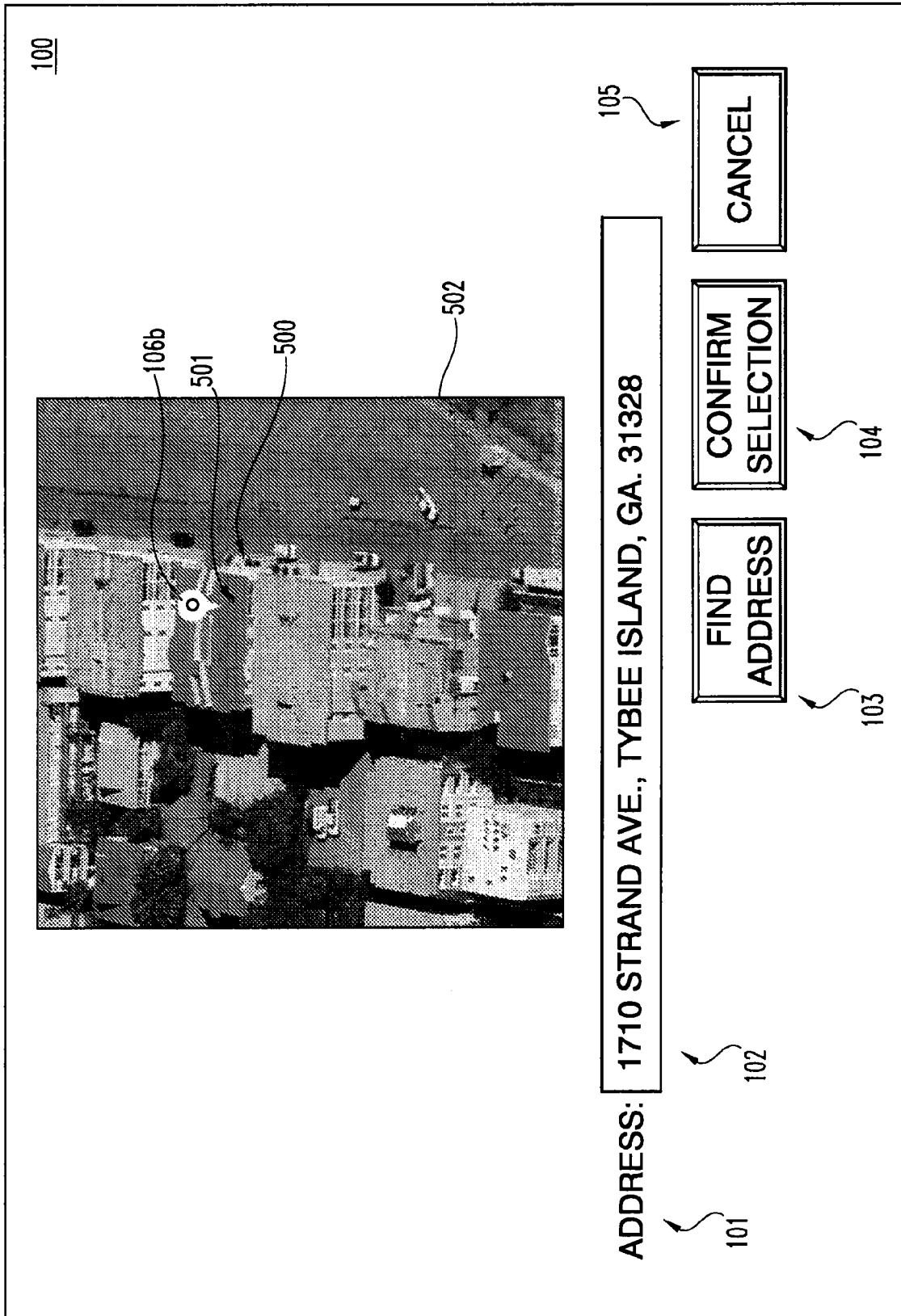


Fig. 4C

ADDRESS TO BE MEASURED:
1710 STRAND AVE.
CITY:
TYBEE ISLAND
STATE:
GA.
ZIP CODE
31328
NUMBER OF PLANES
RUSH PROCESSING
OPTIONAL:
REFERENCE NUMBER:
CLAIM NUMBER:

108
109
110
111
112
113
114
115

100

106b

502a

☒ I have reviewed the image and confirm my selection is correct.

LATITUDE REFERENCE:
38.7492

LONGITUDE REFERENCE:
-85.2748

116
ADD TO CART

Fig. 4D

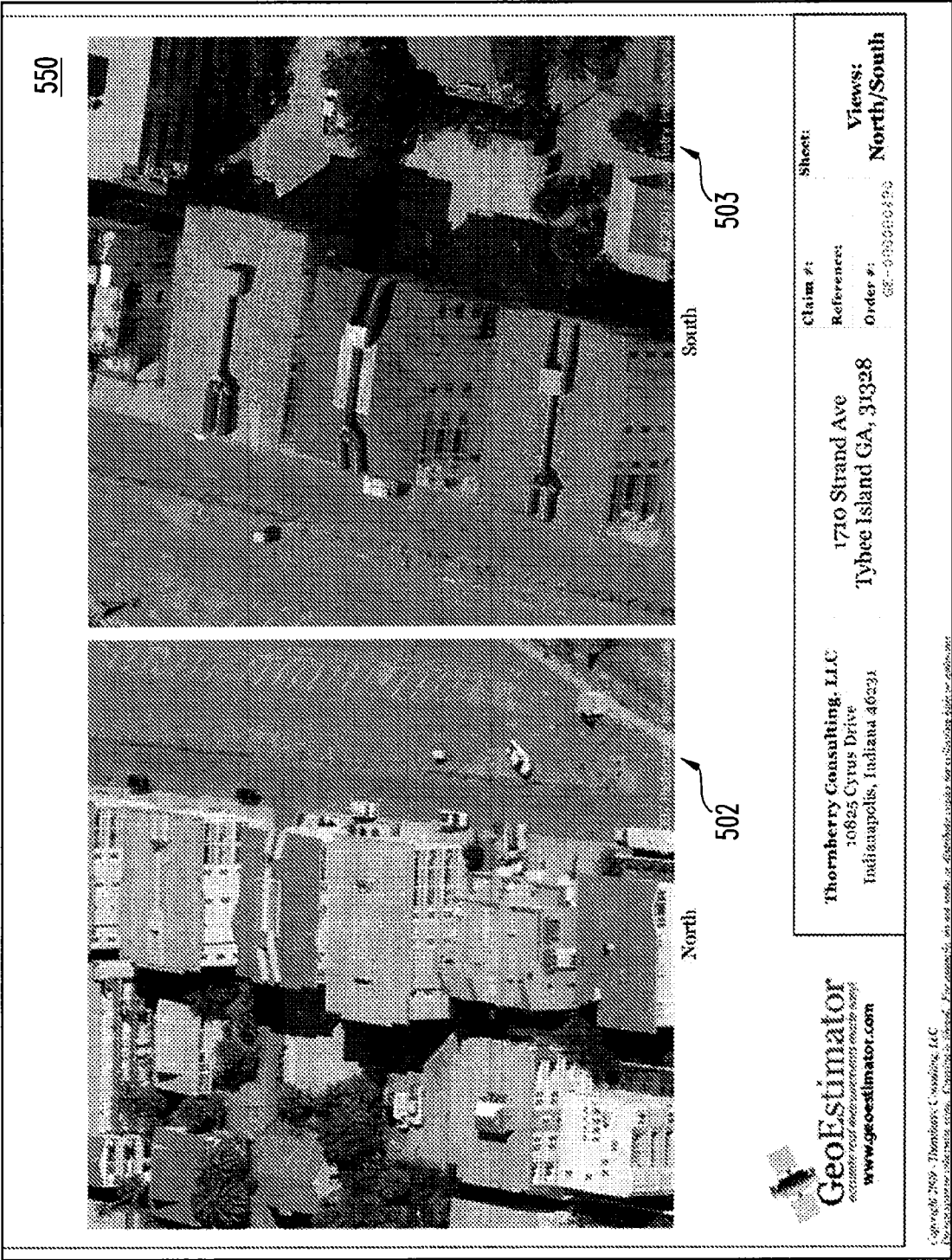


Fig. 5A

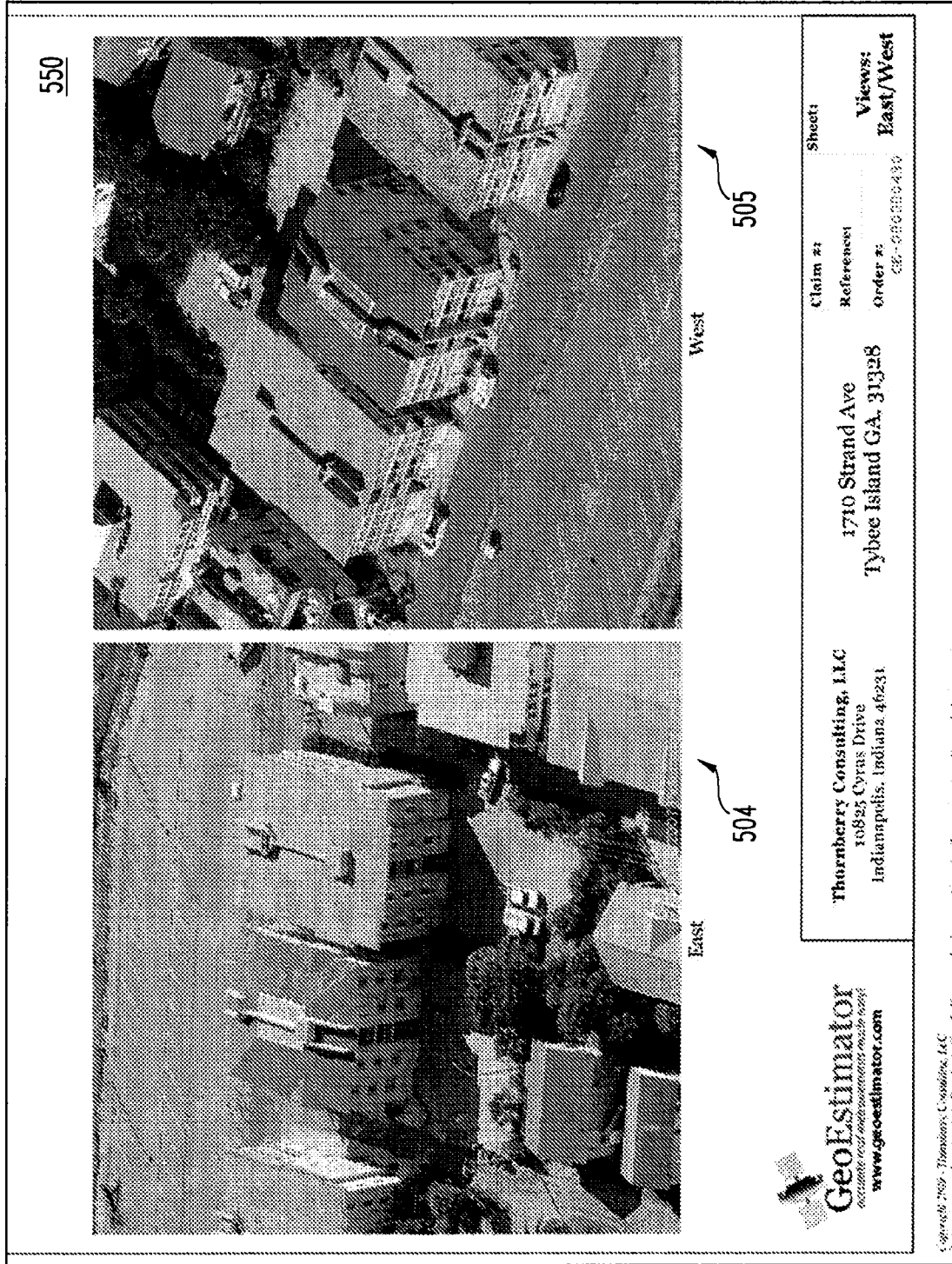


Fig. 5B

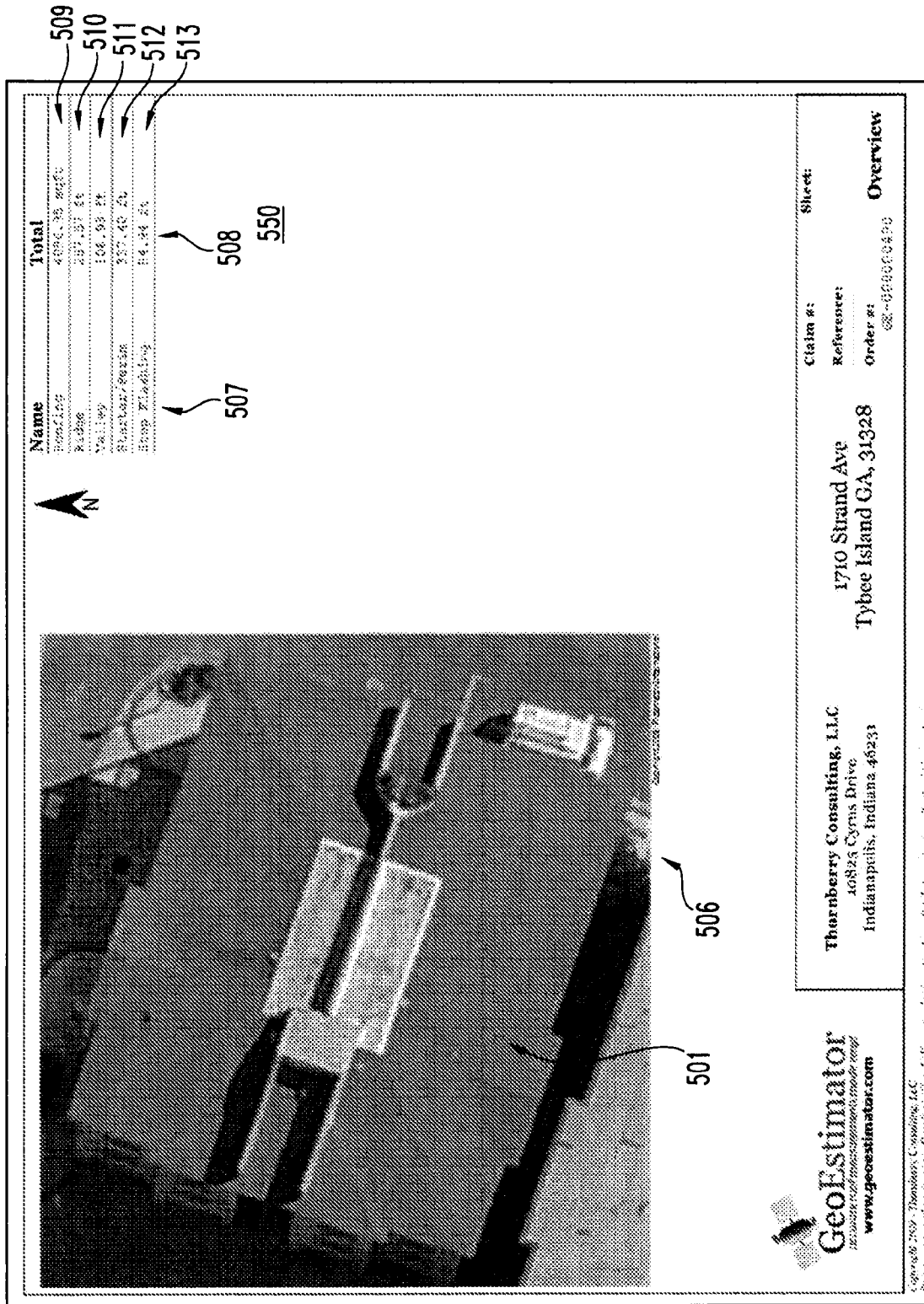


Fig. 5C

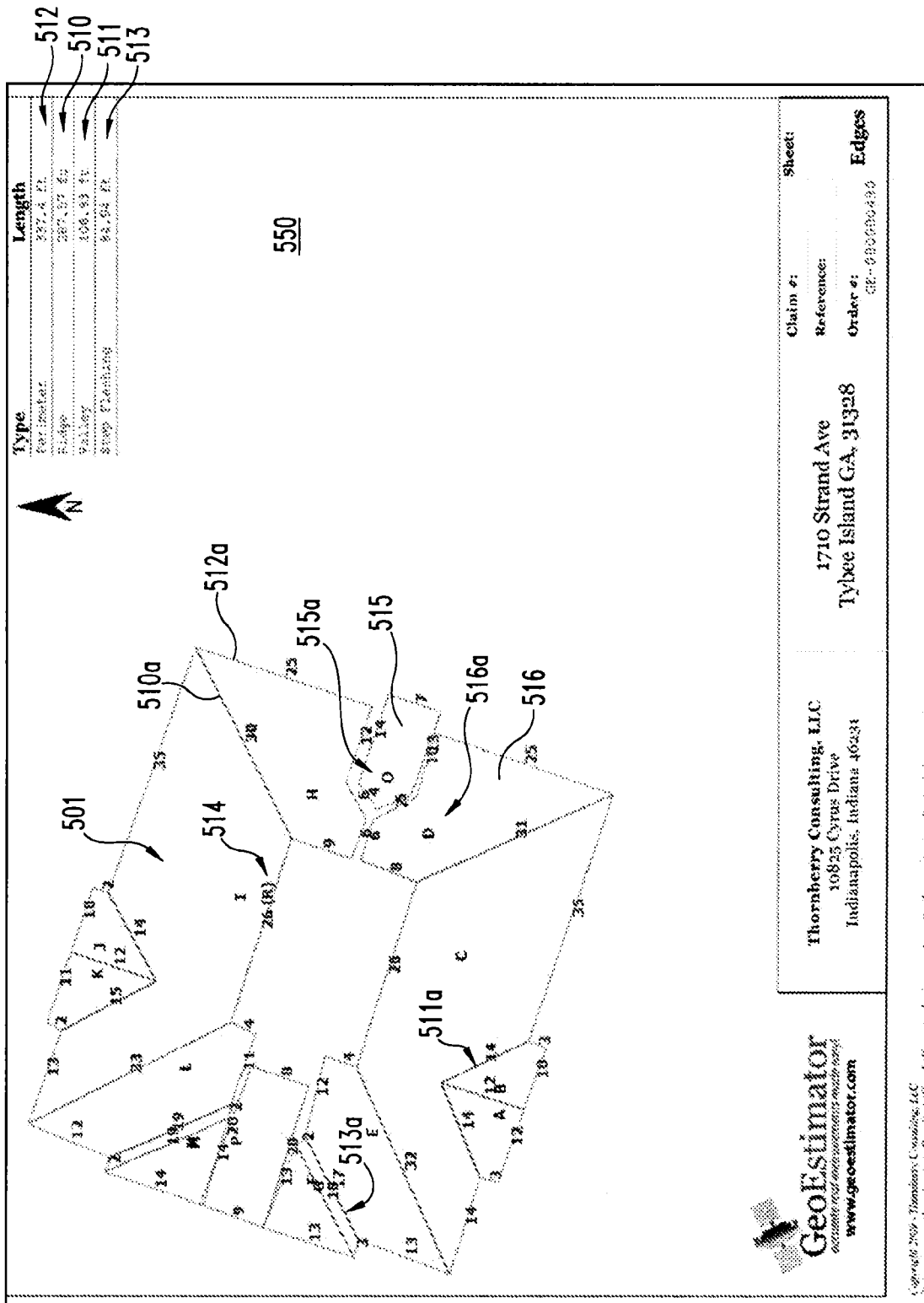


Fig. 5D

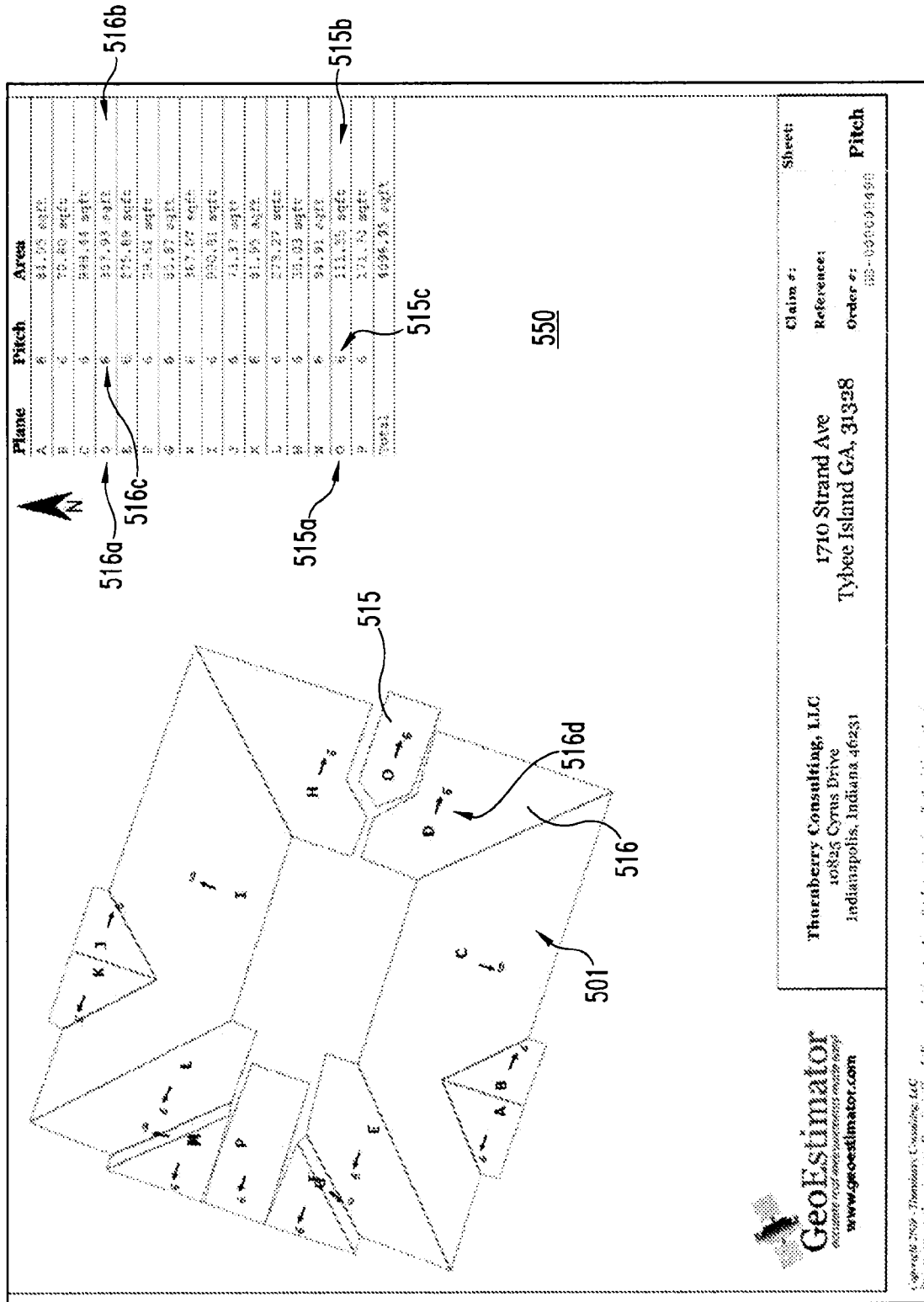


Fig. 5E

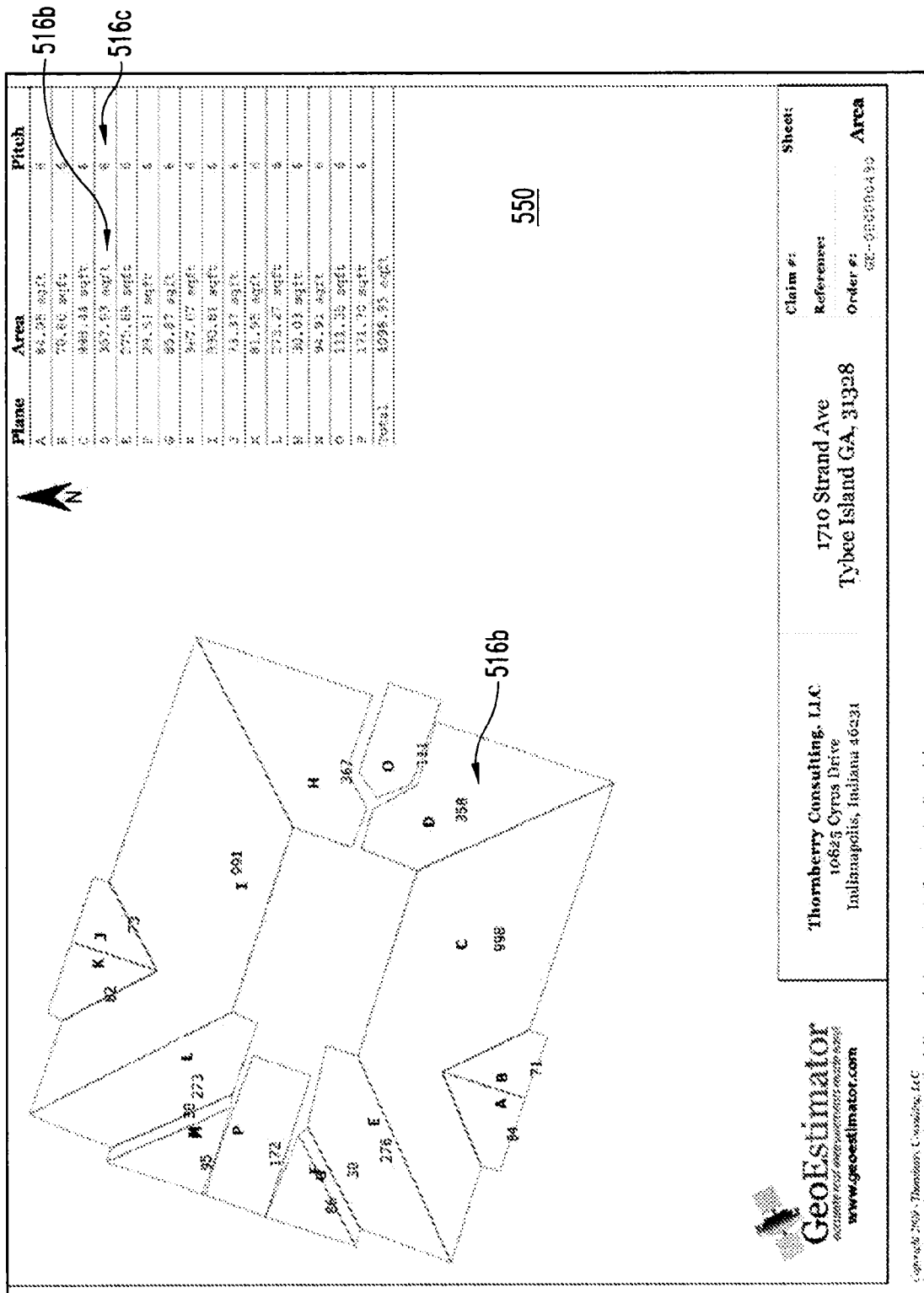


Fig. 5F

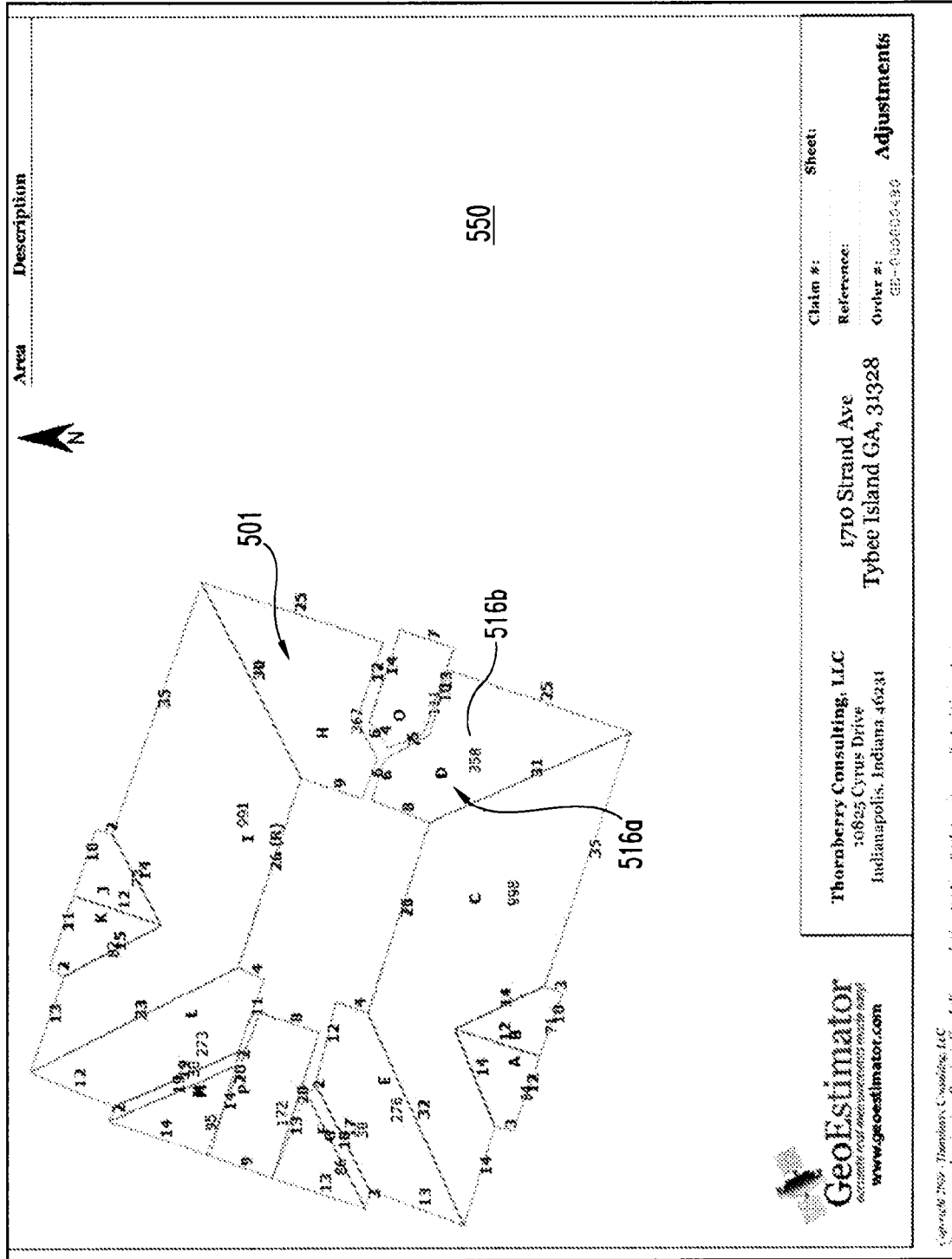


Fig. 5G

Roofing		Ridge		Valley	
Plane	Area	Plane	Length	Plane	Length
A	64.05 sqft	A	11.29 ft	A	14.58 ft
B	76.80 sqft	B	0 ft	B	13.95 ft
C	992.13 sqft	C	29.09 ft	C	0 ft
D	357.25 sqft	D	8.18 ft	D	7.05 ft
E	275.89 sqft	E	16.94 ft	E	17.03 ft
F	24.31 sqft	F	17.88 ft	F	0 ft
G	85.87 sqft	G	0 ft	G	0 ft
H	507.07 sqft	H	36.94 ft	H	35.94 ft
I	480.31 sqft	I	53.65 ft	I	24.48 ft
J	73.37 sqft	J	12.15 ft	J	0 ft
K	63.95 sqft	K	0 ft	K	0 ft
L	273.27 sqft	L	15.10 ft	L	15.08 ft
M	30.03 sqft	M	18.08 ft	M	0 ft
N	94.91 sqft	N	0 ft	N	0 ft
O	131.35 sqft	O	0 ft	O	0 ft
P	131.70 sqft	P	0 ft	P	0 ft
Total	4056.95 sqft	Total	287.57 ft	Total	156.13 ft

517

518

519

550


GeoEstimator
 accurate roof measurements made easy
www.geoestimator.com

Thornberry Consulting, LLC
 10825 Cyrus Drive
 Indianapolis, Indiana 46231

1710 Strand Ave
Tybee Island GA, 31328

Claim #:
 Reference:
 Order #: 455-000000490

Sheet:
Tables

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Fig. 5H

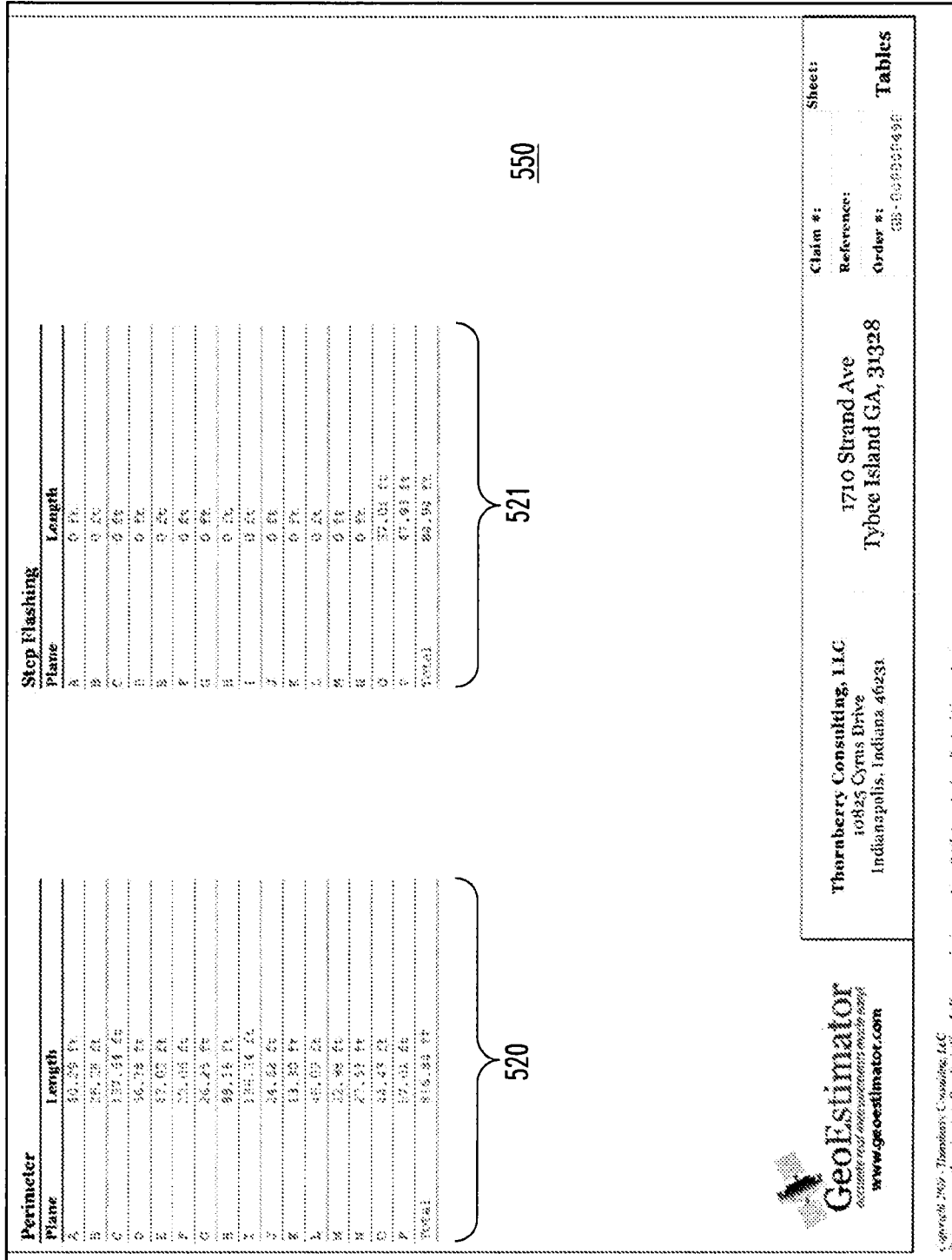


Fig. 5I

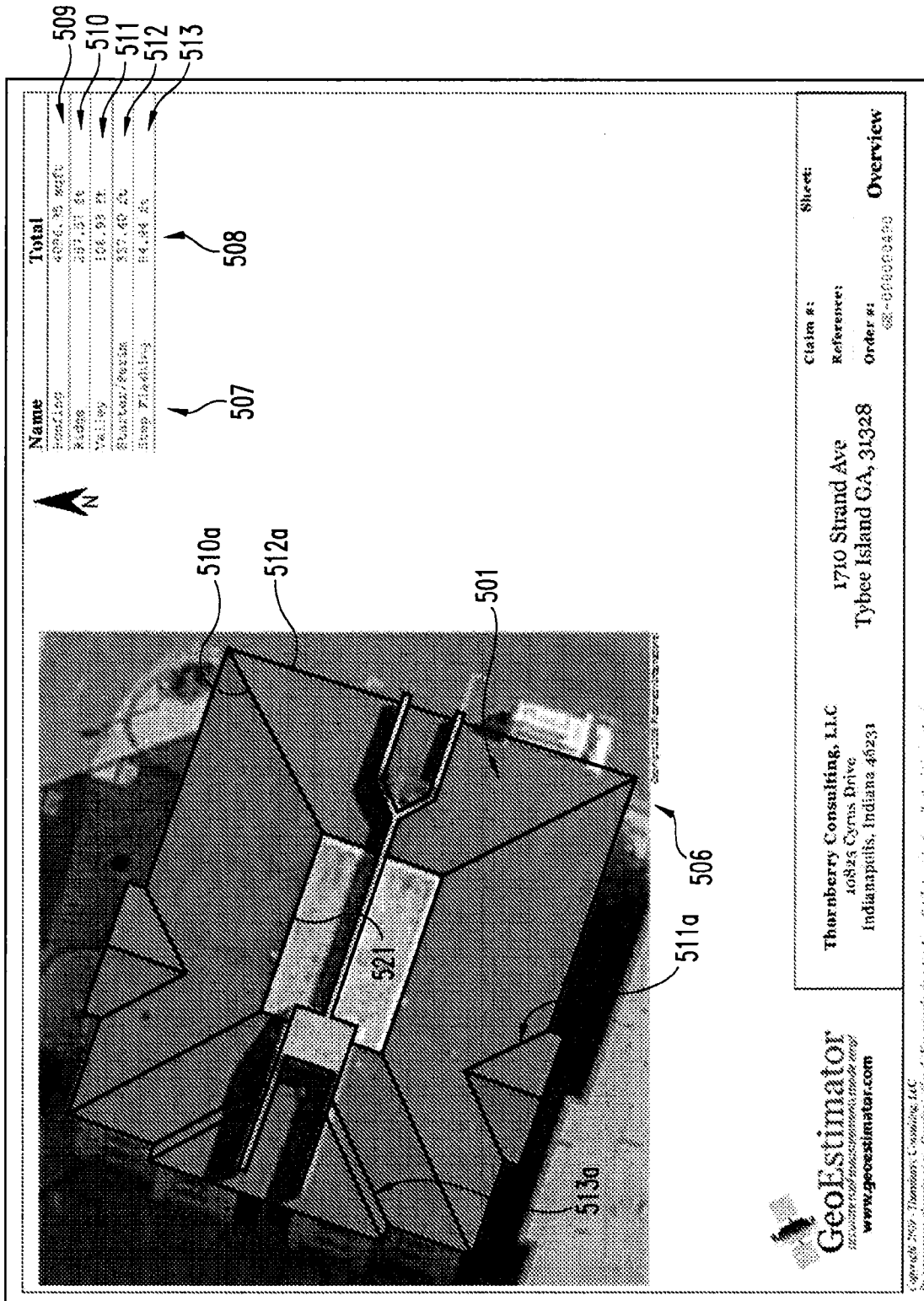


Fig. 6

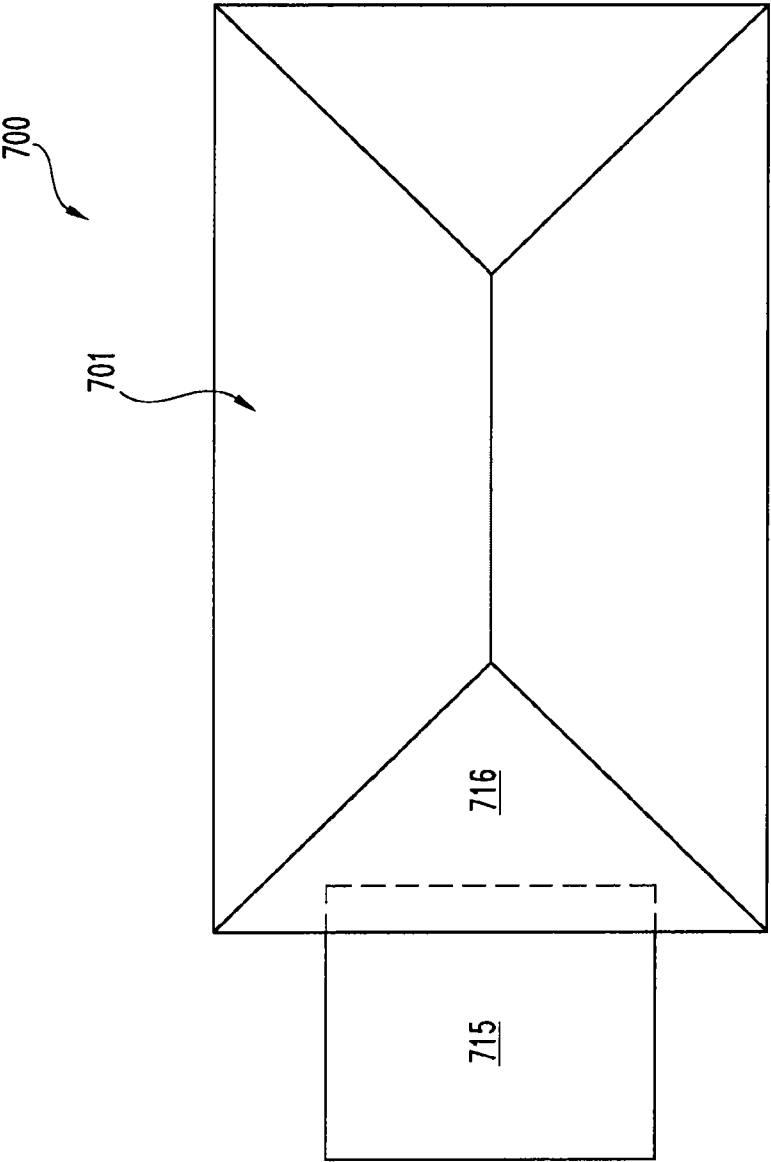


Fig. 7A

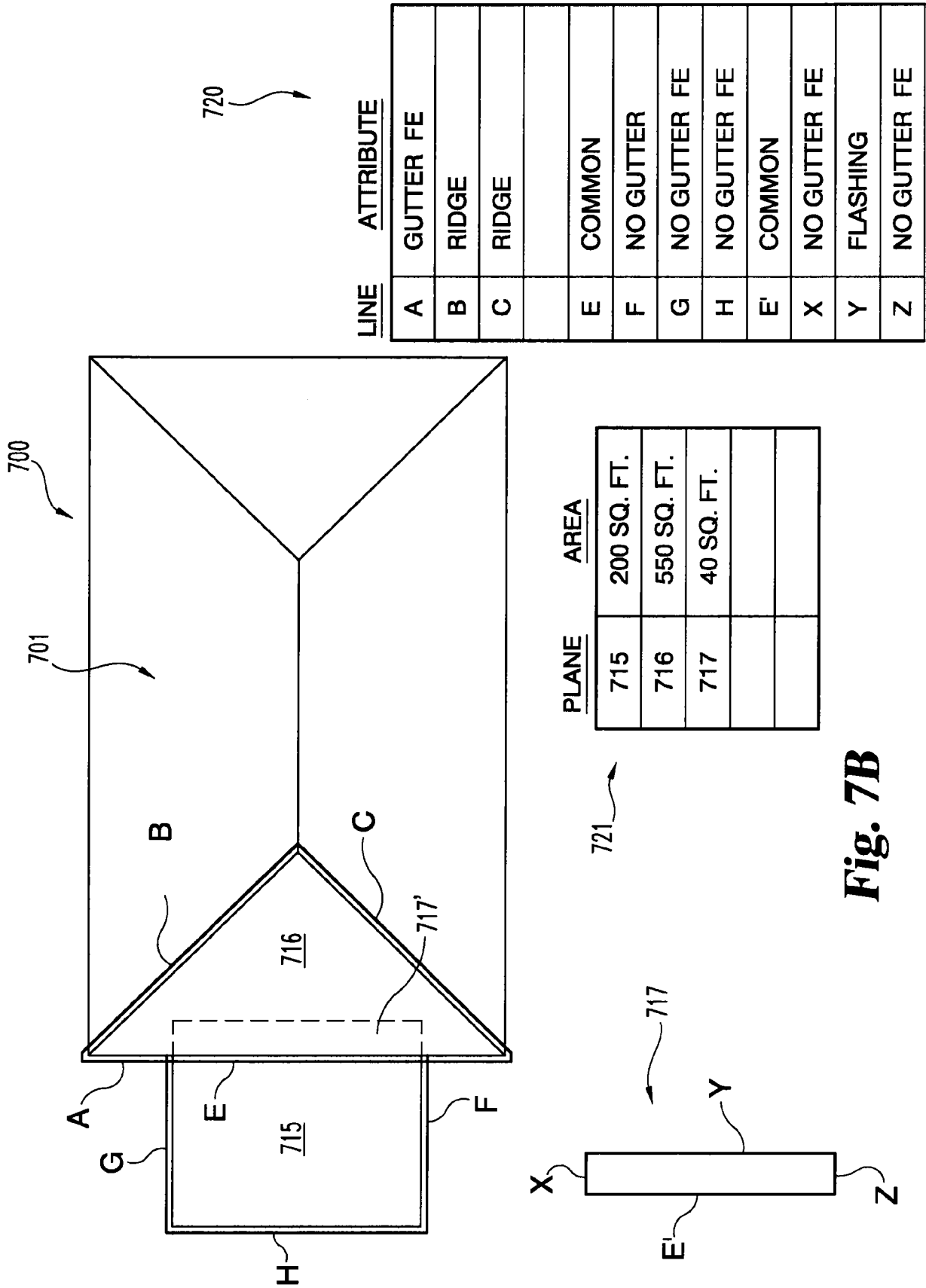
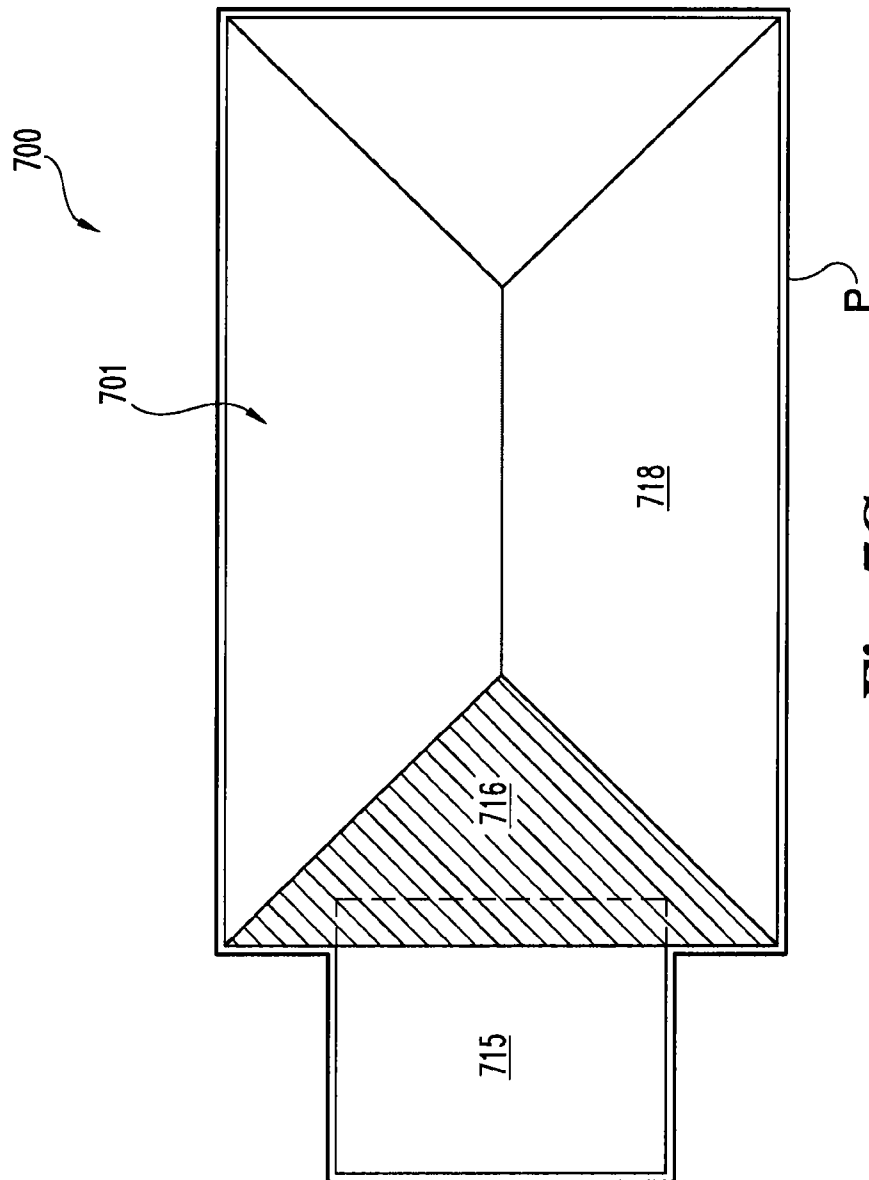


Fig. 7B



Electronic Patent Application Fee Transmittal

Application Number:

Filing Date:

Title of Invention:

System and Process for Roof Measurement Using Aerial Imagery

First Named Inventor/Applicant Name:

Dale R. Thornberry

Filer:

Marc Alan Brockhaus/Lori Radford

Attorney Docket Number:

6338.253

Filed as Small Entity

Utility under 35 USC 111(a) Filing Fees

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Utility filing Fee (Electronic filing)	4011	1	70	70
Utility Search Fee	2111	1	300	300
Utility Examination Fee	2311	1	360	360

Pages:

Claims:

Miscellaneous-Filing:

Petition:

Patent-Appeals-and-Interference:

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				
Miscellaneous:				
Total in USD (\$)				730

Electronic Acknowledgement Receipt

EFS ID:	16773520
Application Number:	14018943
International Application Number:	
Confirmation Number:	1069
Title of Invention:	System and Process for Roof Measurement Using Aerial Imagery
First Named Inventor/Applicant Name:	Dale R. Thornberry
Customer Number:	30589
Filer:	Marc Alan Brockhaus/Lori Radford
Filer Authorized By:	Marc Alan Brockhaus
Attorney Docket Number:	6338.253
Receipt Date:	05-SEP-2013
Filing Date:	
Time Stamp:	15:36:06
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	\$730
RAM confirmation Number	2401
Deposit Account	
Authorized User	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
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1	Transmittal of New Application	6338253_Transmittal.pdf	76433 0f98fe4febfc24e8d0265f58c509c14bb90241b6	no	1
Warnings:					
Information:					
2	Application Data Sheet	6338253_ADS.pdf	310991 939e147212f85affed7192bdc6b4b132dca9ee0d	no	6
Warnings:					
Information:					
This is not an USPTO supplied ADS fillable form					
3		6338253_Application.pdf	1302725 1c9aaba49c6d56fae315ae5d6ff0cfee317c5582	yes	37
	Multipart Description/PDF files in .zip description				
	Document Description		Start	End	
	Specification		1	30	
	Claims		31	36	
	Abstract		37	37	
Warnings:					
Information:					
4	Drawings-only black and white line drawings	6338253_Drawings.pdf	1337999 1dec0f0e03e6d19987711e3e5a3a73119c6928d03	no	21
Warnings:					
The page size in the PDF is too large. The pages should be 8.5 x 11 or A4. If this PDF is submitted, the pages will be resized upon entry into the Image File Wrapper and may affect subsequent processing					
Information:					
5	Fee Worksheet (SB06)	fee-info.pdf	32749 717dab43971ffac8e77dcd028d4010805cc6b90d3	no	2
Warnings:					
Information:					
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New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875						Application or Docket Number 14/018,943	
APPLICATION AS FILED - PART I							
(Column 1)		(Column 2)		SMALL ENTITY		OTHER THAN SMALL ENTITY	
FOR	NUMBER FILED	NUMBER EXTRA	RATE(\$)	FEE(\$)		RATE(\$)	FEE(\$)
BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	70		N/A	
SEARCH FEE (37 CFR 1.16(k), (l), or (m))	N/A	N/A	N/A	300		N/A	
EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	360		N/A	
TOTAL CLAIMS (37 CFR 1.16(j))	20	minus 20 = *	x 40 =	0.00	OR		
INDEPENDENT CLAIMS (37 CFR 1.16(h))	2	minus 3 = *	x 210 =	0.00			
APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).			0.00			
MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				0.00			
			TOTAL	730		TOTAL	
* If the difference in column 1 is less than zero, enter "0" in column 2.							
APPLICATION AS AMENDED - PART II							
(Column 1)		(Column 2)		(Column 3)		SMALL ENTITY	
AMENDMENT A	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE(\$)	ADDITIONAL FEE(\$)		RATE(\$)
	Total (37 CFR 1.16(i))	*	Minus **	=	x =	OR	x =
	Independent (37 CFR 1.16(h))	*	Minus ***	=	x =	OR	x =
	Application Size Fee (37 CFR 1.16(s))					OR	
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))					OR	
				TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE
(Column 1)		(Column 2)		(Column 3)		SMALL ENTITY	
AMENDMENT B	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE(\$)	ADDITIONAL FEE(\$)		RATE(\$)
	Total (37 CFR 1.16(i))	*	Minus **	=	x =	OR	x =
	Independent (37 CFR 1.16(h))	*	Minus ***	=	x =	OR	x =
	Application Size Fee (37 CFR 1.16(s))					OR	
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))					OR	
				TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE
* If the entry in column 1 is less than the entry in column 2, write "0" in column 3. ** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20". *** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3". The "Highest Number Previously Paid For" (Total or Independent) is the highest found in the appropriate box in column 1.							



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United States Patent and Trademark Office
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P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
14/018,943	09/05/2013	Dale R. Thornberry	6338.253

30589
DUNLAP CODDING, P.C.
PO BOX 16370
OKLAHOMA CITY, OK 73113

CONFIRMATION NO. 1069
FORMALITIES LETTER



Date Mailed: 09/24/2013

NOTICE TO FILE MISSING PARTS OF NONPROVISIONAL APPLICATION

FILED UNDER 37 CFR 1.53(b)

Filing Date Granted

Items Required To Avoid Abandonment:

An application number and filing date have been accorded to this application. The item(s) indicated below, however, are missing.

Applicant is given **TWO MONTHS** from the date of this Notice within which to file all required items below to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

- A surcharge (for late submission of the basic filing fee, search fee, examination fee or inventor's oath or declaration) as set forth in 37 CFR 1.16(f) of \$ **70** for a small entity in compliance with 37 CFR 1.27, must be submitted.

SUMMARY OF FEES DUE:

Total fee(s) required within **TWO MONTHS** from the date of this Notice is \$ **70** for a small entity

- \$ **70** Surcharge.

Items Required To Avoid Processing Delays:

Applicant is notified that the above-identified application contains the deficiencies noted below. No period for reply is set forth in this notice for correction of these deficiencies. However, if a deficiency relates to the inventor's oath or declaration, the applicant must file an oath or declaration in compliance with 37 CFR 1.63, or a substitute statement in compliance with 37 CFR 1.64, executed by or with respect to each actual inventor no later than the expiration of the time period set in the "Notice of Allowability" to avoid abandonment. See 37 CFR 1.53(f).

- A properly executed inventor's oath or declaration has not been received for the following inventor(s):
Dale R. Thornberry
Chris T. Thornberry
Mark F. Garringer

Applicant may submit the inventor's oath or declaration at any time before the Notice of Allowance and Fee(s) Due, PTOL-85, is mailed.

Replies must be received in the USPTO within the set time period or must include a proper Certificate of Mailing or Transmission under 37 CFR 1.8 with a mailing or transmission date within the set time period. For more information and a suggested format, see Form PTO/SB/92 and MPEP 512.

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

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Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101



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APPLICATION NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	TOT CLAIMS	IND CLAIMS
14/018,943	09/05/2013	2668	730	6338.253	20	2

CONFIRMATION NO. 1069

30589
DUNLAP CODDING, P.C.
PO BOX 16370
OKLAHOMA CITY, OK 73113

FILING RECEIPT



OC000000063894488

Date Mailed: 09/24/2013

Receipt is acknowledged of this non-provisional patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. **If an error is noted on this Filing Receipt, please submit a written request for a Filing Receipt Correction. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections**

Inventor(s)

Dale R. Thornberry, Carmel, IN;
Chris T. Thornberry, Indianapolis, IN;
Mark F. Garringer, Eaton, IN;

Applicant(s)

Pictometry International Corp., Rochester, NY

Assignment For Published Patent Application

Pictometry International Corp., Rochester, NY

Power of Attorney: None

Domestic Priority data as claimed by applicant

This application is a CON of 13/774,478 02/22/2013 PAT 8542880
which is a CON of 12/470,984 05/22/2009 PAT 8401222

Foreign Applications for which priority is claimed (You may be eligible to benefit from the **Patent Prosecution Highway** program at the USPTO. Please see <http://www.uspto.gov> for more information.) - None.

Foreign application information must be provided in an Application Data Sheet in order to constitute a claim to foreign priority. See 37 CFR 1.55 and 1.76.

Permission to Access - A proper **Authorization to Permit Access to Application by Participating Offices** (PTO/SB/39 or its equivalent) has been received by the USPTO.

If Required, Foreign Filing License Granted: 09/19/2013

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 14/018,943**

Projected Publication Date: 01/02/2014

Non-Publication Request: No

Early Publication Request: No

**** SMALL ENTITY ****

Title

System and Process for Roof Measurement Using Aerial Imagery

Preliminary Class

382

Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications: No

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Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

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Title 37, Code of Federal Regulations, 5.11 & 5.15

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TRANSMITTAL FOR POWER OF ATTORNEY TO ONE OR MORE REGISTERED PRACTITIONERS

NOTE: This form is to be submitted with the Power of Attorney by Applicant form (PTO/AIA/82B) to identify the application to which the Power of Attorney is directed, in accordance with 37 CFR 1.5, unless the application number and filing date are identified in the Power of Attorney by Applicant form. If neither form PTO/AIA/82A nor form PTO/AIA/82B identifies the application to which the Power of Attorney is directed, the Power of Attorney will not be recognized in the application.

Application Number	14/018,943
Filing Date	09/05/2013
First Named Inventor	Dale R. Thornberry
Title	SYSTEM AND PROCESS FOR ROOF MEASUREMENT USING AERIAL IMAGERY
Art Unit	2668
Examiner Name	
Attorney Docket Number	6338.253

SIGNATURE of Applicant or Patent Practitioner			
Signature	<i>Marc A. Brockhaus</i>	Date (Optional)	
Name	Marc A. Brockhaus	Registration Number	40,923
Title (if Applicant is a juristic entity)			
Applicant Name (if Applicant is a juristic entity)			
NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4(d) for signature requirements and certifications. If more than one applicant, use multiple forms.			
☐ *Total of _____ forms are submitted.			

This collection of information is required by 37 CFR 1.131, 1.32, and 1.33. 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 3 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.

Doc Code: PA..

Document Description: Power of Attorney

PTO/AIA/82B (07-13)

Approved for use through 11/30/2014. OMB 0851-0051
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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

POWER OF ATTORNEY BY APPLICANT

I hereby revoke all previous powers of attorney given in the application identified in either the attached transmittal letter or the boxes below.

Application Number

Filing Date

(Note: The boxes above may be left blank if information is provided on form PTO/AIA/82A.)



I hereby appoint the Patent Practitioner(s) associated with the following Customer Number as my/our attorney(s) or agent(s), and to transact all business in the United States Patent and Trademark Office connected therewith for the application referenced in the attached transmittal letter (form PTO/AIA/82A) or identified above:

30589

OR



I hereby appoint Practitioner(s) named in the attached list (form PTO/AIA/82C) as my/our attorney(s) or agent(s), and to transact all business in the United States Patent and Trademark Office connected therewith for the patent application referenced in the attached transmittal letter (form PTO/AIA/82A) or identified above. (Note: Complete form PTO/AIA/82C.)

Please recognize or change the correspondence address for the application identified in the attached transmittal letter or the boxes above to:



The address associated with the above-mentioned Customer Number

OR



The address associated with Customer Number:

OR

Firm or
Individual Name

Dunlap Coddling, P.C.

Address

P.O. Box 16370

City

Oklahoma City

State

Oklahoma

Zip

73113

Country

USA

Telephone

405-607-8600

Email

mbrockhaus@dunlapcoddling.com

I am the Applicant (if the Applicant is a juristic entity, list the Applicant name in the box):



Inventor or Joint Inventor (title not required below)



Legal Representative of a Deceased or Legally Incapacitated Inventor (title not required below)



Assignee or Person to Whom the Inventor is Under an Obligation to Assign (provide signer's title if applicant is a juristic entity)



Person Who Otherwise Shows Sufficient Proprietary Interest (e.g., a petition under 37 CFR 1.46(b)(2) was granted in the application or is concurrently being filed with this document) (provide signer's title if applicant is a juristic entity)

SIGNATURE of Applicant for Patent

The undersigned (whose title is supplied below) is authorized to act on behalf of the applicant (e.g., where the applicant is a juristic entity).

Signature

Date (Optional)

10/25/2013

Name

Steve Schultz

Title

Chief Technology Officer, Pictometry International Corp.

NOTE: Signature - This form must be signed by the applicant in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. If more than one applicant, use multiple forms.



Total of forms are submitted.

This collection of information is required by 37 CFR 1.131, 1.32, and 1.33. 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 3 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.

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.

STATEMENT UNDER 37 CFR 3.73(c)Applicant/Patent Owner: Dale R. Thornberry, Chris T. Thornberry and Mark F. GarringerApplication No./Patent No.: 14/018,943 Filed/Issue Date: 09/05/2013Titled: System and Process for Roof Measurement Using Aerial ImageryPictometry International Corp., a Corporation

(Name of Assignee)

(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that, for the patent application/patent identified above, it is (choose one of options 1, 2, 3 or 4 below):

1. ☒ The assignee of the entire right, title, and interest.
2. ☐ An assignee of less than the entire right, title, and interest (check applicable box):
- ☐ The extent (by percentage) of its ownership interest is ____%. Additional Statement(s) by the owners holding the balance of the interest must be submitted to account for 100% of the ownership interest.
- ☐ There are unspecified percentages of ownership. The other parties, including inventors, who together own the entire right, title and interest are:

Additional Statement(s) by the owner(s) holding the balance of the interest must be submitted to account for the entire right, title, and interest.

3. ☐ The assignee of an undivided interest in the entirety (a complete assignment from one of the joint inventors was made). The other parties, including inventors, who together own the entire right, title, and interest are:

Additional Statement(s) by the owner(s) holding the balance of the interest must be submitted to account for the entire right, title, and interest.

4. ☐ The recipient, via a court proceeding or the like (e.g., bankruptcy, probate), of an undivided interest in the entirety (a complete transfer of ownership interest was made). The certified document(s) showing the transfer is attached.

The interest identified in option 1, 2 or 3 above (not option 4) is evidenced by either (choose one of options A or B below):

- A. ☒ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel 023820, Frame 0931, or for which a copy thereof is attached.
- B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as follows:

1. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.

2. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.

[Page 1 of 2]

This collection of information is required by 37 CFR 3.73(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.

STATEMENT UNDER 37 CFR 3.73(c)

3. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.

4. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.

5. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.

6. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.☐ Additional documents in the chain of title are listed on a supplemental sheet(s).☐ As required by 37 CFR 3.73(c)(1)(i), the documentary evidence of the chain of title from the original owner to the assignee was, or concurrently is being, submitted for recordation pursuant to 37 CFR 3.11.

[NOTE: A separate copy (i.e., a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, to record the assignment in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

Signature

Stephen L. Schultz

Printed or Typed Name

Date

Chief Technology Officer

Title or Registration Number

Electronic Patent Application Fee Transmittal

Application Number:	14018943			
Filing Date:	05-Sep-2013			
Title of Invention:	System and Process for Roof Measurement Using Aerial Imagery			
First Named Inventor/Applicant Name:	Dale R. Thornberry			
Filer:	Marc Alan Brockhaus/Lori Radford			
Attorney Docket Number:	6338.253			
Filed as Small Entity				
Utility under 35 USC 111(a) Filing Fees				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Late Filing Fee for Oath or Declaration	2051	1	70	70
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Miscellaneous:				
Total in USD (\$)				70

Electronic Acknowledgement Receipt

EFS ID:	17456784
Application Number:	14018943
International Application Number:	
Confirmation Number:	1069
Title of Invention:	System and Process for Roof Measurement Using Aerial Imagery
First Named Inventor/Applicant Name:	Dale R. Thornberry
Customer Number:	30589
Filer:	Marc Alan Brockhaus/Lori Radford
Filer Authorized By:	Marc Alan Brockhaus
Attorney Docket Number:	6338.253
Receipt Date:	20-NOV-2013
Filing Date:	05-SEP-2013
Time Stamp:	15:50:47
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	\$70
RAM confirmation Number	2685
Deposit Account	
Authorized User	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
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1	Transmittal Letter	6338253_Transmittal11202013.pdf	67956 34fa9c22b78057e86d664d524f069b92c942a6d3	no	1
Warnings:					
Information:					
2	Oath or Declaration filed	6338253_Declarations.pdf	150323 9901348b2bcd1cedc1743d35d3c4be4d8e68e203	no	2
Warnings:					
Information:					
3	Oath or Declaration filed	6338253_SubstituteStatementinLieuofDeclaration.pdf	120272 6b735175b2e884aaca97df1e07a1c0902b4e0fff	no	2
Warnings:					
Information:					
4	Power of Attorney	6338253_POA.pdf	139119 f3319e119ed8df5118824e3ff563d488c257d34c	no	2
Warnings:					
Information:					
5	Assignee showing of ownership per 37 CFR 3.73.	6338253_Statement.pdf	106377 12a77cede1480cd6db773c553a04e481ddf33ee9	no	2
Warnings:					
Information:					
6	Fee Worksheet (SB06)	fee-info.pdf	30150 ceb2b51816f1c87d2cae4dbc01dc28a1a7e0d94a	no	2
Warnings:					
Information:					
Total Files Size (in bytes):			614197		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

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TRANSMITTAL FORM	Application Number	14/018,943	
	Filing Date	09/05/2013	
	First Named Inventor	Dale R. Thornberry	
	Art Unit	2668	
	Examiner Name		
(to be used for all correspondence after initial filing)		Attorney Docket Number	6338.253
Total Number of Pages in This Submission			

ENCLOSURES (Check all that apply)		
☐ Fee Transmittal Form ☐ Fee Attached ☐ Amendment/Reply ☐ After Final ☐ Affidavits/declaration(s) ☐ Extension of Time Request ☐ Express Abandonment Request ☐ Information Disclosure Statement ☐ Certified Copy of Priority Document(s) ☐ Reply to Missing Parts/ Incomplete Application ☐ Reply to Missing Parts under 37 CFR 1.52 or 1.53	☐ Drawing(s) ☐ Licensing-related Papers ☐ Petition ☐ Petition to Convert to a Provisional Application ☒ Power of Attorney, Revocation Change of Correspondence Address ☐ Terminal Disclaimer ☐ Request for Refund ☐ CD, Number of CD(s) _____ ☐ Landscape Table on CD	☐ After Allowance Communication to TC ☐ Appeal Communication to Board of Appeals and Interferences ☐ Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) ☐ Proprietary Information ☐ Status Letter ☒ Other Enclosure(s) (please identify below): See Remarks
Remarks ELECTRONICALLY TRANSMITTED: 1. SB21 Transmittal Form (1 pg); 2. Declarations (2 pgs); 3. Substitute Statement in Lieu of Oath or Declaration (2 pgs); 4. Power of Attorney (2 pgs); 5. Statement Under 37 CFR 3.73(c) (2 pgs).		
SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT		
Firm Name	DUNLAP CODDING, P.C.	
Signature	<i>Marc Brockhaus</i>	
Printed name	Marc A. Brockhaus	
Date	11/20/2013	Reg. No. 40,923

CERTIFICATE OF TRANSMISSION/MAILING		
I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:		
Signature	<i>Marc Brockhaus</i>	
Typed or printed name	Marc A. Brockhaus	Date 11/20/2013

This collection of information is required by 37 CFR 1.5. 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 2 hours 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.

PTO/AIA/01 (06-12)
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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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**DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN
APPLICATION DATA SHEET (37 CFR 1.76)**

Title of
Invention

SYSTEM AND PROCESS FOR ROOF MEASUREMENT USING AERIAL IMAGERY

As the below named inventor, I hereby declare that:

This declaration
is directed to:



The attached application, or



United States application or PCT international application number 13/786,699

filed on 03/06/2013

The above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001
by fine or imprisonment of not more than five (5) years, or both.

WARNING:

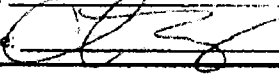
Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

LEGAL NAME OF INVENTOR

Inventor: Chris T. Thornberry

Date (Optional):

7/15/2013

Signature: 

Note: An application data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form or must have been previously filed. Use an additional PTO/AIA/01 form for each additional inventor.

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. 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 1 minute 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 1480, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1480, Alexandria, VA 22313-1450.

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

PTO/AIA/01 (05-12)

Approved for use through 01/31/2014. OMB 0651-0032

U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

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.

**DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN
APPLICATION DATA SHEET (37 CFR 1.76)**

Title of
Invention

SYSTEM AND PROCESS FOR ROOF MEASUREMENT USING AERIAL IMAGERY

As the below named inventor, I hereby declare that:

This declaration
is directed to



The attached application, or



United States application or PCT international application number 13/786,699

filed on 03/06/2013

The above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001
by fine or imprisonment of not more than five (5) years, or both.

WARNING:

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

LEGAL NAME OF INVENTOR

Inventor Mark F. Garringer

Date (Optional): 4/19/13

Signature: 

Note: An application data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form or must have been previously filed. Use an additional PTO/AIA/01 form for each additional inventor.

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to be (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 1 minute 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-9999 and select option 2.

Doc code: Oath
Document Description: Oath or declaration filed

PTO/AIA/02 (06-12)
Approved for use through 01/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

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.

**SUBSTITUTE STATEMENT IN LIEU OF AN OATH OR DECLARATION FOR UTILITY
OR DESIGN PATENT APPLICATION (35 U.S.C. 115(d) AND 37 CFR 1.64)**

Title of Invention	SYSTEM AND PROCESS FOR ROOF MEASUREMENT USING AERIAL IMAGERY		
This statement is directed to:			
☐ The attached application,			
OR			
☒ United States application or PCT international application number <u>13/786,699</u> filed on <u>03/06/2013</u>			
LEGAL NAME of inventor to whom this substitute statement applies:			
(E.g., Given Name (first and middle (if any)) and Family Name or Surname)			
Dale R. Thornberry			
Residence (except for a deceased or legally incapacitated inventor): US			
City	Carmel	State	IN
		Country	US
Mailing Address (except for a deceased or legally incapacitated inventor):			
13890 Wildcat Dr.			
City	Carmel	State	IN
		Zip	46033
		Country	US
I believe the above-named inventor or joint inventor to be the original inventor or an original joint inventor of a claimed invention in the application.			
The above-identified application was made or authorized to be made by me.			
I hereby acknowledge that any willful false statement made in this statement is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.			
Relationship to the inventor to whom this substitute statement applies:			
☐ Legal Representative (for deceased or legally incapacitated inventor only),			
☒ Assignee,			
☐ Person to whom the inventor is under an obligation to assign,			
☐ Person who otherwise shows a sufficient proprietary interest in the matter (petition under 37 CFR 1.46 is required), or			
☐ Joint Inventor.			

[Page 1 of 2]

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. 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 1 minute 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.

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.

SUBSTITUTE STATEMENT

Circumstances permitting execution of this substitute statement:

- ☐ Inventor is deceased,
- ☐ Inventor is under legal incapacity,
- ☐ Inventor cannot be found or reached after diligent effort, or
- ☒ Inventor has refused to execute the oath or declaration under 37 CFR 1.63.

If there are joint inventors, please check the appropriate box below:

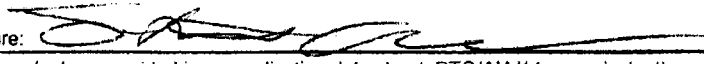
- ☒ An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) naming the entire inventive entity has been or is currently submitted.
- OR
- ☐ An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) has not been submitted. Thus, a Substitute Statement Supplemental Sheet (PTO/AIA/11 or equivalent) naming the entire inventive entity and providing inventor information is attached. See 37 CFR 1.64(b).

WARNING:

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

PERSON EXECUTING THIS SUBSTITUTE STATEMENT:

Name: **Stephen L. Schultz** Date (Optional): **7/16/2013**

Signature: 

Residence (unless provided in an application data sheet, PTO/AIA/14 or equivalent):

City **Rochester** State **NY** Country **US**

Mailing Address (unless provided in an application data sheet, PTO/AIA/14 or equivalent)

100 Town Centre Drive, Suite A

City **Rochester** State **NY** Zip **14623** Country **US**

Note: Use an additional PTO/AIA/02 form for each inventor who is deceased, legally incapacitated, cannot be found or reached after diligent effort, or has refused to execute the oath or declaration under 37 CFR 1.63.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
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Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
14/018,943	09/05/2013	Dale R. Thornberry	6338.253

CONFIRMATION NO. 1069

PUBLICATION NOTICE



OC00000006585664

30589
DUNLAP CODDING, P.C.
PO BOX 16370
OKLAHOMA CITY, OK 73113

Title:System and Process for Roof Measurement Using Aerial Imagery

Publication No.US-2014-0003707-A1

Publication Date:01/02/2014

NOTICE OF PUBLICATION OF APPLICATION

The above-identified application will be electronically published as a patent application publication pursuant to 37 CFR 1.211, et seq. The patent application publication number and publication date are set forth above.

The publication may be accessed through the USPTO's publically available Searchable Databases via the Internet at www.uspto.gov. The direct link to access the publication is currently <http://www.uspto.gov/patft/>.

The publication process established by the Office does not provide for mailing a copy of the publication to applicant. A copy of the publication may be obtained from the Office upon payment of the appropriate fee set forth in 37 CFR 1.19(a)(1). Orders for copies of patent application publications are handled by the USPTO's Office of Public Records. The Office of Public Records can be reached by telephone at (703) 308-9726 or (800) 972-6382, by facsimile at (703) 305-8759, by mail addressed to the United States Patent and Trademark Office, Office of Public Records, Alexandria, VA 22313-1450 or via the Internet.

In addition, information on the status of the application, including the mailing date of Office actions and the dates of receipt of correspondence filed in the Office, may also be accessed via the Internet through the Patent Electronic Business Center at www.uspto.gov using the public side of the Patent Application Information and Retrieval (PAIR) system. The direct link to access this status information is currently <http://pair.uspto.gov/>. Prior to publication, such status information is confidential and may only be obtained by applicant using the private side of PAIR.

Further assistance in electronically accessing the publication, or about PAIR, is available by calling the Patent Electronic Business Center at 1-866-217-9197.

Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875						Application or Docket Number 14/018,943	
APPLICATION AS FILED - PART I							
(Column 1)		(Column 2)		SMALL ENTITY		OTHER THAN SMALL ENTITY	
FOR	NUMBER FILED	NUMBER EXTRA	RATE(\$)	FEE(\$)		RATE(\$)	FEE(\$)
BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	70		N/A	
SEARCH FEE (37 CFR 1.16(k), (l), or (m))	N/A	N/A	N/A	300		N/A	
EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	360		N/A	
TOTAL CLAIMS (37 CFR 1.16(j))	20	minus 20 = *	x 40 =	0.00	OR		
INDEPENDENT CLAIMS (37 CFR 1.16(h))	2	minus 3 = *	x 210 =	0.00			
APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).			0.00			
MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				0.00			
			TOTAL	730		TOTAL	
* If the difference in column 1 is less than zero, enter "0" in column 2.							
APPLICATION AS AMENDED - PART II							
(Column 1)		(Column 2)		(Column 3)		SMALL ENTITY	
AMENDMENT A	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE(\$)	ADDITIONAL FEE(\$)		RATE(\$)
	Total (37 CFR 1.16(i))	*	Minus **	=	x =	OR	x =
	Independent (37 CFR 1.16(h))	*	Minus ***	=	x =	OR	x =
	Application Size Fee (37 CFR 1.16(s))					OR	
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))					OR	
			TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	
(Column 1)		(Column 2)		(Column 3)		SMALL ENTITY	
AMENDMENT B	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE(\$)	ADDITIONAL FEE(\$)		RATE(\$)
	Total (37 CFR 1.16(i))	*	Minus **	=	x =	OR	x =
	Independent (37 CFR 1.16(h))	*	Minus ***	=	x =	OR	x =
	Application Size Fee (37 CFR 1.16(s))					OR	
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))					OR	
			TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	
* If the entry in column 1 is less than the entry in column 2, write "0" in column 3. ** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20". *** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3". The "Highest Number Previously Paid For" (Total or Independent) is the highest found in the appropriate box in column 1.							



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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
14/018,943	09/05/2013	Dale R. Thornberry	6338.253

CONFIRMATION NO. 1069

30589
DUNLAP CODDING, P.C.
PO BOX 16370
OKLAHOMA CITY, OK 73113

NOTICE



Date Mailed: 03/10/2014

INFORMATIONAL NOTICE TO APPLICANT

Applicant is notified that the above-identified application contains the deficiencies noted below. No period for reply is set forth in this notice for correction of these deficiencies. However, if a deficiency relates to the inventor's oath or declaration, the applicant must file an oath or declaration in compliance with 37 CFR 1.63, or a substitute statement in compliance with 37 CFR 1.64, executed by or with respect to each actual inventor no later than the expiration of the time period set in the "Notice of Allowability" to avoid abandonment. See 37 CFR 1.53(f).

The item(s) indicated below are also required and should be submitted with any reply to this notice to avoid further processing delays.

- A properly executed inventor's oath or declaration has not been received for the following inventor(s):
Dale R. Thornberry
- The substitute statement is signed by a person who is not identified as the applicant under 37 CFR 1.46 in an application data sheet (ADS). Only an applicant under 37 CFR 1.43, 1.45 or 1.46 may execute a substitute statement. See 37 CFR 1.64(a). An application data sheet in compliance with 37 CFR 1.76 identifying the person (i.e., assignee, obligated assignee, or person who otherwise shows sufficient proprietary interest) executing the substitute statement as the applicant, or an inventor's oath or declaration in compliance with 37 CFR 1.63 or 1.64 executed by or with respect to the inventor for whom the substitute statement was provided, is required.
Dale R. Thornberry



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APPLICATION NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	TOT CLAIMS	IND CLAIMS
14/018,943	09/05/2013	2668	800	6338.253	20	2

CONFIRMATION NO. 1069

30589
DUNLAP CODDING, P.C.
PO BOX 16370
OKLAHOMA CITY, OK 73113

UPDATED FILING RECEIPT



Date Mailed: 03/10/2014

Receipt is acknowledged of this non-provisional patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. **If an error is noted on this Filing Receipt, please submit a written request for a Filing Receipt Correction. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections**

Inventor(s)

Dale R. Thornberry, Carmel, IN;
Chris T. Thornberry, Indianapolis, IN;
Mark F. Garringer, Eaton, IN;

Applicant(s)

Pictometry International Corp., Rochester, NY

Assignment For Published Patent Application

Pictometry International Corp., Rochester, NY

Power of Attorney: The patent practitioners associated with Customer Number 30589

Domestic Priority data as claimed by applicant

This application is a CON of 13/774,478 02/22/2013 PAT 8542880
which is a CON of 12/470,984 05/22/2009 PAT 8401222

Foreign Applications for which priority is claimed (You may be eligible to benefit from the **Patent Prosecution Highway** program at the USPTO. Please see <http://www.uspto.gov> for more information.) - None.

Foreign application information must be provided in an Application Data Sheet in order to constitute a claim to foreign priority. See 37 CFR 1.55 and 1.76.

Permission to Access - A proper **Authorization to Permit Access to Application by Participating Offices** (PTO/SB/39 or its equivalent) has been received by the USPTO.

If Required, Foreign Filing License Granted: 09/19/2013

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 14/018,943**

Projected Publication Date: Not Applicable

Non-Publication Request: No

Early Publication Request: No

**** SMALL ENTITY ****

Title

System and Process for Roof Measurement Using Aerial Imagery

Preliminary Class

382

Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications: No

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at <http://www.uspto.gov/web/offices/pac/doc/general/index.html>.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, <http://www.stopfakes.gov>. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4258).

LICENSE FOR FOREIGN FILING UNDER
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Title 37, Code of Federal Regulations, 5.11 & 5.15

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This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
14/018,943	09/05/2013	Dale R. Thornberry	6338.253

30589
DUNLAP CODDING, P.C.
PO BOX 16370
OKLAHOMA CITY, OK 73113

CONFIRMATION NO. 1069
POA ACCEPTANCE LETTER



Date Mailed: 03/10/2014

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 11/20/2013.

The Power of Attorney in this application is accepted. Correspondence in this application will be mailed to the above address as provided by 37 CFR 1.33.

/mbayou/

Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

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.

TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	14/018,943
	Filing Date	09/05/2013
	First Named Inventor	Dale R. Thornberry
	Art Unit	2666
	Examiner Name	Atiba O. Fitzpatrick
Total Number of Pages in This Submission	Attorney Docket Number	6338.253

ENCLOSURES (Check all that apply)		
☐ Fee Transmittal Form ☐ Fee Attached ☐ Amendment/Reply ☐ After Final ☐ Affidavits/declaration(s) ☐ Extension of Time Request ☐ Express Abandonment Request ☐ Information Disclosure Statement ☐ Certified Copy of Priority Document(s) ☐ Reply to Missing Parts/Incomplete Application ☐ Reply to Missing Parts under 37 CFR 1.52 or 1.53	☐ Drawing(s) ☐ Licensing-related Papers ☐ Petition ☐ Petition to Convert to a Provisional Application ☐ Power of Attorney, Revocation ☐ Change of Correspondence Address ☐ Terminal Disclaimer ☐ Request for Refund ☐ CD, Number of CD(s) _____ ☐ Landscape Table on CD	☐ After Allowance Communication to TC ☐ Appeal Communication to Board of Appeals and Interferences ☐ Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) ☐ Proprietary Information ☐ Status Letter ☒ Other Enclosure(s) (please identify below): See Remarks
Remarks ELECTRONICALLY TRANSMITTED: 1. SB21 Transmittal Form (1 pg); and 2. PTO/AIA/02 Substitute Statement in Lieu of Declaration (2 pgs)		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	DUNLAP CODDING, P.C.		
Signature	<i>Marc Brockhaus</i>		
Printed name	Marc A. Brockhaus		
Date	04/11/2014	Reg. No.	40,923

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:			
Signature	<i>Marc Brockhaus</i>		
Typed or printed name	Marc A. Brockhaus	Date	04/11/2014

This collection of information is required by 37 CFR 1.5. 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 2 hours 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.

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**SUBSTITUTE STATEMENT IN LIEU OF AN OATH OR DECLARATION FOR UTILITY
OR DESIGN PATENT APPLICATION (35 U.S.C. 115(d) AND 37 CFR 1.64)**

Title of Invention	SYSTEM AND PROCESS FOR ROOF MEASUREMENT USING AERIAL IMAGERY		
This statement is directed to:			
☐ The attached application,			
OR			
☒ United States application or PCT international application number 14/018,943 filed on 09/05/2013			
LEGAL NAME of inventor to whom this substitute statement applies:			
(E.g., Given Name (first and middle (if any)) and Family Name or Surname)			
Dale R. Thornberry			
Residence (except for a deceased or legally incapacitated inventor):			
City Carmel	State IN	Country US	
Mailing Address (except for a deceased or legally incapacitated inventor):			
13890 Wildcat Dr.			
City Carmel	State IN	Zip 46033	Country US
I believe the above-named inventor or joint inventor to be the original inventor or an original joint inventor of a claimed invention in the application.			
The above-identified application was made or authorized to be made by me.			
I hereby acknowledge that any willful false statement made in this statement is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.			
Relationship to the inventor to whom this substitute statement applies:			
☐ Legal Representative (for deceased or legally incapacitated inventor only),			
☒ Assignee,			
☐ Person to whom the inventor is under an obligation to assign,			
☐ Person who otherwise shows a sufficient proprietary interest in the matter (petition under 37 CFR 1.46 is required), or			
☐ Joint Inventor.			

[Page 1 of 2]

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SUBSTITUTE STATEMENT

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- ☐ Inventor is deceased,
☐ Inventor is under legal incapacity,
☐ Inventor cannot be found or reached after diligent effort, or
☒ Inventor has refused to execute the oath or declaration under 37 CFR 1.63.

If there are joint inventors, please check the appropriate box below:

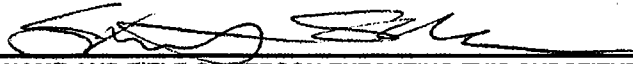
- ☒ An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) naming the entire inventive entity has been or is currently submitted.

OR

- ☐ An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) has not been submitted. Thus, a Substitute Statement Supplemental Sheet (PTO/AIA/11 or equivalent) naming the entire inventive entity and providing inventor information is attached. See 37 CFR 1.64(b).

WARNING:

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PERSON EXECUTING THIS SUBSTITUTE STATEMENT:Name: **Stephen L. Schultz**4/11/2014
Date (Optional):Signature: **APPLICANT NAME AND TITLE OF PERSON EXECUTING THIS SUBSTITUTE STATEMENT:**

If the applicant is a juristic entity, list the applicant name and the title of the signer:

Pictometry International Corp.

Applicant Name:

Title of Person Executing This Substitute Statement: **Chief Technology Officer, Pictometry International Corp.**

The signer, whose title is supplied above, is authorized to act on behalf of the applicant.

Residence of the signer (unless provided in an application data sheet, PTO/AIA/14 or equivalent):City **West Henrietta**State **NY**Country **US**

Mailing Address of the signer (unless provided in an application data sheet, PTO/AIA/14 or equivalent)

291 Brooks RoadCity **West Henrietta**State **NY**Zip **14586**Country **US**

Note: Use an additional PTO/AIA/02 form for each inventor who is deceased, legally incapacitated, cannot be found or reached after diligent effort, or has refused to execute the oath or declaration under 37 CFR 1.63.

Electronic Acknowledgement Receipt

EFS ID:	18744389
Application Number:	14018943
International Application Number:	
Confirmation Number:	1069
Title of Invention:	System and Process for Roof Measurement Using Aerial Imagery
First Named Inventor/Applicant Name:	Dale R. Thornberry
Customer Number:	30589
Filer:	Marc Alan Brockhaus/Lori Radford
Filer Authorized By:	Marc Alan Brockhaus
Attorney Docket Number:	6338.253
Receipt Date:	11-APR-2014
Filing Date:	05-SEP-2013
Time Stamp:	16:58:17
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no
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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Transmittal Letter	6338253_Transmittal04112014.pdf	67732 fa1b5b43050f6ad58a3a17b505fee3e21061d16a	no	1

Warnings:

Information:

2	Oath or Declaration filed	6338253_SubstituteDeclaration.pdf	134258 c0c28d6aa6a91309c5b82db688604f4096d0b7d9	no	2
Warnings:					
Information:					
Total Files Size (in bytes):				201990	
This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503. <u>New Applications Under 35 U.S.C. 111</u> If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application. <u>National Stage of an International Application under 35 U.S.C. 371</u> If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course. <u>New International Application Filed with the USPTO as a Receiving Office</u> If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.					



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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14/018,943

09/05/2013

Dale R. Thornberry

6338.253

1069

30589

7590

09/25/2014

DUNLAP CODDING, P.C.

PO BOX 16370

OKLAHOMA CITY, OK 73113

EXAMINER

FITZPATRICK, ATIBA O

ART UNIT

PAPER NUMBER

2666

NOTIFICATION DATE

DELIVERY MODE

09/25/2014

ELECTRONIC

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

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

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

dsorocco@dunlapcoddington.com

Office Action Summary	Application No. 14/018,943	Applicant(s) THORNBERRY ET AL.	
	Examiner ATIBA O. FITZPATRICK	Art Unit 2666	AIA (First Inventor to File) Status No

-- 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 MONTHS 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 04/11/2014.
☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.
- 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) 1-20 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 _____ 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).

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)).

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

Attachment(s)

- | | |
|---|---|
| 1) ☒ Notice of References Cited (PTO-892) | 3) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) ☐ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b)
Paper No(s)/Mail Date _____ | 4) ☐ Other: _____ |

DETAILED ACTION

Double Patenting

A rejection based on double patenting of the “same invention” type finds its support in the language of 35 U.S.C. 101 which states that “whoever invents or discovers any new and useful process... may obtain a patent therefor...” (Emphasis added). Thus, the term “same invention,” in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the claims that are directed to the same invention so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

Claims 1-20 rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-20 of prior U.S. Patent No. 8542880. This is a statutory double patenting rejection.

Allowable Subject Matter

Claims 1-20 would be allowable if rewritten or amended to overcome the double-patenting rejection(s) set forth in this Office action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Atiba Fitzpatrick whose telephone number is (571) 270-5255. The examiner can normally be reached on M-F 10:00am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vu Le can be reached on (571) 272-7332. The fax phone number for Atiba Fitzpatrick is (571) 270-6255.

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.

Atiba Fitzpatrick

/ATIBA O FITZPATRICK/

Primary Examiner, Art Unit 2668

Notice of References Cited	Application/Control No. 14/018,943	Applicant(s)/Patent Under Reexamination THORNBERRY ET AL.	
	Examiner ATIBA O. FITZPATRICK	Art Unit 2666	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2006/0200311 A1	09-2006	Arutunian et al.	701/210
*	B	US-2002/0154174 A1	10-2002	Redlich et al.	345/848
*	C	US-6,636,803 B1	10-2003	Hartz et al.	701/459
	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

*		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. 14018943	Applicant(s)/Patent Under Reexamination THORNBERRY ET AL.
	Examiner ATIBA O FITZPATRICK	Art Unit 2666

CPC- SEARCHED		
Symbol	Date	Examiner

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner

SEARCH NOTES		
Search Notes	Date	Examiner
("382"/\$, "345"/\$, "703"/\$, "715"/\$, "340"/\$).ccls. combined with keywords	9/18/2014	AF
keyword search	9/18/2014	AF

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

	/ATIBA O FITZPATRICK/ Primary Examiner.Art Unit 2666
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BIB DATA SHEET

CONFIRMATION NO. 1069

SERIAL NUMBER 14/018,943	FILING or 371(c) DATE 09/05/2013 RULE	CLASS 382	GROUP ART UNIT 2666	ATTORNEY DOCKET NO. 6338.253	
APPLICANTS Pictometry International Corp., Rochester, NY, Assignee (with 37 CFR 1.172 Interest); INVENTORS Dale R. Thornberry, Carmel, IN; Chris T. Thornberry, Indianapolis, IN; Mark F. Garringer, Eaton, IN; ** CONTINUING DATA ***** This application is a CON of 13/774,478 02/22/2013 PAT 8542880 which is a CON of 12/470,984 05/22/2009 PAT 8401222 ** FOREIGN APPLICATIONS ***** ** IF REQUIRED, FOREIGN FILING LICENSE GRANTED *** SMALL ENTITY ** 09/19/2013					
Foreign Priority claimed ☐ Yes ☒ No 35 USC 119(a-d) conditions met ☐ Yes ☐ No Verified and /ATIBA O Acknowledged FITZPATRICK/ Examiner's Signature	☐ Met after Allowance Initials	STATE OR COUNTRY IN	SHEETS DRAWINGS 21	TOTAL CLAIMS 20	INDEPENDENT CLAIMS 2
ADDRESS DUNLAP CODDING, P.C. PO BOX 16370 OKLAHOMA CITY, OK 73113 UNITED STATES					
TITLE System and Process for Roof Measurement Using Aerial Imagery					
FILING FEE RECEIVED 800	FEES: Authority has been given in Paper No. _____ to charge/credit DEPOSIT ACCOUNT No. _____ for following:		☐ All Fees ☐ 1.16 Fees (Filing) ☐ 1.17 Fees (Processing Ext. of time) ☐ 1.18 Fees (Issue) ☐ Other _____ ☐ Credit		

<i>Index of Claims</i> 	Application/Control No. 14018943	Applicant(s)/Patent Under Reexamination THORNBERRY ET AL.
	Examiner ATIBA O FITZPATRICK	Art Unit 2666

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant		☐ CPA		☐ T.D.		☐ R.1.47			
CLAIM		DATE							
Final	Original	09/18/2014							
	1	✓							
	2	✓							
	3	✓							
	4	✓							
	5	✓							
	6	✓							
	7	✓							
	8	✓							
	9	✓							
	10	✓							
	11	✓							
	12	✓							
	13	✓							
	14	✓							
	15	✓							
	16	✓							
	17	✓							
	18	✓							
	19	✓							
	20	✓							

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	2	12/470984.app.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/18 13:50
L2	12	(THORNBERRY-DALE\$, THORNBERRY-CHRI\$\$, GARRINGER-MARK\$).in.	US-PGPUB; USPAT; USOCR	OR	ON	2014/09/18 13:50
L3	42	("5319541" "6859768" "20100110074" "6496184" "20070150366" "5699444" "5625827" "6636803" "6798925" "20060282235" "7305983" "6446053" "7133551" "20100114537" "20100179787" "5633995" "6980690" "7324666" "7085400" "20030014224" "20020154174" "20060200311" "20090132436" "7003400" "6396491" "7239761" "20050038636" "7343268" "20080262789" "4497551" "7133570" "6766282" "7164883" "20080221843" "5995765" "7046839" "20050288959" "6323885" "6385541" "6836270" "7006977" "20080105045").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2014/09/18 13:50
L4	13	L3 and (marker mark\$3 index indicator tag\$4 label\$4 pin) near5 (moveable mov\$3 chang\$3 adjust\$4 updat\$3 alter\$3 vary\$3 modif\$4 edit\$4 calibrat\$4 refin\$4 tune tuning tuned fine\$2tun\$3 replac\$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/18 13:50
L5	29	L3 not L4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/18 13:50
L6	8	roof with (image picture photograph\$4 frame video) and (latitud\$5 longitud\$5) with (image picture photograph\$4 frame video) with (plural\$3 poly many several numerous various multi dual multiple (more NEAR2 than) two three first second third all any every each additional subsequent another next) near2 (database knowledge\$3base)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/18 13:50
L7	6	roof with (image picture photograph\$4 frame video) and (latitud\$5 longitud\$5) with (image picture photograph\$4 frame	US-PGPUB; USPAT; USOCR;	OR	ON	2014/09/18 13:50

		video) with (database knowledge\$3base) and (plural\$3 poly many several numerous various multi dual multiple (more NEAR2 than) two three first second third all any every each additional subsequent another next) near2 (database knowledge\$3base) not L6	FPRS; EPO; JPO; DERWENT; IBM_TDB			
L8	4	(US-20120120069-\$ or US-20100179787-\$ or US-20080262789-\$).did. or (US-8145578-\$).did.	US-PGPUB; USPAT	OR	ON	2014/09/18 13:50
L9	4	L8 and (plural\$3 poly many several numerous various multi dual multiple (more NEAR2 than) two three first second third all any every each additional subsequent another next) near2 (database knowledge\$3base)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/18 13:50
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L16	8	L15 and report\$4 with (latitud\$5 longitud\$5)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/18 13:50
L17	1	L10 and report\$4 with (latitud\$5 longitud\$5)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/18 13:50
L18	20	L10 and (latitud\$5 longitud\$5)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/18 13:50
L19	1	"20100110074".pn. and report\$4 with model\$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/18 13:50
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L23	3	(US-20060200311-\$ or US-20020154174-\$).did. or (US-6636803-\$).did.	US-PGPUB; USPAT	OR	ON	2014/09/18 13:50
L24	0	L23 and roof	US-PGPUB; USPAT;	OR	ON	2014/09/18 13:50

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
L25	29	L22 and ("382"/\$, "345"/\$, "703"/\$, "715"/\$, "340"/\$).ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/18 13:50
L26	420	nadir near4 (image picture frame scan video photogra\$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/18 13:50
L27	139	nadir adj1 (image picture frame scan video photogra\$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/18 13:50

9/ 18/ 2014 1:56:40 PM
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**Courtesy Reminder for
Application Serial No: 14/018,943**

Attorney Docket No: 6338.253
Customer Number: 30589
Date of Electronic Notification: 09/25/2014

This is a courtesy reminder that new correspondence is available for this application. If you have not done so already, please review the correspondence. The official date of notification of the outgoing correspondence will be indicated on the form PTOL-90 accompanying the correspondence.

An email notification regarding the correspondence was sent to the following email address(es) associated with your customer number:
dsorocco@dunlapcoddington.com

To view your correspondence online or update your email addresses, please visit us anytime at <https://portal.uspto.gov/secure/myportal/privatepair>. If you have any questions, please email the Electronic Business Center (EBC) at EBC@uspto.gov or call 1-866-217-9197.

Electronically Filed On: March 23, 2015

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.	:	14/018,943	Confirmation No.	:	1069
Applicant(s)	:	Thornberry, et al.			
Filed	:	09/05/2013			
TC/A.U.	:	2666			
Examiner	:	Atibo O. Fitzpatrick			
Title	:	System and Process for Roof Measurement Using Aerial Imagery			
Docket No.	:	6338.253			
Customer No.	:	30589			

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA22313-1450

RESPONSE TO OFFICE ACTION

Applicants submit the following response to the Office Action mailed on September 25, 2014:

Amendments to the Claims are reflected in the Listing of Claims which begins on page **2** of this paper

Remarks begin on page **8** of this paper.

AMENDMENTS TO THE CLAIMS

This Listing of Claims supersedes and replaces all prior versions in the patent application.

Listing of Claims

1. (Currently Amended) A process for determining attributes of a roof structure of a real-world three-dimensional building, comprising the acts of:

providing at least one computer input field for a user to input first location data generally corresponding to the location of the building;

providing visual access to [an] a first aerial image of a region including the roof structure of the building corresponding to said first location data, ~~the aerial image taken from a straight down overhead view with respect to the roof structure~~ the first aerial image having a first resolution;

on the aerial image of the region, providing a visual marker that is moveable on a computer monitor around said region, said visual marker initially corresponding to said first location data, wherein said visual marker may be moved to a final location on top of the building to more precisely identify the location of the building roof structure, the final location having location coordinates;

providing a computer input capable of signaling user-acceptance of the final location of said marker; and,

providing visual access to one or more second oblique aerial images ~~[[of]] from~~ an aerial imagery database corresponding to location coordinates of the final location, the

one or more second aerial images having a second resolution that is higher resolution than the first resolution.

2. (Original) The process of claim 1 and wherein said first location data comprised street address data, and wherein said location coordinates of said final location are translated to latitude and longitude coordinates.

3. (Currently Amended) The process of claim 2 and wherein said image corresponding to the first location data is from a first imagery database from which said final location is selected and is internet-based imagery having a corresponding street address look up field, and wherein the aerial imagery database is a second imagery database, and further comprising the act of:

using said latitude and longitude coordinates to access the one or more second aerial images~~imagery~~ from the second imagery database.

4. (Original) The process of claim 3 and further comprising the act of:

generating, in computer memory, outline drawings around outlines corresponding to roof planes based on tracing from said imagery from said second imagery database.

5. (Original) The process of claim 4 and wherein said providing acts are provided over an internet interface.

6. (Original) The process of claim 5 and further comprising the act of:

providing a printed report that includes an aerial image of the building roof structure.

7. (Currently Amended) The process of claim 1 and further comprising the act of:

generating, in computer memory, outline drawings around outlines corresponding to roof planes based on tracing from said ~~image~~one or more second aerial images.

8. (Original) The process of claim 1 and wherein said providing acts are provided over an internet interface.

9. (Original) The process of claim 1 and further comprising the act of:

providing a printed report that includes an aerial image of the building roof structure.

10. (Original) The process of claim 9 and wherein the printed report includes a latitude reference and/or a longitude reference corresponding to the location of the building roof structure.

11. (Original) The process of claim 1, wherein the user is a customer.

12. (Currently Amended) The process of claim 1, further comprising determining one or more roof pitch from the one or more second aerial images~~wherein the user is a commercial vendor.~~

13. (Currently Amended) The process of claim 1, further comprising determining one or more vertical measurement from the one or more second aerial images~~providing visual access to the one or more images of the aerial imagery database corresponding to the final location data.~~

14. (Currently Amended) A non-transient computer memory storing computer logic, that when executed by computer hardware causes the computer hardware to determine attributes of a roof structure of a real-world three-dimensional building by:

providing at least one computer input field for a user to input first location data generally corresponding to the location of the building;

providing visual access to ~~[[an]]~~a first aerial image of a region including the roof structure of the building corresponding to said first location data, the first aerial image ~~taken from a straight down overhead view with respect to the roof structure~~having a first resolution;

on the aerial image of the region, providing a visual marker that is moveable on a computer monitor around said region, said visual marker initially corresponding to

said first location data, wherein said visual marker may be moved to a final location on top of the building to more precisely identify the location of the building roof structure, the final location having location coordinates;

providing a computer input capable of signaling user-acceptance of the final location of said marker; and,

providing visual access to one or more ~~oblique~~ second aerial images of an aerial imagery database corresponding to location coordinates of the final location, the one or more second aerial images having a second resolution that is higher than the first resolution.

15. (Original) The non-transient computer memory of claim 14, wherein said first location data comprised street address data, and wherein said location coordinates of said final location are translated to latitude and longitude coordinates.

16. (Currently Amended) The non-transient computer memory of claim 15, wherein said first aerial image corresponding to the first location data is from a first imagery database from which said final location is selected and is internet-based imagery having a corresponding street address look up field, and wherein the aerial imagery database is a second imagery database, and wherein said computer logic when executed by computer hardware causes the computer hardware to:

use said latitude and longitude coordinates to access imagery ~~the one or more second~~ aerial images from the second imagery database.

17. (Currently Amended) The non-transient computer memory of claim 16, wherein said computer logic when executed by computer hardware causes the computer hardware to:

generate, in computer memory, outline drawings around outlines corresponding to roof planes based on tracing from said ~~imagery~~one or more second aerial images from said second imagery database.

18. (Original) The non-transient computer memory of claim 17, wherein said computer logic when executed by computer hardware causes the computer hardware to:

provide a printed report that includes an aerial image of the building roof structure.

19. (Currently Amended) The non-transient computer memory of claim 14, wherein said computer logic when executed by computer hardware causes the computer hardware to:

generate, in computer memory, outline drawings around outlines corresponding to roof planes based on tracing from said ~~imagery~~one or more second aerial images.

20. (Original)_The non-transient computer memory of claim 14, wherein said providing acts are provided over an internet interface.

REMARKS

Claims 1-20 have been amended to overcome the statutory type double patenting rejection. The amendments to claims 1-20 are supported, for example, in paragraphs [00119] and [00120] of the application as originally filed. Therefore, no new matter has been added.

Statutory Type Double Patenting

Claims 1-20 were rejected on the ground of statutory type double patenting based on 35 U.S.C. § 101. Claims 1-20 have been amended to no longer be coextensive in scope with claims 1-20 of U.S. Patent No. 8,542,880. In light of the amendments to claims 1-20, reconsideration and withdrawal of the rejection of claims 1-20 under 35 U.S.C. § 101 is respectfully requested.

CONCLUSION

The foregoing is intended to be a complete response to the Office Action mailed September 25, 2014. Should the Examiner have any comments or questions regarding the foregoing, Applicant's attorney would welcome a telephonic interview with the Examiner. For the reasons stated above, reconsideration and withdrawal of the rejection is respectfully requested.

Respectfully submitted,



Marc. A. Brockhaus, Reg. No. 40,923

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Oklahoma City, Oklahoma 73113

Telephone: (405) 607-8600

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Attorney for Applicant

Substitute for form 1449/PTO
PTO/SB/08A and 08B
Form 6-2 and Form 6-2.1

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Use as many sheets as
necessary)

Complete if Known

Application No.	14/018,943
Filing Date	09/05/2013
First Named Inventor	Dale R. Thornberry
Art Unit	2666
Examiner Name	Atiba O. Fitzpatrick
Attorney Docket No.	6338.253

U. S. PATENT APPLICATION DOCUMENTS

EXAM INIT.	Cite No. ¹	Patent Number Number-Kind Code ¹ (if known)	Name of Patentee or Applicant of Cited Document	Issue Date MM/DD/YYYY	
	P1	7,184,072	Loewen et al.	02/27/2007	
	P2	8,705,843	Lieckfeldt, Peter	04/22/2014	

U. S. PATENT APPLICATION PUBLICATION DOCUMENTS

EXAM INIT.	Cite No. ¹	Publication Number Number-Kind Code ¹ (if known)	Name of Patentee or Applicant of Cited Document	Publications Date MM/DD/YYYY	

Examiner Signature: _____ Date Considered: _____

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ² Enter Office that issued the document, by the two-letter code (WIPO Standard St.3). ³ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁴ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard St. 16 if possible. ⁵ Applicant is to place a check mark here if English language Translation is attached.

FOREIGN PATENT DOCUMENTS

EXAM INIT.	Cite No. ¹	Foreign Document No. ³ Country Code ² - Kind Code ⁴ (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM- DD-YYY	T ⁵

Examiner Signature: _____ Date Considered: _____

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ² Enter Office that issued the document, by the two-letter code (WIPO Standard St.3). ³ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁴ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard St. 16 if possible. ⁵ Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449/PTO
PTO/SB/08A and 08B
Form 6-2 and Form 6-2.1

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Use as many sheets as
necessary)

Complete if Known

Application No.	14/018,943
Filing Date	09/05/2013
First Named Inventor	Dale R. Thornberry
Art Unit	2666
Examiner Name	Atiba O. Fitzpatrick
Attorney Docket No.	6338.253

EXAM INIT.	Cite Number	NON-PATENT DOCUMENTS Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	
	NPL1	IMHOF, Ralph K., "Mapping from Oblique Photographs", Manual of Photogrammetry, Chapter 18, 1966.	
	NPL2	MOSTAFA, et al., "System Performance Analysis of INS/DGPS Integrated System for Mobile Mapping System (MMS), Department of Geomatics Engineering, University of Calgary, Commission VI, WG VI/4, March 2004.	
	NPL3	Noronha et al., "Detection and Modeling of Building from Multiple Aerial Images, " Institute for Robotics and Intelligent Systems, University of Southern California, November 27, 2001, 32 pages.	
	NPL4	BIGNONE et al, Automatic Extraction of Generic House Roofs from High Resolution Aerial Imagery, Communication Technology Laboratory, Swiss Federal Institute of Technology ETH, CH-8092 Zurich, Switzerland, 12 pages, 1996.	
	NPL5	GREENING et al., Commercial Applications of GPS-Assisted Photogrammetry, Presented at GIS/LIS Annual Conference and Exposition, Phoenix, AZ, October 1994.	
Examiner Signature:		Date Considered:	
EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Unique citation designation number. 2 Applicant is to place a check mark here if English language Translation is attached.			

Electronic Patent Application Fee Transmittal

Application Number:	14018943			
Filing Date:	05-Sep-2013			
Title of Invention:	System and Process for Roof Measurement Using Aerial Imagery			
First Named Inventor/Applicant Name:	Dale R. Thornberry			
Filer:	Marc Alan Brockhaus/Lori Radford			
Attorney Docket Number:	6338.253			
Filed as Small Entity				
Filing Fees for Utility under 35 USC 111(a)				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Extension - 3 months with \$0 paid	2253	1	700	700
Miscellaneous:				
Submission- Information Disclosure Stmt	2806	1	90	90
Total in USD (\$)				790

Electronic Acknowledgement Receipt

EFS ID:	21845440
Application Number:	14018943
International Application Number:	
Confirmation Number:	1069
Title of Invention:	System and Process for Roof Measurement Using Aerial Imagery
First Named Inventor/Applicant Name:	Dale R. Thornberry
Customer Number:	30589
Filer:	Marc Alan Brockhaus/Lori Radford
Filer Authorized By:	Marc Alan Brockhaus
Attorney Docket Number:	6338.253
Receipt Date:	23-MAR-2015
Filing Date:	05-SEP-2013
Time Stamp:	12:50:10
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	\$790
RAM confirmation Number	10881
Deposit Account	
Authorized User	

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Transmittal Letter	6338253_Transmittal03232015.pdf	67576 8237c548e4f01f2b44846c4282224b824f88d31d	no	1
Warnings:					
Information:					
2	Extension of Time	6338253_Extension03232015.pdf	62832 38ce6474b544f266d6af2f1efaf203dbda203eb2	no	1
Warnings:					
Information:					
3		6338253_Response03232015.pdf	231147 cf39f962f05956ee1ac204f8a9fc0fc189f1186	yes	9
	Multipart Description/PDF files in .zip description				
	Document Description		Start	End	
	Amendment/Req. Reconsideration-After Non-Final Reject		1	1	
	Claims		2	7	
	Applicant Arguments/Remarks Made in an Amendment		8	9	
Warnings:					
Information:					
4	Information Disclosure Statement (IDS) Form (SB08)	6338253_IDS03232015.pdf	109940 70cc73756af6054b151452eed6a9ae6339791cae	no	2
Warnings:					
Information:					
This is not an USPTO supplied IDS fillable form					
5	Non Patent Literature	NPL13_Mapping_from_Oblique_Photographs.pdf	2054354 0acbb2e5471bf7c136f64d317af3c4b54482df63	no	15
Warnings:					
Information:					

6	Non Patent Literature	NPL55_System_Performance_Analysis_of_INS_DGPS.pdf	1436003 d7ea142e2d99027415cdd08aaa83f2105c362ac	no	10
Warnings:					
Information:					
7	Non Patent Literature	NPL89_DetectionandModelingofBuildingsfromMultipleAerialImages.pdf	1808523 9561babe4c4934bf00484f8b243717c582b23665	no	32
Warnings:					
The page size in the PDF is too large. The pages should be 8.5 x 11 or A4. If this PDF is submitted, the pages will be resized upon entry into the Image File Wrapper and may affect subsequent processing					
Information:					
8	Non Patent Literature	AutomaticExtractionofGenericHouseRoofs.pdf	403774 0976922b7653dbf5d3c91fc726cee5f090c5509d	no	12
Warnings:					
Information:					
9	Non Patent Literature	NPL96_Greening.pdf	1235765 6db7c86eabd2fee4ba00d5d1ecba88d8e700206b	no	12
Warnings:					
Information:					
10	Fee Worksheet (SB06)	fee-info.pdf	32387 8c70e56b70f41dfb64eb63cfa85d736c267cc1f2	no	2
Warnings:					
Information:					
Total Files Size (in bytes):			7442301		
This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503. <u>New Applications Under 35 U.S.C. 111</u> If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application. <u>National Stage of an International Application under 35 U.S.C. 371</u> If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course. <u>New International Application Filed with the USPTO as a Receiving Office</u> If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.					

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.

TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	14/018,943
	Filing Date	09/05/2013
	First Named Inventor	Dale R. Thornberry
	Art Unit	2666
	Examiner Name	Atiba O. Fitzpatrick
Total Number of Pages in This Submission	Attorney Docket Number	6338.253

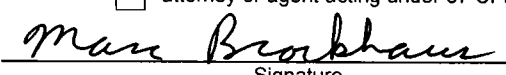
ENCLOSURES (Check all that apply)		
☐ Fee Transmittal Form ☐ Fee Attached ☒ Amendment/Reply ☐ After Final ☐ Affidavits/declaration(s) ☒ Extension of Time Request ☐ Express Abandonment Request ☒ Information Disclosure Statement ☐ Certified Copy of Priority Document(s) ☐ Reply to Missing Parts/ Incomplete Application ☐ Reply to Missing Parts under 37 CFR 1.52 or 1.53	☐ Drawing(s) ☐ Licensing-related Papers ☐ Petition ☐ Petition to Convert to a Provisional Application ☐ Power of Attorney, Revocation Change of Correspondence Address ☐ Terminal Disclaimer ☐ Request for Refund ☐ CD, Number of CD(s) _____ ☐ Landscape Table on CD	☐ After Allowance Communication to TC ☐ Appeal Communication to Board of Appeals and Interferences ☐ Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) ☐ Proprietary Information ☐ Status Letter ☒ Other Enclosure(s) (please identify below): See Remarks
Remarks ELECTRONICALLY TRANSMITTED: 1. SB21 Transmittal Form (1 pg); 2. SB22 Extension of Time (1 pg); 3. Response to Office Action (9 pgs); 4. Information Disclosure Statement (2 pgs); and 5. Cited non patent documents.		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT			
Firm Name	DUNLAP CODDING, P.C.		
Signature			
Printed name	Marc A. Brockhaus		
Date	03/23/2015	Reg. No.	40,923

CERTIFICATE OF TRANSMISSION/MAILING			
I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:			
Signature			
Typed or printed name	Marc A. Brockhaus	Date	03/23/2015

This collection of information is required by 37 CFR 1.5. 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 2 hours 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.

PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a)		Docket Number (Optional) 6338.253																														
Application Number 14/018,943	Filed 09/05/2013																															
For Dale R. Thornberry																																
Art Unit 2666	Examiner Atiba O. Fitzpatrick																															
This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above-identified application. The requested extension and fee are as follows (check time period desired and enter the appropriate fee below): <table style="width: 100%; border-collapse: collapse;"><thead><tr><th></th><th style="text-align: center;"><u>Fee</u></th><th style="text-align: center;"><u>Small Entity Fee</u></th><th style="text-align: center;"><u>Micro Entity Fee</u></th><th></th></tr></thead><tbody><tr><td>☐ One month (37 CFR 1.17(a)(1))</td><td style="text-align: center;">\$200</td><td style="text-align: center;">\$100</td><td style="text-align: center;">\$50</td><td>\$ _____</td></tr><tr><td>☐ Two months (37 CFR 1.17(a)(2))</td><td style="text-align: center;">\$600</td><td style="text-align: center;">\$300</td><td style="text-align: center;">\$150</td><td>\$ _____</td></tr><tr><td>☒ Three months (37 CFR 1.17(a)(3))</td><td style="text-align: center;">\$1,400</td><td style="text-align: center;">\$700</td><td style="text-align: center;">\$350</td><td>\$ <u>700.00</u></td></tr><tr><td>☐ Four months (37 CFR 1.17(a)(4))</td><td style="text-align: center;">\$2,200</td><td style="text-align: center;">\$1,100</td><td style="text-align: center;">\$550</td><td>\$ _____</td></tr><tr><td>☐ Five months (37 CFR 1.17(a)(5))</td><td style="text-align: center;">\$3,000</td><td style="text-align: center;">\$1,500</td><td style="text-align: center;">\$750</td><td>\$ _____</td></tr></tbody></table> ☒ Applicant asserts small entity status. See 37 CFR 1.27. ☐ Applicant certifies micro entity status. See 37 CFR 1.29. Form PTO/SB/15A or B or equivalent must either be enclosed or have been submitted previously. ☐ A check in the amount of the fee is enclosed. ☐ Payment by credit card. Form PTO-2038 is attached. ☐ The Director has already been authorized to charge fees in this application to a Deposit Account. ☐ The Director is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number _____ ☒ Payment made via EFS-Web. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038. I am the ☐ applicant. ☒ attorney or agent of record. Registration number <u>40,923</u> ☐ attorney or agent acting under 37 CFR 1.34. Registration number _____  _____ Signature <u>03/23/2015</u> _____ Date Marc A. Brockhaus _____ Typed or printed name 405-607-8600 _____ Telephone Number NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. Submit multiple forms if more than one signature is required, see below*.				<u>Fee</u>	<u>Small Entity Fee</u>	<u>Micro Entity Fee</u>		☐ One month (37 CFR 1.17(a)(1))	\$200	\$100	\$50	\$ _____	☐ Two months (37 CFR 1.17(a)(2))	\$600	\$300	\$150	\$ _____	☒ Three months (37 CFR 1.17(a)(3))	\$1,400	\$700	\$350	\$ <u>700.00</u>	☐ Four months (37 CFR 1.17(a)(4))	\$2,200	\$1,100	\$550	\$ _____	☐ Five months (37 CFR 1.17(a)(5))	\$3,000	\$1,500	\$750	\$ _____
	<u>Fee</u>	<u>Small Entity Fee</u>	<u>Micro Entity Fee</u>																													
☐ One month (37 CFR 1.17(a)(1))	\$200	\$100	\$50	\$ _____																												
☐ Two months (37 CFR 1.17(a)(2))	\$600	\$300	\$150	\$ _____																												
☒ Three months (37 CFR 1.17(a)(3))	\$1,400	\$700	\$350	\$ <u>700.00</u>																												
☐ Four months (37 CFR 1.17(a)(4))	\$2,200	\$1,100	\$550	\$ _____																												
☐ Five months (37 CFR 1.17(a)(5))	\$3,000	\$1,500	\$750	\$ _____																												

☐ * Total of _____ forms are submitted.

This collection of information is required by 37 CFR 1.136(a). 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 6 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: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 14/018,943	Filing Date 09/05/2013	☐ To be Mailed
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 ENTITY: ☐ LARGE ☒ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

FOR	NUMBER FILED (Column 1)	NUMBER EXTRA (Column 2)	RATE (\$)	FEE (\$)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (l), or (m))	N/A	N/A	N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X \$ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X \$ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).			
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	

APPLICATION AS AMENDED – PART II

AMENDMENT	(Column 1)	(Column 2)	(Column 3)	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)
	03/23/2015	CLAIMS REMAINING AFTER AMENDMENT					
	Total (37 CFR 1.16(i))	* 20	Minus	** 20	= 0	X \$40 =	0
	Independent (37 CFR 1.16(h))	* 2	Minus	*** 3	= 0	X \$210 =	0
	☐ Application Size Fee (37 CFR 1.16(s))						
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
TOTAL ADD'L FEE							0

AMENDMENT	(Column 1)	(Column 2)	(Column 3)	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)
		CLAIMS REMAINING AFTER AMENDMENT					
	Total (37 CFR 1.16(i))	*	Minus	**	=	X \$ =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X \$ =	
	☐ Application Size Fee (37 CFR 1.16(s))						
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
TOTAL ADD'L FEE							

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".

*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

 LIE
/PAMELA YOUNG/

This collection of information is required by 37 CFR 1.16. 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, 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.



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

NOTICE OF ALLOWANCE AND FEE(S) DUE

30589 7590 04/08/2015
DUNLAP CODDING, P.C.
PO BOX 16370
OKLAHOMA CITY, OK 73113

EXAMINER

FITZPATRICK, ATIBA O

ART UNIT

PAPER NUMBER

2666

DATE MAILED: 04/08/2015

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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14/018,943

09/05/2013

Dale R. Thornberry

6338.253

1069

TITLE OF INVENTION: System and Process for Roof Measurement Using Aerial Imagery

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	\$480	\$0	\$0	\$480	07/08/2015

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.

PART B - FEE(S) TRANSMITTAL

**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.

30589 7590 04/08/2015
DUNLAP CODDING, P.C.
PO BOX 16370
OKLAHOMA CITY, OK 73113

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.
14/018,943	09/05/2013	Dale R. Thornberry	6338.253	1069

TITLE OF INVENTION: System and Process for Roof Measurement Using Aerial Imagery

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	\$480	\$0	\$0	\$480	07/08/2015

EXAMINER	ART UNIT	CLASS-SUBCLASS
FITZPATRICK, ATIBA O	2666	382-154000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. ☐ "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.	2. For printing on the patent front page, list (1) The names of up to 3 registered patent attorneys or agents OR, alternatively, 1 _____ (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 _____ 3 _____
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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

4a. The following fee(s) are submitted: ☐ Issue Fee ☐ Publication Fee (No small entity discount permitted) ☐ Advance Order - # of Copies _____	4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above) ☐ A check is enclosed. ☐ Payment by credit card. Form PTO-2038 is attached. ☐ The director is hereby authorized to charge the required fee(s), any deficiency, or credits any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).
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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 forms 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: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/018,943	09/05/2013	Dale R. Thornberry	6338.253	1069

30589 7590 04/08/2015
DUNLAP CODDING, P.C.
PO BOX 16370
OKLAHOMA CITY, OK 73113

EXAMINER

FITZPATRICK, ATIBA O

ART UNIT	PAPER NUMBER
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2666

DATE MAILED: 04/08/2015

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (Applications filed on or after May 29, 2000)

The Office has discontinued providing a Patent Term Adjustment (PTA) calculation with the Notice of Allowance.

Section 1(h)(2) of the AIA Technical Corrections Act amended 35 U.S.C. 154(b)(3)(B)(i) to eliminate the requirement that the Office provide a patent term adjustment determination with the notice of allowance. See Revisions to Patent Term Adjustment, 78 Fed. Reg. 19416, 19417 (Apr. 1, 2013). Therefore, the Office is no longer providing an initial patent term adjustment determination with the notice of allowance. The Office will continue to provide a patent term adjustment determination with the Issue Notification Letter that is mailed to applicant approximately three weeks prior to the issue date of the patent, and will include the patent term adjustment on the patent. Any request for reconsideration of the patent term adjustment determination (or reinstatement of patent term adjustment) should follow the process outlined in 37 CFR 1.705.

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

<i>Notice Requiring Inventor's Oath or Declaration</i>	Application No. 14/018,943	Applicant(s) Dale R. Thornberry	
	Examiner FITZPATRICK, ATIBA O	Art Unit 2666	

This notice is an attachment to the Notice of Allowability (PTOL-37), or the Notice of Allowability For A Design Application (PTOL-37D).

An inventor's oath or declaration in compliance with 37 CFR 1.63 or 1.64 executed by or with respect to each inventor has not yet been submitted.

An oath or declaration in compliance with 37 CFR 1.63, or a substitute statement in compliance with 37 CFR 1.64, executed by or with respect to each inventor (for any inventor for which a compliant oath, declaration, or substitute statement has not yet been submitted) **MUST** be filed no later than the date on which the issue fee is paid. See 35 U.S.C. 115(f). Failure to timely comply will result in ABANDONMENT of this application.

A properly executed inventor's oath to declaration has not been received for the following inventor(s):

If applicant previously filed one or more oaths, declarations, or substitute statements, applicant may have received an informational notice regarding deficiencies therein.

The following deficiencies are noted:

INFORMAL ACTION PROBLEMS

- A properly executed inventor's oath or declaration has not been received for the following inventor(s): **Dale R. Thornberry**.

Applicant may submit the inventor's oath or declaration at any time before the Notice of Allowance and Fee(s) Due, PTOL-85, is mailed.

- The substitute statement is signed by a person who is not identified as the applicant under 37 CFR 1.46 in an application data sheet (ADS). Only an applicant under 37 CFR 1.43, 1.45 or 1.46 may execute a substitute statement. See 37 CFR 1.64(a). An application data sheet in compliance with 37 CFR 1.76 identifying the person (i.e., assignee, obligated assignee, or person who otherwise shows sufficient proprietary interest) executing the substitute statement as the applicant, or an inventor's oath or declaration in compliance with 37 CFR 1.63 or 1.64 executed by or with respect to the inventor for whom the substitute statement was provided, is required.

Dale R. Thornberry

Questions relating to this Notice should be directed to the Application Assistance Unit at 571-272-4200.

OMB Clearance and PRA Burden Statement for PTOL-85 Part B

The Paperwork Reduction Act (PRA) of 1995 requires Federal agencies to obtain Office of Management and Budget approval before requesting most types of information from the public. When OMB approves an agency request to collect information from the public, OMB (i) provides a valid OMB Control Number and expiration date for the agency to display on the instrument that will be used to collect the information and (ii) requires the agency to inform the public about the OMB Control Number's legal significance in accordance with 5 CFR 1320.5(b).

The information collected by PTOL-85 Part B 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. 14/018,943	Applicant(s) THORNBERRY ET AL.	
	Examiner ATIBA O. FITZPATRICK	Art Unit 2666	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 14/018943.
☐ 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 1-20. 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/pph/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: _____.

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) | 5. ☐ Examiner's Amendment/Comment |
| 2. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date <u>03/23/2015</u> | 6. ☒ Examiner's Statement of Reasons for Allowance |
| 3. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 7. ☐ Other _____. |
| 4. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____. | |

/ATIBA O FITZPATRICK/
Primary Examiner, Art Unit 2666

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance: Limitations pertaining to "on the aerial image of the region, providing a visual marker that is moveable on a computer monitor around said region, said visual marker initially corresponding to said first location data, wherein said visual marker may be moved to a final location on top of the building to more precisely identify the location of the building roof structure, the final location having location coordinates; providing a computer input capable of signaling user-acceptance of the final location of said marker; and, providing visual access to one or more second aerial images from an aerial imagery database corresponding to location coordinates of the final location, the one or more second aerial images having a second resolution that is higher resolution than the first resolution", in conjunction with other limitations present in the independent claims, distinguish over the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ATIBA O. FITZPATRICK whose telephone number is (571)270-5255. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lefkowitz Sumati can be reached on (571)272-3638. The fax phone

Art Unit: 2666

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.

/ATIBA O FITZPATRICK/
Primary Examiner, Art Unit 2666

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	13	(THORNBERRY-DALE\$, THORNBERRY-CHRISS\$, GARRINGER-MARK\$).in.	US-PGPUB; USPAT; USOCR	OR	ON	2015/04/02 10:59
L2	0	1 and resolution.clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/02 10:59
L3	0	1 and resov\$4.clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/02 11:00
L7	2	12/470984.app.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/02 11:09
L8	13	(THORNBERRY-DALE\$, THORNBERRY-CHRISS\$, GARRINGER-MARK\$).in.	US-PGPUB; USPAT; USOCR	OR	ON	2015/04/02 11:09
L9	42	("5319541" "6859768" "20100110074" "6496184" "20070150366" "5699444" "5625827" "6636803" "6798925" "20060282235" "7305983" "6446053" "7133551" "20100114537" "20100179787" "5633995" "6980690" "7324666" "7085400" "20030014224" "20020154174" "20060200311" "20090132436" "7003400" "6396491" "7239761" "20050038636" "7343268" "20080262789" "4497551" "7133570" "6766282" "7164883" "20080221843" "5995765" "7046839" "20050288959" "6323885" "6385541" "6836270" "7006977" "20080105045").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2015/04/02 11:09
L10	13	L9 and (marker mark\$3 index indicator tag\$4 label\$4 pin) near5 (moveable mov\$3 chang\$3 adjust\$4 updat\$3 alter\$3 vary\$3 modif\$4 edit\$4 calibrat\$4 refin\$4 tune tuning tuned fine\$2tun\$3 replac\$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/02 11:09
L11	29	L9 not L10	US-PGPUB;	OR	ON	2015/04/02

			USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			11:09
L12	8	roof with (image picture photograph\$4 frame video) and (latitud\$5 longitud\$5) with (image picture photograph\$4 frame video) with (plural\$3 poly many several numerous various multi dual multiple (more NEAR2 than) two three first second third all any every each additional subsequent another next) near2 (database knowledge\$3base)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/02 11:09
L13	6	roof with (image picture photograph\$4 frame video) and (latitud\$5 longitud\$5) with (image picture photograph\$4 frame video) with (database knowledge\$3base) and (plural\$3 poly many several numerous various multi dual multiple (more NEAR2 than) two three first second third all any every each additional subsequent another next) near2 (database knowledge\$3base) not L12	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/02 11:09
L14	4	(US-20120120069-\$ or US-20100179787-\$ or US-20080262789-\$).did. or (US-8145578-\$).did.	US-PGPUB; USPAT	OR	ON	2015/04/02 11:09
L15	4	L14 and (plural\$3 poly many several numerous various multi dual multiple (more NEAR2 than) two three first second third all any every each additional subsequent another next) near2 (database knowledge\$3base)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/02 11:09
L16	42	("5319541" "6859768" "20100110074" "6496184" "20070150366" "5699444" "5625827" "6636803" "6798925" "20060282235" "7305983" "6446053" "7133551" "20100114537" "20100179787" "5633995" "6980690" "7324666" "7085400" "20030014224" "20020154174" "20060200311" "20090132436" "7003400" "6396491" "7239761" "20050038636" "7343268" "20080262789" "4497551" "7133570" "6766282" "7164883" "20080221843" "5995765" "7046839" "20050288959" "6323885" "6385541" "6836270" "7006977" "20080105045").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2015/04/02 11:09
L17	12	L16 and (plural\$3 poly many several numerous various multi dual multiple (more NEAR2 than) two three first second third all any every each additional subsequent another next) near2 (database knowledge\$3base)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/02 11:09
L18	0	roof with (image picture photograph\$4 frame video) and report\$4 with (latitud\$5 longitud\$5) with (image picture photograph\$4 frame video)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	ON	2015/04/02 11:09

			DERWENT; IBM_TDB			
L19	24	roof with (image picture photograph\$4 frame video) and report\$4 with (latitud\$5 longitud\$5)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/02 11:09
L20	8	(US-20100296693-\$ or US-20070107620-\$ or US-20050216147-\$ or US-20030095789-\$). did. or (US-7391956-\$ or US-7246007-\$ or US-6625383-\$ or US-6571052-\$).did.	US-PGPUB; USPAT	OR	ON	2015/04/02 11:09
L21	8	(US-20100296693-\$ or US-20070107620-\$ or US-20050216147-\$ or US-20030095789-\$). did. or (US-7391956-\$ or US-7246007-\$ or US-6625383-\$ or US-6571052-\$).did.	US-PGPUB; USPAT	OR	ON	2015/04/02 11:09
L22	8	L21 and report\$4 with (latitud\$5 longitud\$5)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/02 11:09
L23	1	L16 and report\$4 with (latitud\$5 longitud\$5)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/02 11:09
L24	20	L16 and (latitud\$5 longitud\$5)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/02 11:09
L25	1	"20100110074".pn. and report\$4 with model\$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/02 11:09
L26	34	L16 and (database knowledge\$3base)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/02 11:09
L27	2	"20100110074".pn. and (outlin\$4 contour\$4 border\$4 trac\$4 arm\$3 boundar\$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/02 11:09
L28	42	("5319541" "6859768" "20100110074"	US-PGPUB;	OR	ON	2015/04/02

		"6496184" "20070150366" "5699444" "5625827" "6636803" "6798925" "20060282235" "7305983" "6446053" "7133551" "20100114537" "20100179787" "5633995" "6980690" "7324666" "7085400" "20030014224" "20020154174" "20060200311" "20090132436" "7003400" "6396491" "7239761" "20050038636" "7343268" "20080262789" "4497551" "7133570" "6766282" "7164883" "20080221843" "5995765" "7046839" "20050288959" "6323885" "6385541" "6836270" "7006977" "20080105045").PN.	USPAT; USOCR			11:09
L29	3	(US-20060200311-\$ or US-20020154174-\$).did. or (US-6636803-\$).did.	US- PGPUB; USPAT	OR	ON	2015/04/02 11:09
L30	0	L29 and roof	US- PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/02 11:09
L31	29	L28 and ("382"/\$, "345"/\$, "703"/\$, "715"/\$, "340"/\$).ccls.	US- PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/02 11:09
L32	451	nadir near4 (image picture frame scan video photogra\$4)	US- PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/02 11:09
L33	148	nadir adj1 (image picture frame scan video photogra\$4)	US- PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/02 11:09
L34	2	("7184072" "8705843").PN.	US- PGPUB; USPAT; USOCR	OR	ON	2015/04/02 11:33

EAST Search History (I nterference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L5	6	(roof with (image picture photograph\$4 frame video) and (latitud\$5 longitud\$5) with (image picture photograph\$4 frame video) with (plural\$3 poly many several numerous various multi dual multiple (more NEAR2 than) two three first second third all any every each additional subsequent another next) near2 (database knowledge\$3base)).clm.	US- PGPUB; USPAT; UPAD	OR	ON	2015/04/02 11:07
L6	37	(roof with (image picture photograph\$4 frame	US-	OR	ON	2015/04/02

	video) and (database knowledge\$base)).clm.	PGPUB; USPAT; UPAD	11:08
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4/ 2/ 2015 11:34:46 AM
C:\ Users\ afitzpatrick\ Documents\ EAST\ Workspaces\ 13774478.wsp

Search Notes 	Application/Control No. 14018943	Applicant(s)/Patent Under Reexamination THORNBERRY ET AL.
	Examiner ATIBA O FITZPATRICK	Art Unit 2666

CPC- SEARCHED		
Symbol	Date	Examiner

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner

SEARCH NOTES		
Search Notes	Date	Examiner
("382"/\$, "345"/\$, "703"/\$, "715"/\$, "340"/\$).cccls. combined with keywords	4/2/2015	AF
keyword search	4/2/2015	AF

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner
	See interference search printout	4/2/2015	AF

	/ATIBA O FITZPATRICK/ Primary Examiner.Art Unit 2666
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<i>Index of Claims</i> 	Application/Control No. 14018943	Applicant(s)/Patent Under Reexamination THORNBERRY ET AL.
	Examiner ATIBA O FITZPATRICK	Art Unit 2666

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☒ Claims renumbered in the same order as presented by applicant				☐ CPA		☐ T.D.		☐ R.1.47	
CLAIM		DATE							
Final	Original	09/18/2014	04/02/2015						
	1	✓	=						
	2	✓	=						
	3	✓	=						
	4	✓	=						
	5	✓	=						
	6	✓	=						
	7	✓	=						
	8	✓	=						
	9	✓	=						
	10	✓	=						
	11	✓	=						
	12	✓	=						
	13	✓	=						
	14	✓	=						
	15	✓	=						
	16	✓	=						
	17	✓	=						
	18	✓	=						
	19	✓	=						
	20	✓	=						

Issue Classification 	Application/Control No. 14018943	Applicant(s)/Patent Under Reexamination THORNBERRY ET AL.	
	Examiner ATIBA O FITZPATRICK	Art Unit 2666	

CPC						
Symbol					Type	Version
G06F		3	/	04815	F	2013-01-01
G06K		9	/	00637	I	2013-01-01
G06T		7	/	602	I	2013-01-01
G06F		17	/	5004	I	2013-01-01
G01B		11	/	28	I	2013-01-01
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			/			

CPC Combination Sets				
Symbol	Type	Set	Ranking	Version

NONE (Assistant Examiner) _____ (Date) _____		Total Claims Allowed: 20	
/ATIBA O FITZPATRICK/ Primary Examiner.Art Unit 2666 (Primary Examiner) _____ (Date) _____		04/02/2015 O.G. Print Claim(s) 1	O.G. Print Figure 1

Issue Classification 	Application/Control No. 14018943	Applicant(s)/Patent Under Reexamination THORNBERRY ET AL.
	Examiner ATIBA O FITZPATRICK	Art Unit 2666

☒ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47															
Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original
	1		17												
	2		18												
	3		19												
	4		20												
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	7														
	8														
	9														
	10														
	11														
	12														
	13														
	14														
	15														
	16														

NONE (Assistant Examiner) _____ (Date) _____		Total Claims Allowed: 20	
/ATIBA O FITZPATRICK/ Primary Examiner.Art Unit 2666 (Primary Examiner) _____ (Date) _____		O.G. Print Claim(s) 1	O.G. Print Figure 1

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PTO/SB/08A and 08B
Form 6-2 and Form 6-2.1

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Use as many sheets as
necessary)

Complete if Known

Application No.	14/018,943
Filing Date	09/05/2013
First Named Inventor	Dale R. Thornberry
Art Unit	2666
Examiner Name	Atiba O. Fitzpatrick
Attorney Docket No.	6338.253

U. S. PATENT APPLICATION DOCUMENTS

EXAM INIT.	Cite No. ¹	Patent Number Number-Kind Code ¹ (if known)	Name of Patentee or Applicant of Cited Document	Issue Date MM/DD/YYYY	
	P1	7,184,072	Loewen et al.	02/27/2007	
	P2	8,705,843	Lieckfeldt, Peter	04/22/2014	

U. S. PATENT APPLICATION PUBLICATION DOCUMENTS

EXAM INIT.	Cite No. ¹	Publication Number Number-Kind Code ¹ (if known)	Name of Patentee or Applicant of Cited Document	Publications Date MM/DD/YYYY	

Examiner Signature: _____ Date Considered: _____

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ² Enter Office that issued the document, by the two-letter code (WIPO Standard St.3). ³ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁴ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard St. 16 if possible. ⁵ Applicant is to place a check mark here if English language Translation is attached.

FOREIGN PATENT DOCUMENTS

EXAM INIT.	Cite No. ¹	Foreign Document No. ³ Country Code ² - Kind Code ⁴ (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM- DD-YYY	T ⁵

Examiner Signature: /Atiba Fitzpatrick/ Date Considered: 04/02/2015

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Filing Date	09/05/2013
First Named Inventor	Dale R. Thornberry
Art Unit	2666
Examiner Name	Atiba O. Fitzpatrick
Attorney Docket No.	6338.253

EXAM INIT.	Cite Number	NON-PATENT DOCUMENTS	
		Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	
	NPL1	IMHOF, Ralph K., "Mapping from Oblique Photographs", Manual of Photogrammetry, Chapter 18, 1966.	
	NPL2	MOSTAFA, et al., "System Performance Analysis of INS/DGPS Integrated System for Mobile Mapping System (MMS), Department of Geomatics Engineering, University of Calgary, Commission VI, WG VI/4, March 2004.	
	NPL3	Noronha et al., "Detection and Modeling of Building from Multiple Aerial Images, " Institute for Robotics and Intelligent Systems, University of Southern California, November 27, 2001, 32 pages.	
	NPL4	BIGNONE et al, Automatic Extraction of Generic House Roofs from High Resolution Aerial Imagery, Communication Technology Laboratory, Swiss Federal Institute of Technology ETH, CH-8092 Zurich, Switzerland, 12 pages, 1996.	
	NPL5	GREENING et al., Commercial Applications of GPS-Assisted Photogrammetry, Presented at GIS/LIS Annual Conference and Exposition, Phoenix, AZ, October 1994.	
Examiner Signature: /Atiba Fitzpatrick/		Date Considered: 04/02/2015	
EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Unique citation designation number. 2 Applicant is to place a check mark here if English language Translation is attached.			

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /A.F./



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/018,943	09/05/2013	Dale R. Thornberry	6338.253	1069
7590 05/29/2015				
DUNLAP CODDING, P.C.				
PO BOX 16370				
OKLAHOMA CITY, OK 73113				
EXAMINER				
FITZPATRICK, ATIBA O				
ART UNIT		PAPER NUMBER		
2666				
NOTIFICATION DATE		DELIVERY MODE		
05/29/2015		ELECTRONIC		

Letter Withdrawing a Notice Requiring Inventor's Oath or Declaration

The Notice Requiring Inventor's Oath or Declaration mailed on 2/8/15 was sent in error, and is hereby withdrawn. The time period set forth in the Notice of Allowance and Fee(s) Due to file a reply and pay the required fees continues to run from the mailing date of the Notice of Allowance and Fee(s) Due. Any time period set forth in the Notice of Allowability continues to run from the mailing date of the Notice of Allowability.

Questions relating to this Notice should be directed to the Application Assistance Unit at 571-272-4200.

[Signature]
(571)-272-4200 or 1(888)-786-0101

Patent Publication Branch

Office of Data Management

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.

Request for Continued Examination (RCE) Transmittal

Address to:
Mail Stop RCE
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Application Number	14/018,943
Filing Date	09/05/2013
First Named Inventor	Dale R. Thornberry
Art Unit	2666
Examiner Name	Atiba O. Fitzpatrick
Attorney Docket Number	6338.253

This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application.

Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. See Instruction Sheet for RCEs (not to be submitted to the USPTO) on page 2.

1. **Submission required under 37 CFR 1.114** Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).

- a. ☐ Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.

i. ☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on _____

ii. ☐ Other _____

- b. ☒ Enclosed

i. ☐ Amendment/Reply

iii. ☒ Information Disclosure Statement (IDS)

ii. ☐ Affidavit(s)/ Declaration(s)

iv. ☐ Other _____

2. Miscellaneous

- a. ☐ Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a period of _____ months. (Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(i) required)

b. ☐ Other _____

3. Fees

The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.

The Director is hereby authorized to charge the following fees, any underpayment of fees, or credit any overpayments, to

- a. ☐ Deposit Account No. _____

i. ☒ RCE fee required under 37 CFR 1.17(e)

ii. ☐ Extension of time fee (37 CFR 1.136 and 1.17)

iii. ☐ Other _____

- b. ☐ Check in the amount of \$ _____ enclosed

- c. ☒ Payment by credit card (Form PTO-2038 enclosed)

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

Signature	<i>Marc Brockhaus</i>	Date	07/07/2015
Name (Print/Type)	Marc A. Brockhaus	Registration No.	40,923

CERTIFICATE OF MAILING OR TRANSMISSION

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop RCE, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450 or facsimile transmitted to the U.S. Patent and Trademark Office on the date shown below.

Signature	<i>Marc Brockhaus</i>	Date	07/07/2015
Name (Print/Type)	Marc A. Brockhaus		

This collection of information is required by 37 CFR 1.114. 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: Mail Stop RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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**SUPPLEMENTAL
INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Use as many sheets as
necessary)

Complete if Known	
Application No.	14/018,943
Filing Date	09/05/2013
First Named Inventor	Dale R. Thornberry
Art Unit	2666
Examiner Name	Atiba O. Fitzpatrick
Attorney Docket No.	6338.253

U. S. PATENT APPLICATION DOCUMENTS

EXAM INIT.	Cite No. ¹	Patent Number Number-Kind Code ¹ (if known)	Name of Patentee or Applicant of Cited Document	Issue Date MM/DD/YYYY	

U. S. PATENT APPLICATION PUBLICATION DOCUMENTS

EXAM INIT.	Cite No. ¹	Publication Number Number-Kind Code ¹ (if known)	Name of Patentee or Applicant of Cited Document	Publications Date MM/DD/YYYY	
	PB1	2007/0220174	Abhyanker	09/20/2007	

Examiner Signature: _____ Date Considered: _____

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FOREIGN PATENT DOCUMENTS

EXAM INIT.	Cite No. ¹	<u>Foreign Document No.</u> ³ Country Code ² - Kind Code ⁴ (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM- DD-YYY	T ⁵

Examiner Signature: _____ Date Considered: _____

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Form 6-2 and Form 6-2.1

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INFORMATION DISCLOSURE
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(Use as many sheets as
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Filing Date	09/05/2013
First Named Inventor	Dale R. Thornberry
Art Unit	2666
Examiner Name	Atiba O. Fitzpatrick
Attorney Docket No.	6338.253

EXAM INIT.	Cite Number	NON-PATENT DOCUMENTS Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published
Examiner Signature:		Date Considered:
EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Unique citation designation number. 2 Applicant is to place a check mark here if English language Translation is attached.		

Electronic Patent Application Fee Transmittal

Application Number:	14018943			
Filing Date:	05-Sep-2013			
Title of Invention:	System and Process for Roof Measurement Using Aerial Imagery			
First Named Inventor/Applicant Name:	Dale R. Thornberry			
Filer:	Marc Alan Brockhaus/Lori Radford			
Attorney Docket Number:	6338.253			
Filed as Small Entity				
Filing Fees for Utility under 35 USC 111(a)				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Miscellaneous:				
Request for Continued Examination	2801	1	600	600
Total in USD (\$)				600

Electronic Acknowledgement Receipt

EFS ID:	22841648
Application Number:	14018943
International Application Number:	
Confirmation Number:	1069
Title of Invention:	System and Process for Roof Measurement Using Aerial Imagery
First Named Inventor/Applicant Name:	Dale R. Thornberry
Customer Number:	30589
Filer:	Marc Alan Brockhaus/Lori Radford
Filer Authorized By:	Marc Alan Brockhaus
Attorney Docket Number:	6338.253
Receipt Date:	07-JUL-2015
Filing Date:	05-SEP-2013
Time Stamp:	12:35:48
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	\$600
RAM confirmation Number	10908
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The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

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1	Transmittal Letter	6338253_Transmittal07072015.pdf	56194	no	1
			fd829c31779e9fa3cd177b312b69ebd83f9269a2		
Warnings:					
Information:					
2	Request for Continued Examination (RCE)	6338253_RCE.pdf	67357	no	1
			302678f207ea46a4b526104fe82303061fd08f47		
Warnings:					
This is not a USPTO supplied RCE SB30 form.					
Information:					
3	Information Disclosure Statement (IDS) Form (SB08)	6338253_IDS.pdf	70798	no	2
			4848b0c675632e7803438d58acbacfda0eae9301		
Warnings:					
Information:					
This is not an USPTO supplied IDS fillable form					
4	Fee Worksheet (SB06)	fee-info.pdf	30624	no	2
			459c811808032064401f3165b1df25884b09cf24		
Warnings:					
Information:					
Total Files Size (in bytes):			224973		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

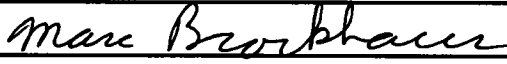
New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

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.

TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	14/018,943
	Filing Date	09/05/2013
	First Named Inventor	Dale R. Thornberry
	Art Unit	2666
	Examiner Name	Atiba O. Fitzpatrick
Total Number of Pages in This Submission	Attorney Docket Number	6338.253

ENCLOSURES (Check all that apply)		
☐ Fee Transmittal Form ☐ Fee Attached ☐ Amendment/Reply ☐ After Final ☐ Affidavits/declaration(s) ☐ Extension of Time Request ☐ Express Abandonment Request ☒ Information Disclosure Statement ☐ Certified Copy of Priority Document(s) ☐ Reply to Missing Parts/Incomplete Application ☐ Reply to Missing Parts under 37 CFR 1.52 or 1.53	☐ Drawing(s) ☐ Licensing-related Papers ☐ Petition ☐ Petition to Convert to a Provisional Application ☐ Power of Attorney, Revocation ☐ Change of Correspondence Address ☐ Terminal Disclaimer ☐ Request for Refund ☐ CD, Number of CD(s) _____ ☐ Landscape Table on CD	☐ After Allowance Communication to TC ☐ Appeal Communication to Board of Appeals and Interferences ☐ Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) ☐ Proprietary Information ☐ Status Letter ☒ Other Enclosure(s) (please identify below): See Remarks
Remarks ELECTRONICALLY TRANSMITTED: 1. SB21 Transmittal Form (1 pg); 2. SB30 Request for Continued Exam (1 pg); and 3. Information Disclosure Statement (2 pgs).		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT			
Firm Name	DUNLAP CODDING, P.C.		
Signature			
Printed name	Marc A. Brockhaus		
Date	07/07/2015	Reg. No.	40,923

CERTIFICATE OF TRANSMISSION/MAILING			
I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:			
Signature			
Typed or printed name	Marc A. Brockhaus	Date	07/07/2015

This collection of information is required by 37 CFR 1.5. 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 2 hours 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.



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

NOTICE OF ALLOWANCE AND FEE(S) DUE

30589 7590 09/23/2015
DUNLAP CODDING, P.C.
PO BOX 16370
OKLAHOMA CITY, OK 73113

EXAMINER

FITZPATRICK, ATIBA O

ART UNIT

PAPER NUMBER

2666

DATE MAILED: 09/23/2015

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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14/018,943

09/05/2013

Dale R. Thornberry

6338.253

1069

TITLE OF INVENTION: SYSTEM AND PROCESS FOR ROOF MEASUREMENT USING AERIAL IMAGERY

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	\$480	\$0	\$0	\$480	12/23/2015

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.

PART B - FEE(S) TRANSMITTAL

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.

30589 7590 09/23/2015
DUNLAP CODDING, P.C.
PO BOX 16370
OKLAHOMA CITY, OK 73113

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.
14/018,943	09/05/2013	Dale R. Thornberry	6338.253	1069

TITLE OF INVENTION: SYSTEM AND PROCESS FOR ROOF MEASUREMENT USING AERIAL IMAGERY

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	\$480	\$0	\$0	\$480	12/23/2015

EXAMINER	ART UNIT	CLASS-SUBCLASS
FITZPATRICK, ATIBA O	2666	382-154000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. ☐ "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.	2. For printing on the patent front page, list (1) The names of up to 3 registered patent attorneys or agents OR, alternatively, 1 _____ (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 _____ 3 _____
---	---

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

4a. The following fee(s) are submitted:

- ☐ Issue Fee
☐ Publication Fee (No small entity discount permitted)
☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
☐ Payment by credit card. Form PTO-2038 is attached.
☐ The director is hereby authorized to charge the required fee(s), any deficiency, or credits any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

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 forms 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: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature _____ Date _____
Typed or printed name _____ Registration No. _____



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.
14/018,943	09/05/2013	Dale R. Thornberry	6338.253	1069

30589	7590	09/23/2015
DUNLAP CODDING, P.C. PO BOX 16370 OKLAHOMA CITY, OK 73113		

EXAMINER	
FITZPATRICK, ATIBA O	

ART UNIT	PAPER NUMBER
2666	

DATE MAILED: 09/23/2015

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (Applications filed on or after May 29, 2000)

The Office has discontinued providing a Patent Term Adjustment (PTA) calculation with the Notice of Allowance.

Section 1(h)(2) of the AIA Technical Corrections Act amended 35 U.S.C. 154(b)(3)(B)(i) to eliminate the requirement that the Office provide a patent term adjustment determination with the notice of allowance. See Revisions to Patent Term Adjustment, 78 Fed. Reg. 19416, 19417 (Apr. 1, 2013). Therefore, the Office is no longer providing an initial patent term adjustment determination with the notice of allowance. The Office will continue to provide a patent term adjustment determination with the Issue Notification Letter that is mailed to applicant approximately three weeks prior to the issue date of the patent, and will include the patent term adjustment on the patent. Any request for reconsideration of the patent term adjustment determination (or reinstatement of patent term adjustment) should follow the process outlined in 37 CFR 1.705.

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

OMB Clearance and PRA Burden Statement for PTOL-85 Part B

The Paperwork Reduction Act (PRA) of 1995 requires Federal agencies to obtain Office of Management and Budget approval before requesting most types of information from the public. When OMB approves an agency request to collect information from the public, OMB (i) provides a valid OMB Control Number and expiration date for the agency to display on the instrument that will be used to collect the information and (ii) requires the agency to inform the public about the OMB Control Number's legal significance in accordance with 5 CFR 1320.5(b).

The information collected by PTOL-85 Part B 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. 14/018,943	Applicant(s) THORNBERRY ET AL.	
	Examiner ATIBA O. FITZPATRICK	Art Unit 2666	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 07/07/2015.
☐ 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 1-20. 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/pph/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: _____.

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) | 5. ☐ Examiner's Amendment/Comment |
| 2. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date <u>07/07/2015</u> | 6. ☒ Examiner's Statement of Reasons for Allowance |
| 3. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 7. ☐ Other _____. |
| 4. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____. | |

/ATIBA O FITZPATRICK/
Primary Examiner, Art Unit 2666

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance: Limitations pertaining to "providing visual access to one or more second aerial images from an aerial imagery database corresponding to location coordinates of the final location, the one or more second aerial images having a second resolution that is higher resolution than the first resolution" (emphasis added), in conjunction with other limitations present in the independent claims, distinguish over the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ATIBA O. FITZPATRICK whose telephone number is (571)270-5255. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lefkowitz Sumati can be reached on (571)272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2666

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.

/ATIBA O FITZPATRICK/
Primary Examiner, Art Unit 2666

Substitute for form 1449/PTO
PTO/SB/08A and 08B
Form 6-2 and Form 6-2.1

**SUPPLEMENTAL
INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Use as many sheets as
necessary)

Complete if Known	
Application No.	14/018,943
Filing Date	09/05/2013
First Named Inventor	Dale R. Thornberry
Art Unit	2666
Examiner Name	Atiba O. Fitzpatrick
Attorney Docket No.	6338.253

U. S. PATENT APPLICATION DOCUMENTS

EXAM INIT.	Cite No. ¹	Patent Number Number-Kind Code ¹ (if known)	Name of Patentee or Applicant of Cited Document	Issue Date MM/DD/YYYY

U. S. PATENT APPLICATION PUBLICATION DOCUMENTS

EXAM INIT.	Cite No. ¹	Publication Number Number-Kind Code ¹ (if known)	Name of Patentee or Applicant of Cited Document	Publications Date MM/DD/YYYY
	PB1	2007/0220174	Abhyanker	09/20/2007

Examiner Signature: _____ Date Considered: _____

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ² Enter Office that issued the document, by the two-letter code (WIPO Standard St.3). ³ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁴ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard St. 16 if possible. ⁵ Applicant is to place a check mark here if English language Translation is attached.

FOREIGN PATENT DOCUMENTS

EXAM INIT.	Cite No. ¹	<u>Foreign Document No.</u> ³ Country Code ² - Kind Code ⁴ (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM- DD-YYY	T ⁵

Examiner Signature: /Atiba Fitzpatrick/ Date Considered: 09/16/2015

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ² Enter Office that issued the document, by the two-letter code (WIPO Standard St.3). ³ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁴ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard St. 16 if possible. ⁵ Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449/PTO
PTO/SB/08A and 08B
Form 6-2 and Form 6-2.1

**SUPPLEMENTAL
INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Use as many sheets as
necessary)

Complete if Known	
Application No.	14/018,943
Filing Date	09/05/2013
First Named Inventor	Dale R. Thornberry
Art Unit	2666
Examiner Name	Atiba O. Fitzpatrick
Attorney Docket No.	6338.253

EXAM INIT.	Cite Number	NON-PATENT DOCUMENTS
		Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published
Examiner Signature: /Atiba Fitzpatrick/		Date Considered: 09/16/2015
EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Unique citation designation number. 2 Applicant is to place a check mark here if English language Translation is attached.		

Search Notes 	Application/Control No. 14018943	Applicant(s)/Patent Under Reexamination THORNBERRY ET AL.
	Examiner ATIBA O FITZPATRICK	Art Unit 2666

CPC- SEARCHED		
Symbol	Date	Examiner

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner

SEARCH NOTES		
Search Notes	Date	Examiner
("382"/\$, "345"/\$, "703"/\$, "715"/\$, "340"/\$).ccls. combined with keywords	9/16/2015	AF
keyword search	9/16/2015	AF
G01B11/28; G06F17/5004; G06F3/04815; G06K9/00637; G06T7/602 combined with keywords	9/16/2015	AF

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner
	See interference search printout	9/16/2015	AF

	/ATIBA O FITZPATRICK/ Primary Examiner.Art Unit 2666
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EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L3	2	12/470984.app.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/16 19:27
L4	13	(THORNBERRY-DALE\$, THORNBERRY-CHRI\$\$, GARRINGER-MARK\$).in.	US-PGPUB; USPAT; USOCR	OR	ON	2015/09/16 19:27
L5	42	("5319541" "6859768" "20100110074" "6496184" "20070150366" "5699444" "5625827" "6636803" "6798925" "20060282235" "7305983" "6446053" "7133551" "20100114537" "20100179787" "5633995" "6980690" "7324666" "7085400" "20030014224" "20020154174" "20060200311" "20090132436" "7003400" "6396491" "7239761" "20050038636" "7343268" "20080262789" "4497551" "7133570" "6766282" "7164883" "20080221843" "5995765" "7046839" "20050288959" "6323885" "6385541" "6836270" "7006977" "20080105045").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2015/09/16 19:27
L6	13	L5 and (marker mark\$3 index indicator tag\$4 label\$4 pin) near5 (moveable mov\$3 chang\$3 adjust\$4 updat\$3 alter\$3 vary\$3 modif\$4 edit\$4 calibrat\$4 refin\$4 tune tuning tuned fine\$2tun\$3 replac\$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/16 19:27
L7	29	L5 not L6	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/16 19:27
L8	8	roof with (image picture photograph\$4 frame video) and (latitud\$5 longitud\$5) with (image picture photograph\$4 frame video) with (plural\$3 poly many several numerous various multi dual multiple (more NEAR2 than) two three first second third all any every each additional subsequent another next) near2 (database knowledge\$3base)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/16 19:27
L9	6	roof with (image picture photograph\$4 frame video) and (latitud\$5 longitud\$5) with (image picture photograph\$4 frame	US-PGPUB; USPAT; USOCR;	OR	ON	2015/09/16 19:27

		video) with (database knowledge\$3base) and (plural\$3 poly many several numerous various multi dual multiple (more NEAR2 than) two three first second third all any every each additional subsequent another next) near2 (database knowledge\$3base) not L8	FPRS; EPO; JPO; DERWENT; IBM_TDB			
L10	4	(US-20120120069-\$ or US-20100179787-\$ or US-20080262789-\$).did. or (US-8145578-\$).did.	US-PGPUB; USPAT	OR	ON	2015/09/16 19:27
L11	4	L10 and (plural\$3 poly many several numerous various multi dual multiple (more NEAR2 than) two three first second third all any every each additional subsequent another next) near2 (database knowledge\$3base)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/16 19:27
L12	42	("5319541" "6859768" "20100110074" "6496184" "20070150366" "5699444" "5625827" "6636803" "6798925" "20060282235" "7305983" "6446053" "7133551" "20100114537" "20100179787" "5633995" "6980690" "7324666" "7085400" "20030014224" "20020154174" "20060200311" "20090132436" "7003400" "6396491" "7239761" "20050038636" "7343268" "20080262789" "4497551" "7133570" "6766282" "7164883" "20080221843" "5995765" "7046839" "20050288959" "6323885" "6385541" "6836270" "7006977" "20080105045").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2015/09/16 19:27
L13	12	L12 and (plural\$3 poly many several numerous various multi dual multiple (more NEAR2 than) two three first second third all any every each additional subsequent another next) near2 (database knowledge\$3base)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/16 19:27
L14	0	roof with (image picture photograph\$4 frame video) and report\$4 with (latitud\$5 longitud\$5) with (image picture photograph\$4 frame video)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/16 19:27
L15	24	roof with (image picture photograph\$4 frame video) and report\$4 with (latitud\$5 longitud\$5)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/16 19:27
L16	8	(US-20100296693-\$ or US-20070107620-\$ or US-20050216147-\$ or US-20030095789-\$).did. or (US-7391956-\$ or US-7246007-\$ or US-6625383-\$ or US-6571052-\$).did.	US-PGPUB; USPAT	OR	ON	2015/09/16 19:27
L17	8	(US-20100296693-\$ or US-20070107620-\$ or US-20050216147-\$ or US-20030095789-\$).did. or (US-7391956-\$ or US-7246007-\$ or US-6625383-\$ or US-6571052-\$).did.	US-PGPUB; USPAT	OR	ON	2015/09/16 19:27

L18	8	L17 and report\$4 with (latitud\$5 longitud\$5)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/16 19:27
L19	1	L12 and report\$4 with (latitud\$5 longitud\$5)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/16 19:27
L20	20	L12 and (latitud\$5 longitud\$5)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/16 19:27
L21	1	"20100110074".pn. and report\$4 with model\$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/16 19:27
L22	34	L12 and (database knowledge\$3base)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/16 19:27
L23	2	"20100110074".pn. and (outlin\$4 contour\$4 border\$4 trac\$4 arm\$3 boundar\$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/16 19:27
L24	42	("5319541" "6859768" "20100110074" "6496184" "20070150366" "5699444" "5625827" "6636803" "6798925" "20060282235" "7305983" "6446053" "7133551" "20100114537" "20100179787" "5633995" "6980690" "7324666" "7085400" "20030014224" "20020154174" "20060200311" "20090132436" "7003400" "6396491" "7239761" "20050038636" "7343268" "20080262789" "4497551" "7133570" "6766282" "7164883" "20080221843" "5995765" "7046839" "20050288959" "6323885" "6385541" "6836270" "7006977" "20080105045").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2015/09/16 19:27
L25	3	(US-20060200311-\$ or US-20020154174-\$).did. or (US-6636803-\$).did.	US-PGPUB; USPAT	OR	ON	2015/09/16 19:27
L26	0	L25 and roof	US-PGPUB; USPAT;	OR	ON	2015/09/16 19:27

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
L27	29	L24 and ("382"/\$, "345"/\$, "703"/\$, "715"/\$, "340"/\$).ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/16 19:27
L28	480	nadir near4 (image picture frame scan video photogra\$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/16 19:27
L29	156	nadir adj1 (image picture frame scan video photogra\$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/16 19:27
L30	1	("20070220174").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2015/09/16 19:27
L31	5	(roof) near5 (image picture frame scan photogra\$4 picel pixel) with (address\$4 position\$4 locat\$4 placed placement placing coordinat\$4 latitude longitude) near5 (marker tag\$4 label\$4 pin) same (image picture frame scan photogra\$4 picel pixel) near5 (database knowledge\$3base)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/16 19:27
L32	11	(roof) near5 (image picture frame scan photogra\$4 picel pixel) and (address\$4 position\$4 locat\$4 placed placement placing coordinat\$4 latitude longitude) near5 (marker tag\$4 label\$4 pin) same (image picture frame scan photogra\$4 picel pixel) near5 (database knowledge\$3base)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/16 19:27
L33	6	L32 not L31	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/16 19:27
L34	2	("20070220174").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/16 19:27
L35	10	(roof) with (image picture frame scan photogra\$4 picel pixel video) and (address\$4 position\$4 locat\$4 placed placement placing coordinat\$4 latitude	US-PGPUB; USPAT; USOCR; FPRS;	OR	ON	2015/09/16 19:27

		longitude lat lon) with (marker tag\$4 label\$4 pin pushpin) same (image picture frame scan photogra\$4 picel pixel) near5 (database knowledge\$3base) not L32	EPO; JPO; DERWENT; IBM_TDB			
L36	108	(roof) with (image picture frame scan photogra\$4 picel pixel video) and (address\$4 position\$4 locat\$4 placed placement placing coordinat\$4 latitude longitude lat lon) with (marker tag\$4 label\$4 pin pushpin) same (image picture frame scan photogra\$4 picel pixel) near5 (archiv\$4 stor\$3 sav\$3 record\$3 memor\$4 repository database) not (L32 L35)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/16 19:27
L37	1	L36 and (G01B11/28; G06F17/5004; G06F3/04815; G06K9/00637; G06T7/602).cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/16 19:27
L38	84	(US-20150157468-\$ or US-20150151771-\$ or US-20130190981-\$ or US-20140368507-\$ or US-20140156049-\$ or US-20140015924-\$ or US-20130322767-\$ or US-20130293584-\$ or US-20120120103-\$ or US-20110205245-\$ or US-20070150366-\$ or US-20110001606-\$ or US-20030037812-\$ or US-20100114680-\$ or US-20090304227-\$ or US-20090046093-\$ or US-20060132291-\$ or US-20070019888-\$ or US-20060055991-\$ or US-20050267657-\$ or US-20050017537-\$ or US-20040247174-\$ or US-20040081355-\$ or US-20030137426-\$ or US-20030063004-\$ or US-20030019689-\$).did. or (US-6604606-\$ or US-6315180-\$ or US-6876390-\$ or US-6547304-\$ or US-6454049-\$ or US-6349249-\$ or US-6227603-\$ or US-6116485-\$ or US-5876064-\$ or US-5558389-\$ or US-5247357-\$ or US-5172228-\$ or US-4842316-\$ or US-4667565-\$ or US-4635136-\$ or US-4546530-\$ or US-4438878-\$ or US-4326726-\$ or US-3802354-\$ or US-3797670-\$ or US-3677192-\$).did. or (US-3460297-\$ or US-3418778-\$ or US-3395940-\$ or US-3371954-\$ or US-3321135-\$ or US-3279636-\$ or US-3186758-\$ or US-3186419-\$ or US-3180675-\$ or US-3161958-\$ or US-3160434-\$ or US-3143978-\$ or US-3141494-\$ or US-3096983-\$ or US-3085586-\$ or US-3069028-\$ or US-3053426-\$ or US-3011455-\$ or US-2895274-\$ or US-2882911-\$ or US-2860004-\$ or US-2723811-\$ or US-2715953-\$ or US-2576691-\$ or US-2513102-\$ or US-2414412-\$).did. or (US-2323665-\$ or US-2270506-\$ or US-2007514-\$ or US-1713503-\$ or US-1374386-\$).did. or (EP-0725326-\$ or CN-201539597-\$).did. or (EP-725326-\$).did. or (US-20150016689-\$).did.	US-PGPUB; USPAT; USOCR; FPRS; EPO; DERWENT	OR	ON	2015/09/16 19:27

L39	82	L38 and (address\$4 position\$4 locat\$4 placed placement placing coordinat\$4 latitude longitude lat lon) with (marker tag\$4 label\$4 pin pushpin) same (image picture frame scan photogra\$4 picel pixel) near5 (archiv\$4 stor\$3 sav\$3 record\$3 memor\$4 repository database)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/16 19:27
L40	11	(roof) near5 (image picture frame scan photogra\$4 picel pixel) and (address\$4 position\$4 locat\$4 placed placement placing coordinat\$4 latitude longitude) near5 (marker tag\$4 label\$4 pin) same (image picture frame scan photogra\$4 picel pixel) near5 (database knowledge\$3base)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/16 19:27
L41	10	(roof) with (image picture frame scan photogra\$4 picel pixel video) and (address\$4 position\$4 locat\$4 placed placement placing coordinat\$4 latitude longitude lat lon) with (marker tag\$4 label\$4 pin pushpin) same (image picture frame scan photogra\$4 picel pixel) near5 (database knowledge\$3base) not L40	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/16 19:27
L42	108	(roof) with (image picture frame scan photogra\$4 picel pixel video) and (address\$4 position\$4 locat\$4 placed placement placing coordinat\$4 latitude longitude lat lon) with (marker tag\$4 label\$4 pin pushpin) same (image picture frame scan photogra\$4 picel pixel) near5 (archiv\$4 stor\$3 sav\$3 record\$3 memor\$4 repository database) not (L40 L41)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/16 19:27
L43	137	(roof) with (image picture frame scan photogra\$4 picel pixel video) and (address\$4 position\$4 locat\$4 placed placement placing coordinat\$4 latitude longitude lat lon) with (marker tag\$4 label\$4 pin pushpin) same (image picture frame scan photogra\$4 picel pixel) near5 (retreiv\$4 provid\$4 access\$4 find\$3 get getting call) not (L42)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/16 19:27
L44	120	L43 not (L40 L41)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/16 19:27
L45	9	L44 and (G01B11/28; G06F17/5004; G06F3/04815; G06K9/00637; G06T7/602).cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/16 19:27
L46	3	(US-20100296693-\$ or US-20110282537-\$).did. or (US-8818770-\$).did.	US-PGPUB; USPAT	OR	ON	2015/09/16 19:27
L47	3	L46 and (address\$4 position\$4 locat\$4 placed placement placing coordinat\$4 latitude longitude lat lon) with (marker tag\$4 label\$4 pin pushpin) same (image picture frame scan photogra\$4 picel pixel)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	ON	2015/09/16 19:27

		near5 (retreiv\$4 provid\$4 access\$4 find\$3 get getting call)	DERWENT; IBM_TDB			
L48	111	L44 not L45	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/16 19:27
L49	231	(roof) with (image picture frame scan photogra\$4 picel pixel video) and (address\$4 position\$4 locat\$4 placed placement placing coordinat\$4 latitude longitude lat lon) same (image picture frame scan photogra\$4 picel pixel) near5 (database knowledge\$3base) not (L40 L41 L42 L43)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/16 19:27
L50	33	L49 and (G01B11/28; G06F17/5004; G06F3/04815; G06K9/00637; G06T7/602).cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/16 19:27
L51	15	(US-20120101783-\$ or US-20150094992-\$ or US-20100114537-\$ or US-20090208095-\$ or US-20140270355-\$ or US-20140132635-\$ or US-20140025343-\$ or US-20130211790-\$ or US-20130110558-\$ or US-20100110074-\$ or US-20100257487-\$ or US-20100142748-\$ or US-20080162380-\$).did. or (US-9135737-\$ or US-8731234-\$).did.	US-PGPUB; USPAT	OR	ON	2015/09/16 19:27
L52	15	L51 and (address\$4 position\$4 locat\$4 placed placement placing coordinat\$4 latitude longitude lat lon) same (image picture frame scan photogra\$4 picel pixel) near5 (database knowledge\$3base)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/16 19:27
L53	152	(roof) with (image picture frame scan photogra\$4 picel pixel video) and (address\$4 position\$4 locat\$4 placed placement placing coordinat\$4 latitude longitude lat lon) same (archiv\$4 stor\$3 sav\$3 record\$3 memor\$4 repository database) near5 (image picture frame scan photogra\$4 picel pixel) near5 (retreiv\$4 provid\$4 access\$4 find\$3 get getting call) not (L40 L41 L42 L43 L50)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/16 19:27
L54	0	L53 and (G01B11/28; G06F17/5004; G06F3/04815; G06K9/00637; G06T7/602).cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/16 19:27
L55	198	L49 not L50	US-PGPUB; USPAT; USOCR; FPRS;	OR	ON	2015/09/16 19:27

			EPO; JPO; DERWENT; IBM TDB			
L56	105	(US-20150242855-\$ or US-20150227775-\$ or US-20150213590-\$ or US-20150193972-\$ or US-20150149454-\$ or US- 20150097924-\$ or US-20150066442-\$ or US-20150043828-\$ or US-20120121125-\$ or US-20140357428-\$ or US-20140316614-\$ or US-20140289323-\$ or US- 20140282060-\$ or US-20140279868-\$ or US-20140258295-\$ or US-20140257943-\$ or US-20140036076-\$ or US-20140245210-\$ or US-20140236514-\$ or US- 20090132436-\$ or US-20140176543-\$ or US-20140132409-\$ or US-20130293542-\$ or US-20110216953-\$ or US-20120120069-\$ or US-20140029802-\$).did. or (US- 20140025199-\$ or US-20140019166-\$ or US-20080262789-\$ or US-20130296711-\$ or US-20130246204-\$ or US-20130230255-\$ or US-20130222369-\$ or US- 20130204457-\$ or US-20130176401-\$ or US-20130064522-\$ or US-20120281913-\$ or US-20120221371-\$ or US-20110109719-\$ or US-20120156662-\$ or US- 20120140063-\$ or US-20120086850-\$ or US-20120076358-\$ or US-20110292208-\$ or US-20110205084-\$ or US-20110137561-\$ or US-20110012900-\$ or US- 20100322483-\$ or US-20100212979-\$ or US-20100062817-\$ or US-20070003162-\$ or US-20100036883-\$ or US-20100009735-\$). did. or (US-20090316939-\$ or US- 20040029213-\$ or US-20090284553-\$ or US-20090259567-\$ or US-20090216552-\$ or US-20090171822-\$ or US-20090132316-\$ or US-20090112389-\$ or US- 20090100767-\$ or US-20080266142-\$ or US-20080249702-\$ or US-20080204570-\$ or US-20080172955-\$ or US-20080152216-\$ or US-20070140595-\$ or US- 20060152592-\$ or US-20060137736-\$ or US-20060132605-\$ or US-20060056732-\$ or US-20050231507-\$ or US-20050203768-\$ or US-20040215660-\$ or US- 20030216953-\$ or US-20030076414-\$ or US-20020164962-\$ or US-20020154213-\$ or US-20020134151-\$).did. or (US- 20020084891-\$ or US-20020065046-\$ or US-20020040356-\$ or US-20020009978-\$ or US-20010049592-\$).did. or (US- 9135752-\$ or US-7983474-\$ or US- 6509750-\$ or US-6812851-\$ or US- 6002499-\$ or US-6241288-\$ or US- 5748865-\$ or US-5835386-\$ or US- 5831876-\$ or US-5818737-\$ or US- 5815417-\$ or US-5809161-\$ or US- 5808916-\$ or US-5734337-\$ or US- 5259037-\$).did. or (KR-100818340-\$).did. or (US-20140125664-\$ or US- 20140019166-\$ or US-20080262789-\$ or KR-818340-\$).did.	US-PGPUB; USPAT; FPRS; DERWENT	OR	ON	2015/09/16 19:27
L57	105	L56 and (address\$4 position\$4 locat\$4	US-PGPUB;	OR	ON	2015/09/16

		placed placement placing coordinat\$4 latitude longitude lat lon) same (image picture frame scan photogra\$4 picel pixel) near5 (database knowledge\$3base)	USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			19:27
L58	87	L53 not L49	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/16 19:27
L59	60	(US-20140204215-\$ or US-20130201365-\$ or US-20130195314-\$ or US-20130144427-\$ or US-20130116968-\$ or US-20110122520-\$ or US-20100199915-\$ or US-20100149782-\$ or US-20070065259-\$ or US-20060146120-\$ or US-20020156559-\$ or US-20070091183-\$ or US-20070057530-\$ or US-20060120565-\$ or US-20050285428-\$ or US-20050196258-\$ or US-20050080702-\$ or US-20050071376-\$ or US-20040222658-\$ or US-20040155480-\$ or US-20030101237-\$ or US-20030095789-\$ or US-20030081123-\$ or US-20030057749-\$ or US-20020063725-\$).did. or (US-7774268-\$ or US-6400835-\$ or US-7855662-\$ or US-7602947-\$ or US-6917693-\$ or US-6580373-\$ or US-6571052-\$ or US-6473126-\$ or US-6375222-\$ or US-6360930-\$ or US-6215518-\$ or US-6198502-\$ or US-6131343-\$ or US-6067078-\$ or US-5835241-\$ or US-5764383-\$ or US-5760925-\$ or US-5726775-\$ or US-5551743-\$ or US-5080426-\$ or US-5039153-\$ or US-4746163-\$ or US-4671315-\$ or US-4290083-\$ or US-3957301-\$ or US-3841221-\$).did. or (US-3557712-\$).did. or (US-3282192-\$ or US-3206725-\$ or US-2925859-\$ or US-1605220-\$).did. or (WO-0224565-\$).did. or (CA-2546882-\$ or US-20050017537-\$ or WO-0224565-\$).did.	US-PGPUB; USPAT; USOCR; FPRS; DERWENT	OR	ON	2015/09/16 19:27
L60	0	L59 and (address\$4 position\$4 locat\$4 placed placement placing coordinat\$4 latitude longitude lat lon) same (image picture frame scan photogra\$4 picel pixel) near5 (database knowledge\$3base)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/16 19:27
L61	60	L59 and (address\$4 position\$4 locat\$4 placed placement placing coordinat\$4 latitude longitude lat lon) same (archiv\$4 stor\$3 sav\$3 record\$3 memor\$4 repository database) near5 (image picture frame scan photogra\$4 picel pixel) near5 (retreiv\$4 provid\$4 access\$4 find\$3 get getting call)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/16 19:27
L62	17	(roof) with (image picture frame scan photogra\$4 picel pixel video) and (address\$4 position\$4 locat\$4 placed	US-PGPUB; USPAT; USOCR;	OR	ON	2015/09/16 19:27

		placement placing coordinat\$4 latitude longitude lat lon) same (high\$3 great\$3 increas\$4 more abvoe superior better best) near5 (resolution resolv\$4) with (image picture frame scan photogra\$4 picel pixel) near5 (database knowledge\$3base)	FPRS; EPO; JPO; DERWENT; IBM_TDB			
L63	17	(roof) with (image picture frame scan photogra\$4 picel pixel video) and (address\$4 position\$4 locat\$4 placed placement placing coordinat\$4 latitude longitude lat lon) same (high\$3 great\$3 increas\$4 more above superior better best) near5 (resolution resolv\$4) with (image picture frame scan photogra\$4 picel pixel) near5 (database knowledge\$3base)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/16 19:27
L64	6	(US-20140237430-\$ or US-20140019166-\$ or US-20100296693-\$ or US-20120086850-\$ or US-20060137736-\$).did. or (US-20140019166-\$).did.	US-PGPUB; DERWENT	OR	ON	2015/09/16 19:27
L65	6	L64 and (address\$4 position\$4 locat\$4 placed placement placing coordinat\$4 latitude longitude lat lon) same (high\$3 great\$3 increas\$4 more above superior better best) near5 (resolution resolv\$4) with (image picture frame scan photogra\$4 picel pixel) near5 (database knowledge\$3base)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/16 19:27
L66	4	(roof) with (image picture frame scan photogra\$4 picel pixel video) and (roof) with (address\$4 position\$4 locat\$4 placed placement placing coordinat\$4 latitude longitude lat lon) and (high\$3 great\$3 increas\$4 more above superior better best) near5 (resolution resolv\$4) with (image picture frame scan photogra\$4 picel pixel) near5 (database knowledge\$3base) not L63	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/16 19:27

EAST Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	12	((roof) with (image picture frame scan photogra\$4 picel pixel video) and (address\$4 position\$4 locat\$4 placed placement placing coordinat\$4 latitude longitude lat lon) with (marker tag\$4 label\$4 pin pushpin) same (image picture frame scan photogra\$4 picel pixel) near5 (retreiv\$4 provid\$4 access\$4 find\$3 get getting call)).clm.	US-PGPUB; USPAT; UPAD	OR	ON	2015/09/16 19:24
L2	18	((roof) with (image picture frame scan photogra\$4 picel pixel video) and (address\$4 position\$4 locat\$4 placed placement placing coordinat\$4 latitude longitude lat lon) same (image picture frame scan photogra\$4 picel pixel) near5 (database knowledge\$3base)).clm.	US-PGPUB; USPAT; UPAD	OR	ON	2015/09/16 19:25

<i>Index of Claims</i> 	Application/Control No. 14018943	Applicant(s)/Patent Under Reexamination THORNBERRY ET AL.
	Examiner ATIBA O FITZPATRICK	Art Unit 2666

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☒ Claims renumbered in the same order as presented by applicant					☐ CPA		☐ T.D.		☐ R.1.47	
CLAIM		DATE								
Final	Original	09/18/2014	04/02/2015	09/16/2015						
	1	✓	=	=						
	2	✓	=	=						
	3	✓	=	=						
	4	✓	=	=						
	5	✓	=	=						
	6	✓	=	=						
	7	✓	=	=						
	8	✓	=	=						
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	10	✓	=	=						
	11	✓	=	=						
	12	✓	=	=						
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	14	✓	=	=						
	15	✓	=	=						
	16	✓	=	=						
	17	✓	=	=						
	18	✓	=	=						
	19	✓	=	=						
	20	✓	=	=						

Issue Classification 	Application/Control No. 14018943	Applicant(s)/Patent Under Reexamination THORNBERRY ET AL.	
	Examiner ATIBA O FITZPATRICK	Art Unit 2666	

CPC						
Symbol					Type	Version
G06F		3	/	04815	F	2013-01-01
G06K		9	/	00637	I	2013-01-01
G06T		7	/	602	I	2013-01-01
G06F		17	/	5004	I	2013-01-01
G01B		11	/	28	I	2013-01-01
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			/			
			/			

CPC Combination Sets				
Symbol	Type	Set	Ranking	Version

NONE		Total Claims Allowed: 20	
(Assistant Examiner)	(Date)		
/ATIBA O FITZPATRICK/ Primary Examiner.Art Unit 2666	09/16/2015	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	1

Issue Classification 	Application/Control No. 14018943	Applicant(s)/Patent Under Reexamination THORNBERRY ET AL.
	Examiner ATIBA O FITZPATRICK	Art Unit 2666

☒ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47															
Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original
	1		17												
	2		18												
	3		19												
	4		20												
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	7														
	8														
	9														
	10														
	11														
	12														
	13														
	14														
	15														
	16														

NONE	Total Claims Allowed: 20	
(Assistant Examiner)	(Date)	
/ATIBA O FITZPATRICK/ Primary Examiner.Art Unit 2666	09/16/2015	O.G. Print Claim(s) 1
(Primary Examiner)	(Date)	O.G. Print Figure 1

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: **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)

30589 7590 09/23/2015
DUNLAP CODDING, P.C.
PO BOX 16370
OKLAHOMA CITY, OK 73113

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.

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.

Marc A. Brockhaus	(Depositor's name)
<i>Marc Brockhaus</i>	(Signature)
12/15/2015	(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/018,943	09/05/2013	Dale R. Thornberry	6338.253	1069

TITLE OF INVENTION: SYSTEM AND PROCESS FOR ROOF MEASUREMENT USING AERIAL IMAGERY

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	\$480	\$0	\$0	\$480	12/23/2015

EXAMINER	ART UNIT	CLASS-SUBCLASS
FITZPATRICK, ATIBA O	2666	382-154000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
☐ "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.

2. For printing on the patent front page, list

- (1) The names of up to 3 registered patent attorneys or agents OR, alternatively,
(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.

1 DUNLAP CODDING, P.C.

2 _____
3 _____

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)

Pictometry International Corp.

Rochester, New York

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

4a. The following fee(s) are submitted:

- ☒ Issue Fee
☒ Publication Fee (No small entity discount permitted)
☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): (Please first recopy any previously paid issue fee shown above)

- ☐ A check is enclosed.
☒ Payment by credit card. Form PTO-2038 is attached.
☐ The director is hereby authorized to charge the required fee(s), any deficiency, or credits any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

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 forms 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: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature *Marc Brockhaus*
Typed or printed name Marc A. Brockhaus

Date 12/15/2015

Registration No. 40,923

Electronic Patent Application Fee Transmittal

Application Number:	14018943			
Filing Date:	05-Sep-2013			
Title of Invention:	SYSTEM AND PROCESS FOR ROOF MEASUREMENT USING AERIAL IMAGERY			
First Named Inventor/Applicant Name:	Dale R. Thornberry			
Filer:	Marc Alan Brockhaus/Lori Radford			
Attorney Docket Number:	6338.253			
Filed as Small Entity				
Filing Fees for Utility under 35 USC 111(a)				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Utility Appl Issue Fee	2501	1	480	480

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Extension-of-Time:				
Miscellaneous:				
Total in USD (\$)				480

Electronic Acknowledgement Receipt

EFS ID:	24368283
Application Number:	14018943
International Application Number:	
Confirmation Number:	1069
Title of Invention:	SYSTEM AND PROCESS FOR ROOF MEASUREMENT USING AERIAL IMAGERY
First Named Inventor/Applicant Name:	Dale R. Thornberry
Customer Number:	30589
Filer:	Marc Alan Brockhaus/Lori Radford
Filer Authorized By:	Marc Alan Brockhaus
Attorney Docket Number:	6338.253
Receipt Date:	15-DEC-2015
Filing Date:	05-SEP-2013
Time Stamp:	15:43:01
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	\$480
RAM confirmation Number	2418
Deposit Account	
Authorized User	

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Transmittal Letter	6338253_Transmittal12152015.pdf	57211	no	1
			a4d1b50138fb6cd006dbdabfc19cfc1c77ecf770		
Warnings:					
Information:					
2	Issue Fee Payment (PTO-85B)	6338253_PartB.pdf	77228	no	1
			964907a8468b7232fe53a3eb25f5e3d393fa76a9		
Warnings:					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	30720	no	2
			14263e62a8a1b7f899bb189b499f09c4afd99f48		
Warnings:					
Information:					
Total Files Size (in bytes):			165159		
This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503. <u>New Applications Under 35 U.S.C. 111</u> If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application. <u>National Stage of an International Application under 35 U.S.C. 371</u> If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course. <u>New International Application Filed with the USPTO as a Receiving Office</u> If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.					

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.

TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	14/018,943
	Filing Date	09/05/2013
	First Named Inventor	Dale R. Thornberry
	Art Unit	2666
	Examiner Name	Atiba O. Fitzpatrick
Total Number of Pages in This Submission	Attorney Docket Number	6338.253

ENCLOSURES (Check all that apply)		
☐ Fee Transmittal Form ☐ Fee Attached ☐ Amendment/Reply ☐ After Final ☐ Affidavits/declaration(s) ☐ Extension of Time Request ☐ Express Abandonment Request ☐ Information Disclosure Statement ☐ Certified Copy of Priority Document(s) ☐ Reply to Missing Parts/Incomplete Application ☐ Reply to Missing Parts under 37 CFR 1.52 or 1.53	☐ Drawing(s) ☐ Licensing-related Papers ☐ Petition ☐ Petition to Convert to a Provisional Application ☐ Power of Attorney, Revocation ☐ Change of Correspondence Address ☐ Terminal Disclaimer ☐ Request for Refund ☐ CD, Number of CD(s) _____ ☐ Landscape Table on CD	☐ After Allowance Communication to TC ☐ Appeal Communication to Board of Appeals and Interferences ☐ Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) ☐ Proprietary Information ☐ Status Letter ☒ Other Enclosure(s) (please identify below): See Remarks
Remarks ELECTRONICALLY TRANSMITTED: 1. SB21 Transmittal Form (1 pg); and 2. PTOL-85 (1 pg).		
SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT		
Firm Name	DUNLAP CODDING, P.C.	
Signature	<i>Marc Brockhaus</i>	
Printed name	Marc A. Brockhaus	
Date	12/15/2015	Reg. No. 40,923

CERTIFICATE OF TRANSMISSION/MAILING	
I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:	
Signature	<i>Marc Brockhaus</i>
Typed or printed name	Marc A. Brockhaus
Date	12/15/2015

This collection of information is required by 37 CFR 1.5. 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 2 hours 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.

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UNITED STATES DEPARTMENT OF COMMERCE
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Address: COMMISSIONER FOR PATENTS
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Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/018,943	01/26/2016	9244589	6338.253	1069

30589 7590 01/06/2016
DUNLAP CODDING, P.C.
PO BOX 16370
OKLAHOMA CITY, OK 73113

ISSUE NOTIFICATION

The projected patent number and issue date are specified above.

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment is 0 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Application Assistance Unit (AAU) of the Office of Data Management (ODM) at (571)-272-4200.

APPLICANT(s) (Please see PAIR WEB site <http://pair.uspto.gov> for additional applicants):

Pictometry International Corp., Rochester, NY;
Dale R. Thornberry, Carmel, IN;
Chris T. Thornberry, Indianapolis, IN;
Mark F. Garringer, Eaton, IN;

The United States represents the largest, most dynamic marketplace in the world and is an unparalleled location for business investment, innovation, and commercialization of new technologies. The USA offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to encourage and facilitate business investment. To learn more about why the USA is the best country in the world to develop technology, manufacture products, and grow your business, visit SelectUSA.gov.

ELECTRONICALLY FILED: 03/11/2016

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent No.: 9,244,589 B2

Serial No.: 14/018,943

Issued: 01/26/2016

Inventors: Dale R. Thornberry, Chris T. Thornberry, Mark F. Garringer

Atty. Docket No.: 6338.253

Customer No.: 30589

Attn: Certificate of Correction Branch

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

**REQUEST FOR CERTIFICATE OF CORRECTION OF PATENT
FOR PTO AND/OR APPLICANT'S MISTAKES (37 CFR 1.322(a) and 1.323)**

Enclosed are:

☒ sb21 Transmittal Form; and

☒ 1 sheet(s) of form sb44 Certificate of Correction.

☐ PTO ERRORS

The exact column and line number where the mistakes occur in the patent as well as reference to the exact page and line number where the correct information occurs in the application file:

☐ No fee is submitted herewith.

[X] APPLICANT'S ERRORS

It is noted that errors appear in this patent of a clerical or typographical nature or a minor character as more fully described below. These errors occurred in good faith, and correction thereof does not involve such changes in the patent as would constitute new matter or would require re-examination. Thus, a Certificate of Correction is requested.

The exact column and line number where the mistakes occur in the patent are:

In the Specification:

Column 9, line 26: Delete "N + I " and replace with -- N + 1 --
(See Application, filed 09/05/2013, pg. 20, line 9)

Column 9, line 29: Delete "N + I. " and replace with -- N + 1. --
(See Application, filed 09/05/2013, pg. 20, line 11)

[X] RETURN OF CERTIFICATE

Please send the Certificate of Correction to the undersigned.


Marc A. Brockhaus, Reg. No. 40,923
DUNLAP CODDING, P.C.
P.O. Box 16370
Oklahoma City, Oklahoma 73113
Telephone: 405/607-8600
Facsimile: 405/607-8686

Attorney for Applicant

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

Page 1 of 1

PATENT NO. : 9,244,589 B2

APPLICATION NO.: 14/018,943

ISSUE DATE : 01/26/2016

INVENTOR(S) : Dale R. Thornberry, Chris T. Thornberry, Mark F. Garringer

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 9, line 26: Delete "N + I " and replace with -- N + 1 --

Column 9, line 29: Delete "N + I. " and replace with -- N + 1. --

MAILING ADDRESS OF SENDER (Please do not use customer number below):

Marc A. Brockhaus, Reg. # 40,923
Dunlap Codding, P.C.
P. O. Box 16370
Oklahoma City, OK 73113

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. 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 1.0 hour 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: Attention Certificate of Corrections Branch, 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.

Electronic Patent Application Fee Transmittal

Application Number:	14018943			
Filing Date:	05-Sep-2013			
Title of Invention:	SYSTEM AND PROCESS FOR ROOF MEASUREMENT USING AERIAL IMAGERY			
First Named Inventor/Applicant Name:	Dale R. Thornberry			
Filer:	Marc Alan Brockhaus/Julie Rose			
Attorney Docket Number:	6338.253			
Filed as Large Entity				
Filing Fees for Utility under 35 USC 111(a)				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Certificate of Correction	1811	1	100	100

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Extension-of-Time:				
Miscellaneous:				
Total in USD (\$)				100

Electronic Acknowledgement Receipt

EFS ID:	25169440
Application Number:	14018943
International Application Number:	
Confirmation Number:	1069
Title of Invention:	SYSTEM AND PROCESS FOR ROOF MEASUREMENT USING AERIAL IMAGERY
First Named Inventor/Applicant Name:	Dale R. Thornberry
Customer Number:	30589
Filer:	Marc Alan Brockhaus/Julie Rose
Filer Authorized By:	Marc Alan Brockhaus
Attorney Docket Number:	6338.253
Receipt Date:	11-MAR-2016
Filing Date:	05-SEP-2013
Time Stamp:	11:24:16
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	\$ 100
RAM confirmation Number	8232
Deposit Account	
Authorized User	

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Miscellaneous Incoming Letter	sb21_Transmittal_Form_COC.pdf	83982 e21e499c30efcf8f0f2a460d0da004cecdf24a67	no	1
Warnings:					
Information:					
2	Request for Certificate of Correction	Request_for_Certificate_of_Correction.pdf	68020 3fb4d0baa73e332d422ef7f8fb2e5520dce4b06e	no	2
Warnings:					
Information:					
3	Request for Certificate of Correction	sb44_Certificate_of_Correction.pdf	51504 e38f66174a131705dd48f6034fef935e2982101c	no	1
Warnings:					
Information:					
4	Fee Worksheet (SB06)	fee-info.pdf	30598 aa34a7ee75bb03b3c3d6b712b701441cceed9b94e	no	2
Warnings:					
Information:					
Total Files Size (in bytes):			234104		
This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503. <u>New Applications Under 35 U.S.C. 111</u> If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application. <u>National Stage of an International Application under 35 U.S.C. 371</u> If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course. <u>New International Application Filed with the USPTO as a Receiving Office</u> If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.					

**TRANSMITTAL
FORM**

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

Application Number	14/018,943
Filing Date	09/05/2016
First Named Inventor	Dale R. Thornberry
Art Unit	2666 (Conf No. 1069)
Examiner Name	Aliba O Fitzpatrick
Attorney Docket Number	6338.253

ENCLOSURES (Check all that apply)

☐ Fee Transmittal Form	☐ Drawing(s)	☐ After Allowance Communication to TC
☐ Fee Attached	☐ Licensing-related Papers	☐ Appeal Communication to Board of Appeals and Interferences
☐ Amendment/Reply	☐ Petition	☐ Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
☐ After Final	☐ Petition to Convert to a Provisional Application	☐ Proprietary Information
☐ Affidavits/declaration(s)	☐ Power of Attorney, Revocation	☐ Status Letter
☐ Extension of Time Request	☐ Change of Correspondence Address	☒ Other Enclosure(s) (please identify below):
☐ Express Abandonment Request	☐ Terminal Disclaimer	Certificate of Correction Filed Electronically
☐ Information Disclosure Statement	☐ Request for Refund	
☐ Certified Copy of Priority Document(s)	☐ CD, Number of CD(s) _____	
☐ Reply to Missing Parts/Incomplete Application	☐ Landscape Table on CD	
☐ Reply to Missing Parts under 37 CFR 1.52 or 1.53		

Remarks

1. sb21 Transmittal Form (1 pg.);
2. Request for Certificate of Correction (2 pgs.); and
3. sb44 Certificate of Correction (1 pg.)

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	DUNLAP CODDING, P.C.		
Signature	<i>Marc Brockhaus</i>		
Printed name	Marc A. Brockhaus		
Date	03/11/2016	Reg. No.	40,923

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being electronically transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:

Signature	<i>Marc Brockhaus</i>		
Typed or printed name	Marc A. Brockhaus	Date	03/11/2016

This collection of information is required by 37 CFR 1.5. 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 2 hours 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.

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 9,244,589 B2
APPLICATION NO. : 14/018943
DATED : January 26, 2016
INVENTOR(S) : Dale R. Thornberry, Chris T. Thornberry and Mark F. Garringer

Page 1 of 1

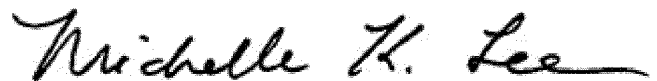
It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Specification

Column 9, line 26: Delete "N + I" and replace with -- N + 1 --

Column 9, line 29: Delete "N + I." and replace with -- N + 1. --

Signed and Sealed this
Seventeenth Day of May, 2016

A handwritten signature in black ink, reading "Michelle K. Lee". The signature is fluid and cursive, with the first letters of each name being capitalized and prominent.

Michelle K. Lee
Director of the United States Patent and Trademark Office



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 NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY.DOCKET NO./TITLE	REQUEST ID
14/018,943	09/05/2013	Dale R. Thornberry	6338.253	66114

Acknowledgement of Loss of Entitlement to Entity Status Discount

The entity status change request below filed through Private PAIR on 06/19/2018 has been accepted.

CERTIFICATIONS:

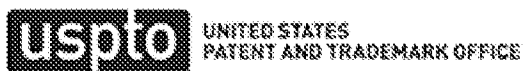
Change of Entity Status:

✕ Applicant changing to regular undiscounted fee status.

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

This portion must be completed by the signatory or signatories making the entity status change in accordance with 37 CFR 1.4(d)(4).

Signature:	/marcabrockhaus/
Name:	Marc A. Brockhaus
Registration Number:	40923



P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

CORRESPONDENCE ADDRESS CHANGE

APPLICATION #	FILING OR 371(C) DATE	REQUEST ID
14/018,943	09/05/2013	37737

The following fields have been changed to Customer Number 189081 on 08/10/2022 via Patent Center in view of the certification copied below that authorized the change.

- Correspondence Address

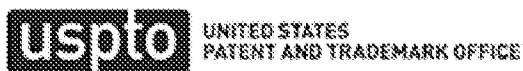
The address for Customer Number 189081 is:

189081 - EagleView
PO BOX 16370
OKLAHOMA CITY , OK 73113

I certify, in accordance with 37 CFR 1.4(d)(4), that I am :

An attorney or Agent of Record registered to practice before the Patent and Trademark Office who has been given power of attorney in this application

Signature	Name	Registration #
/Ann Robl/	ANN ROBL	71541



P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

FEE ADDRESS CHANGE

APPLICATION #	FILING OR 371(C) DATE	REQUEST ID
14/018,943	09/05/2013	37737

The following fields have been changed to Customer Number 189081 on 08/10/2022 via Patent Center in view of the certification copied below that authorized the change.

- Maintenance Fee Address

The address for Customer Number 189081 is:

189081 - EagleView
PO BOX 16370
OKLAHOMA CITY, OK 73113

I certify, in accordance with 37 CFR 1.4(d)(4), that I am :

An attorney or Agent of Record registered to practice before the Patent and Trademark Office who has been given power of attorney in this application

Signature	Name	Registration #
/Ann Robl/	ANN ROBL	71541

POWER OF ATTORNEY TO PROSECUTE APPLICATIONS BEFORE THE USPTO

I hereby revoke all previous powers of attorney given in the application identified in the attached statement under 37 CFR 3.73(c).

I hereby appoint:



Practitioners associated with Customer Number:

189081

OR



Practitioner(s) named below (if more than ten patent practitioners are to be named, then a customer number must be used):

Name	Registration Number

Name	Registration Number

As attorney(s) or agent(s) to represent the undersigned before the United States Patent and Trademark Office (USPTO) in connection with any and all patent applications assigned only to the undersigned according to the USPTO assignment records or assignments documents attached to this form in accordance with 37 CFR 3.73(c).

Please change the correspondence address for the application identified in the attached statement under 37 CFR 3.73(c) to:



The address associated with Customer Number:

189081

OR

☐	Firm or Individual Name			
	Address			
	City		State	Zip
	Country			
	Telephone			Email

Assignee Name and Address: Pictometry International Corp.
25 Methodist Hill Drive
Rochester, NY 14623

A copy of this form, together with a statement under 37 CFR 3.73(c) (Form PTO/AIA/96 or equivalent) is required to be Filed in each application in which this form is used. The statement under 37 CFR 3.73(c) may be completed by one of The practitioners appointed in this form, and must identify the application in which this Power of Attorney is to be filed.

SIGNATURE of Assignee of Record

The individual whose signature and title is supplied below is authorized to act on behalf of the assignee

Signature	/Rebecca Unruh/	Date	August 10, 2022
Name	Rebecca Unruh	Telephone	
Title	Deputy General Counsel, IP and Transactions, Pictometry International Corp.		

This collection of information is required by 37 CFR 1.31, 1.32 and 1.33. 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 3 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.**



ELECTRONIC ACKNOWLEDGEMENT RECEIPT

APPLICATION #
14/018,943

RECEIPT DATE / TIME
08/23/2022 03:13:00 PM ET

ATTORNEY DOCKET #
6338.253

Title of Invention

SYSTEM AND PROCESS FOR ROOF MEASUREMENT USING AERIAL IMAGERY

Application Information

APPLICATION TYPE Utility - Nonprovisional Application
under 35 USC 111(a)

PATENT # 9244589

CONFIRMATION # 1069

FILED BY Anne Burns

PATENT CENTER # 60899010

FILING DATE 09/05/2013

CUSTOMER # 189081

FIRST NAMED INVENTOR Dale R. Thornberry

CORRESPONDENCE ADDRESS -

AUTHORIZED BY ANN ROBL

Documents

TOTAL DOCUMENTS: 3

DOCUMENT	PAGES	DESCRIPTION	SIZE (KB)
6338253_sb21_Transmittal_08232022.pdf	1	Transmittal Letter	163 KB
6338253_AIA80_POA_08232022.pdf	1	Power of Attorney	87 KB
6338253_AIA96_Statement_08232022.pdf	2	Assignee showing of ownership per 37 CFR 3.73	77 KB

Digest

DOCUMENT	MESSAGE DIGEST(SHA-512)
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6338253_sb21_Transmittal_08232022.pdf	75FC24F15C0E25024A299A7243F7B0C634F0073C5BA7D663A5CCDFE216957675049B6064732005FA0371B3CE319A0237C46A75EFA5F902583CCC8BED2745658E
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6338253_AIA80_POA_08232022.pdf	7F4D6D39770CEA900D5AD7B25C9CC0DCED64643D5A2360A73EBED4F81D43549FA52A4FE33BEF3E3EEE254A7A649E060F16FB4714D89451D67364AC39DDA5CFBF
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6338253_AIA96_Statement_08232022.pdf	3756C97C2B768E37AC80071F7CE3F72BACDE12200B2A231F7B4564A131395B5D8939A0897FEAA05BD67AC0F8553257CD7C9F4C4D150C4BD67188F01D577F03B4
--------------------------------------	--

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

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.

**TRANSMITTAL
FORM**

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

Application Number	14/018,943
Filing Date	09/05/2013
First Named Inventor	Dale R. Thornberry
Art Unit	2666 (conf. no. 1069)
Examiner Name	Atiba O. Fitzpatrick
Attorney Docket Number	6338.253

ENCLOSURES (Check all that apply)

☐ Fee Transmittal Form	☐ Drawing(s)	☐ After Allowance Communication to TC
☐ Fee Attached	☐ Licensing-related Papers	☐ Appeal Communication to Board of Appeals and Interferences
☐ Amendment/Reply	☐ Petition	☐ Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
☐ After Final	☐ Petition to Convert to a Provisional Application	☐ Proprietary Information
☐ Affidavits/declaration(s)	☒ Power of Attorney, Revocation Change of Correspondence Address	☐ Status Letter
☐ Extension of Time Request	☐ Terminal Disclaimer	☐ Other Enclosure(s) (please identify below):
☐ Express Abandonment Request	☐ Request for Refund	
☐ Information Disclosure Statement	☐ CD, Number of CD(s) _____	
	☐ Landscape Table on CD	
☐ Certified Copy of Priority Document(s)	Remarks	
☐ Reply to Missing Parts/ Incomplete Application	Electronically Transmitted: August 23, 2022	
☐ Reply to Missing Parts under 37 CFR 1.52 or 1.53	1) sb21 Transmittal (1 page); 2) AIA80 POA (1 page); and 3) AIA96 Statement (2 pages).	

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	DUNLAP CODDING, P.C.		
Signature	/Ann M. Robl/		
Printed name	Ann M. Robl		
Date	August 23, 2022	Reg. No.	71,541

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:

Signature	/Ann M. Robl/		
Typed or printed name	Ann M. Robl	Date	August 23, 2022

This collection of information is required by 37 CFR 1.5. 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 2 hours 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.

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.

STATEMENT UNDER 37 CFR 3.73(c)Applicant/Patent Owner: Pictometry International Corp.Application No./Patent No.: 14/018,943Filed/Issue Date: 09/05/2013Titled: SYSTEM AND PROCESS FOR ROOF MEASUREMENT USING AERIAL IMAGERYPictometry International Corp., a corporation

(Name of Assignee)

(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that, for the patent application/patent identified above, it is (choose one of options 1, 2, 3 or 4 below):

1. ☒ The assignee of the entire right, title, and interest.
2. ☐ An assignee of less than the entire right, title, and interest (check applicable box):
- ☐ The extent (by percentage) of its ownership interest is _____%. Additional Statement(s) by the owners holding the balance of the interest must be submitted to account for 100% of the ownership interest.
- ☐ There are unspecified percentages of ownership. The other parties, including inventors, who together own the entire right, title and interest are:

Additional Statement(s) by the owner(s) holding the balance of the interest must be submitted to account for the entire right, title, and interest.

3. ☐ The assignee of an undivided interest in the entirety (a complete assignment from one of the joint inventors was made). The other parties, including inventors, who together own the entire right, title, and interest are:

Additional Statement(s) by the owner(s) holding the balance of the interest must be submitted to account for the entire right, title, and interest.

4. ☐ The recipient, via a court proceeding or the like (e.g., bankruptcy, probate), of an undivided interest in the entirety (a complete transfer of ownership interest was made). The certified document(s) showing the transfer is attached.

The interest identified in option 1, 2 or 3 above (not option 4) is evidenced by either (choose one of options A or B below):

- A. ☒ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel 031928, Frame 0368, or for which a copy thereof is attached.
- B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as follows:

1. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at

Reel _____, Frame _____, or for which a copy thereof is attached.

2. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at

Reel _____, Frame _____, or for which a copy thereof is attached.

[Page 1 of 2]

This collection of information is required by 37 CFR 3.73(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.

STATEMENT UNDER 37 CFR 3.73(c)

3. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at
 Reel _____, Frame _____, or for which a copy thereof is attached.

4. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at
 Reel _____, Frame _____, or for which a copy thereof is attached.

5. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at
 Reel _____, Frame _____, or for which a copy thereof is attached.

6. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at
 Reel _____, Frame _____, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet(s).

☒ As required by 37 CFR 3.73(c)(1)(i), the documentary evidence of the chain of title from the original owner to the assignee was, or concurrently is being, submitted for recordation pursuant to 37 CFR 3.11.

[NOTE: A separate copy (i.e., a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, to record the assignment in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

/Ann M. Robl/

August 23, 2022

Signature

Date

Ann M. Robl

71,541

Printed or Typed Name

Title or Registration Number



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 NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
14/018,943	09/05/2013	Dale R. Thornberry	6338.253

189081
EagleView
PO BOX 16370
OKLAHOMA CITY, OK 73113

CONFIRMATION NO. 1069
POWER OF ATTORNEY NOTICE



Date Mailed: 09/01/2022

NOTICE REGARDING CHANGE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 08/23/2022.

- The Power of Attorney to you in this application has been revoked by the assignee who has intervened as provided by 37 CFR 3.71. Future correspondence will be mailed to the new address of record(37 CFR 1.33).

Questions about the contents of this notice and the requirements it sets forth should be directed to the Office of Data Management, Application Assistance Unit, at (571) 272-4000 or (571) 272-4200 or 1-888-786-0101.

/mtklemichael/



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 NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
14/018,943	09/05/2013	Dale R. Thornberry	6338.253

189081
EagleView
PO BOX 16370
OKLAHOMA CITY, OK 73113

CONFIRMATION NO. 1069
POA ACCEPTANCE LETTER



Date Mailed: 09/01/2022

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 08/23/2022.

The Power of Attorney in this application is accepted. Correspondence in this application will be mailed to the above address as provided by 37 CFR 1.33.

Questions about the contents of this notice and the requirements it sets forth should be directed to the Office of Data Management, Application Assistance Unit, at (571) 272-4000 or (571) 272-4200 or 1-888-786-0101.

/mtklemichael/