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PATENT

**IN THE UNITED STATES PATENT & TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

Applicant: 7424133

Atty. Dkt. No.: 6338.037

Application No.: 95/001,110

Group Art Unit: 3992

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Examiner: Browne, Lynne Hambleton

Title: Method and Apparatus for Capturing, Geolocating and Measuring Oblique Images

APPEAL BRIEF

Respectfully submitted,



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TABLE OF CONTENTS

	<u>Page</u>
I. REAL PARTY IN INTEREST	1
II. RELATED APPEALS AND INTERFERENCES	1
III. STATUS OF CLAIMS	2
IV. STATUS OF AMENDMENTS	2
V. SUMMARY OF CLAIMED SUBJECT MATTER	2
VI. ISSUES TO BE REVIEWED ON APPEAL	5
VII. ARGUMENT	7
A. Disqualification of Rattigan (“Towns Get a New View From Above,” <u>The Boston Globe</u> , September 5, 2002, by David Rattigan) as a prior art reference via a 37 C.F.R. § 1.132 Affidavit/Declaration	7
B. Disqualification of Rattigan (“Towns Get a New View From Above,” <u>The Boston Globe</u> , September 5, 2002, by David Rattigan) as a prior art reference via a 37 C.F.R. § 1.131 Declaration	13
C. Rejection of Claims 17-18 and 43 under 35 U.S.C. § 103(a) as being unpatentable over Ciampa (WO 99/18732) in view of Rattigan (“Towns Get a New View From Above,” <u>The Boston Globe</u> , September 5, 2002, by David Rattigan)	21
CLAIMS APPENDIX	27
EVIDENCE APPENDIX	30
RELATED PROCEEDINGS APPENDIX	31
CERTIFICATE OF SERVICE	32

I. Real Party in Interest

The real party in interest is Pictometry International Corp., a New York Corporation.

II. Related Appeals and Interferences

There is no litigation activity or other prior or concurrent proceeding involving U.S. Patent No. 7,424,133. However, in order to ensure full compliance with Appellant's responsibility under 37 C.F.R. §1.985 and also to comply with 37 C.F.R. § 41.67(c)(ii), Appellant hereby submits that there is litigation currently pending between the Appellant and Third Party Requester involving U.S. Patent No. 5,633,946 owned by the Third Party Requester.

In particular, the Third Party Requester has sued the Appellant in the U.S. District Court for the District of Minnesota (Civil Case No. 08-816, filed March 20, 2008) for infringement of U.S. Patent No. 5,633,946 and a declaratory action of non-infringement and invalidity of Appellant's U.S. Patent No. 5,247,356. Currently, Third Party Requester's claim for patent infringement is pending while the claims regarding a declaratory action of non-infringement and invalidity of Appellant's U.S. Patent No. 5,247,356 have been dismissed.

Additionally, Appellant has sued Third Party Requestor for infringement of Appellant's U.S. Patent No. 5,247,356 in Rochester, New York (Civil Case No. 6517, Filed October 13, 2009). Third Party Requestor has counterclaimed alleging 1) that Third Party Requestor does not infringe any valid claim of U.S. Patent No. 5,247,356; and 2) that one or more claims of U.S. Patent No. 5,247,356 are invalid for failure to comply with the provisions of 35 U.S.C. §§ 102, 103 and/or 112.

III. Status of Claims

Claims 17-24 are subject to the reexamination proceeding. Claims 19-24 have been cancelled during the reexamination proceeding and are no longer pending. Claim 43 was added during the reexamination proceeding. Claims 17-18 and 43 are currently pending in the application and have been rejected by the Examiner in the Right of Appeal Notice mailed February 26, 2010. Appellant is appealing the rejection of claims 17-18 and 43.

IV. Status of Amendments

No amendments have been filed subsequent to the Examiner's Right of Appeal Notice.

V. Summary of Claimed Subject Matter

Independent claim 17 is directed to a computerized method for taking measurements from an oblique image displayed on a computer system¹ (130), at least one input device² (134a and 134b) connected to said computer system (130), an image data file³ (120) accessible by said computer system (130), said image data file (120) including captured images and positional data⁴ corresponding thereto⁵. The computerized method comprises the steps of:

¹ See col. 2, line 64 to col. 3, line 12; col. 7, line 14 to col. 12, line 16.

² See col. 7, lines 23-37.

³ See col. 5, line 44 to col. 7, line 22; col. 7, lines 45-57.

⁴ See col. 3, line 55 to col. 5, line 44.

⁵ See col. 5, line 44 to col. 7, line 22.

placing the computer system (130) into a desired one of a plurality of measurement modes, the desired measurement mode configured for calculating a desired measurement⁶;

selecting a starting point on the displayed image⁷;

retrieving the positional data corresponding to said starting point⁸;

selecting an end point on the displayed image⁹;

retrieving the positional data corresponding to said end point¹⁰; and

calculating the desired measurement dependent at least in part upon said positional data of said starting and end points¹¹;

wherein said plurality of measurement modes comprise a distance measuring mode¹²

calculating a distance between two or more selected points, a height measuring mode¹³ calculating a height difference between two or more selected points, a relative elevation measurement mode¹⁴ calculating the difference in elevation of two or more selected points, and an area measurement mode¹⁵ calculating the area encompassed by at least three points.

⁶ See col. 8, lines 5-21.

⁷ See col. 8, lines 22-29; col. 8, line 54 to col. 9, line 23.

⁸ See col. 8, lines 29-40; col. 8, line 54 to col. 9, line 23; col. 9, line 51 to col. 12, line 16.

⁹ See col. 8, lines 40-43; col. 8, line 54 to col. 9, line 23.

¹⁰ See col. 8, lines 40-43; col. 8, line 54 to col. 9, line 23; col. 9, line 51 to col. 12, line 16.

¹¹ See col. 8, lines 44-53; col. 9, line 24 to col. 10, line 50.

¹² See col. 8, lines 4-21; col. 9, line 24 to col. 10, line 50.

¹³ See col. 8, lines 4-21.

¹⁴ See col. 8, lines 4-21.

¹⁵ See col. 8, lines 4-21.

Independent claim 43 is directed to a computerized method for taking measurements from an oblique image displayed on a computer system¹⁶ (130), at least one input device¹⁷ (134a and 134b) connected to said computer system (130), an image data file¹⁸ (120) accessible by said computer system (130), said image data file (120) including captured images and corresponding positional data¹⁹ captured with the images. The computerized method comprises the steps of:

placing the computer system (130) into a desired one of a plurality of measurement modes, the desired measurement mode configured for calculating a desired measurement²⁰;

selecting a starting point on the displayed image²¹;

retrieving the positional data corresponding to said starting point²²;

calculating the geographic location corresponding to said starting point using the corresponding positional data²³;

selecting an end point on the displayed image²⁴;

retrieving the positional data corresponding to said end point²⁵; and

calculating the geographic location corresponding to said end point using the corresponding positional data²⁶; and

¹⁶ See col. 2, line 64 to col. 3, line 12; col. 7, line 14 to col. 12, line 16.

¹⁷ See col. 7, lines 23-37.

¹⁸ See col. 5, line 44 to col. 7, line 22; col. 7, lines 45-57.

¹⁹ See col. 3, line 55 to col. 5, line 44.

²⁰ See col. 8, lines 5-21.

²¹ See col. 8, lines 22-29; col. 8, line 54 to col. 9, line 23.

²² See col. 8, lines 29-40; col. 8, line 54 to col. 9, line 23; col. 9, line 51 to col. 12, line 16.

²³ See col. 8, line 4 to col. 10, line 8.

²⁴ See col. 8, lines 40-43; col. 8, line 54 to col. 9, line 23.

²⁵ See col. 8, lines 40-43; col. 8, line 54 to col. 9, line 23; col. 9, line 51 to col. 12, line 16.

²⁶ See col. 8, line 4 to col. 10, line 8.

calculating the desired measurement dependent at least in part upon said geographic locations of said starting and end points²⁷;
wherein said plurality of measurement modes comprise a distance measuring mode²⁸ calculating a distance between two or more selected points, a height measuring mode²⁹ calculating a height difference between two or more selected points, a relative elevation measurement mode³⁰ calculating the difference in elevation of two or more selected points, and an area measurement mode³¹ calculating the area encompassed by at least three points.

VI. Issues to be Reviewed on Appeal

There are three issues to be reviewed in this appeal. The first two issues involve the sufficiency of an Affidavit and a Declaration of prior invention filed under 37 C.F.R. §1.131 and §1.132 to disqualify a prior art reference. The third issue is an obviousness rejection under 35 U.S.C. §103(a). Concise statements for each of the three issues are set forth below.

(a) In the Right of Appeal Notice mailed February 26, 2010, the Examiner did not disqualify Rattigan (“Towns Get a New View From Above,” The Boston Globe, September 5, 2002) as a prior art reference in the reexamination proceeding in view of a 37 C.F.R. § 1.132 Affidavit and also in view of a Supplemental 37 C.F.R. § 1.132 Declaration submitted by Appellant. The issue to be reviewed is whether a 37 C.F.R. §1.132 Affidavit or Declaration can

²⁷ See col. 8, lines 44-53; col. 9, line 24 to col. 10, line 50.

²⁸ See col. 8, lines 4-21; col. 9, line 24 to col. 10, line 50.

²⁹ See col. 8, lines 4-21.

be used to disqualify a prior art reference when none of the co-inventors is a co-author of the prior art reference.

(b) In the Right of Appeal Notice mailed February 26, 2010, the Examiner also did not disqualify Rattigan as a prior art reference in the reexamination proceeding in view of the 37 C.F.R. § 1.131 Declaration and corroborating evidence submitted by Appellant (see page 7, third paragraph of the Right of Appeals Notice). The issue to review is whether the 37 C.F.R. §1.131 Declaration and corroborating evidence demonstrate an actual reduction to practice of the features relied upon by the Examiner in the Rattigan article to disqualify the Rattigan article.

(c) The third issue to be reviewed is whether claims 17-18 and 43 were properly rejected under 35 U.S.C. § 103(a) as being unpatentable over Ciampa (WO 99/18732), in view of Rattigan.

A copy of the Ciampa and Rattigan references are attached hereto and marked as Exhibit 1 and Exhibit 2, for the convenience of the Board. A copy of the Rule 132 Affidavit and the Rule 131/Supplemental Rule 132 Declaration, and corroborating evidence, are attached hereto and marked as Exhibit 3 and Exhibit 4, for the convenience of the Board.

³⁰ See col. 8, lines 4-21.

³¹ See col. 8, lines 4-21.

VII. ARGUMENT

A. Disqualification of Rattigan (“Towns Get a New View From Above,” The Boston Globe, September 5, 2002, by David Rattigan) as a prior art reference via a 37 C.F.R. § 1.132 Affidavit/Declaration

In the Right of Appeal Notice (RAN) mailed February 26, 2010, the Examiner did not disqualify Rattigan (“Towns Get a New View From Above,” The Boston Globe, September 5, 2002, by David Rattigan) (“Rattigan”) as a prior art reference via a 37 C.F.R. § 1.132 Affidavit and a Supplemental 37 C.F.R. § 1.132 Declaration (collectively referred to as the “Rule 132 Affidavit”) in the reexamination proceeding because none of the named inventors of Appellant’s U.S. Patent No. 7,424,133 (the ‘133 patent) were listed as authors of the Rattigan newspaper article, i.e., there was no “co-authorship.” In particular, the Examiner misinterpreted relevant case law regarding the application of a Rule 132 Affidavit and, based on that misunderstanding, required co-authorship of the Rattigan article before a Rule 132 Declaration can be used to disqualify the Rattigan article.

The Rattigan article should have been disqualified as prior art in the reexamination proceeding because Appellant has submitted an unequivocal Rule 132 Affidavit and a Supplemental Rule 132 Declaration providing clear, uncontested facts establishing that the relevant portions of the Rattigan article originated with or were obtained from Applicants via software provided by the Applicants’ employer (Pictometry International Corp.) to a beta-testing site, i.e., the Merrimack Valley Planning Commission. Therefore, the relevant subject matter recited in Mr. Rattigan’s newspaper article is not by “another”, does not qualify as a prior art

reference under 35 U.S.C. § 102(a), and should not be used to reject claims 17-18 and 43 of the '133 patent. See M.P.E.P. § 706.02(b) and §706.10 (“an affidavit under 37 C.F.R. 1.132 may be submitted to show that the relevant portions of the reference originated with or were obtained from applicant.”)

In the Action Closing Prosecution (ACP) mailed August 27, 2009, and the RAN, the Examiner does not contest the sufficiency of evidence established in the Rule 132 Affidavit but does not accept the Rule 132 Affidavit as a proper mechanism to disqualify the Rattigan article as a prior art reference because “the publication was not generated by patent owner”³² and because “the article in question is authored by David Rattigan and no other co-authors.”³³ The Examiner correctly points out that in several of the cases³⁴ cited in the Manual of Patent Examining Procedure (MPEP) §§ 706.10 and 2132.01, the prior art in question was co-authored by the inventors and others. The Examiner then states that those cases are therefore distinguishable from this case because none of the named inventors in the '133 patent are co-authors of the Rattigan article. The Examiner has interpreted the relevant case law to require “co-authorship” between the cited reference and at least one of the named inventors of the patent at issue before a Rule 132 Affidavit can be used to disqualify the reference. Although it may not be uncommon to have co-authorship when using a Rule 132 Affidavit to remove a reference, e.g., in the situation where a professor lists graduate students as co-authors on a publication, there is no requirement for co-authorship when using a Rule 132 Affidavit. The Examiner’s

³² See page 3, third paragraph of the ACP.

³³ See page 6, second paragraph of the RAN.

³⁴ The Examiner cites to: *Ex Parte Hirschler*, 110 USPQ 384 (Bd. App. 1951); *In re Katz*, 687 F.2d 450 (CCPA 1982); and *Ex parte Kroger*, 219 USPQ 370 (Bd. App. & Int. 1982).

interpretation and application of relevant case law is in direct contravention to decisions from both the United States Court of Appeals for the Federal Circuit (CAFC) and the Board of Patent Appeals and Interferences (Board).

To begin with, there is no language in the cases relied on by the Examiner, or in any cases known to Appellant, that suggests, or requires co-authorship of a § 102(a) reference before the reference can be disqualified via a Rule 132 Affidavit. The MPEP is silent as to such a requirement of co-authorship. Instead, the MPEP expressly permits use of a Rule 132 Affidavit to show that the reference is not by “another,” i.e., to show that the reference “derived” their knowledge from Applicants or that the reference “attributes” their work to Applicants. See M.P.E.P. § 706.02(b) and §706.10. In summary, the proper requirements for a Rule 132 Affidavit to disqualify a reference is submission of uncontradicted evidence establishing that the relevant disclosure describes Applicants’ own work, i.e., the reference is not by “another.”

The CAFC has directly ruled on this issue where, when presented with the situation of no co-authorship, they held that the use of a Rule 132 Affidavit to disqualify a reference where the authors derived their knowledge from the applicant was permissible and well within established jurisprudence. See *In re Costello*, 717 F.2d 1346, 1347 (Fed. Cir. 1983). In *Costello*, the applicant had submitted Rule 132 Affidavits from the authors of the reference, as opposed to the applicant himself, admitting that they derived their knowledge from applicant. The *Costello* court noted: “appellants must either satisfy the substantive requirements of Rule 131 or establish that the relevant disclosure describes their own invention.” *Id* at 1351 (emphasis added). *Costello* does not require or even suggest a requirement of co-authorship in order to disqualify a reference using a Rule 132 Affidavit.

Furthermore, the Board has expressly declined to interpret *Costello* to require co-authorship. The Board recently reversed an Examiner's rejection of claims based on a reference without co-authorship where the applicant had submitted a Rule 132 Affidavit that unambiguously stated, and provided factual evidence to show, that the reference "derived and copied such subject matter from [applicant]." See *Ex parte Nykoluk*, Appeal No. 2008-1778, page 21 (Bd. App. & Int. 2008). In discussing the applicable rule of law, the Board, applying *Costello*, stated:

"An applicant may also overcome a reference by showing that the relevant disclosure is a description of the applicant's own work" *In re Costello*, 717 F.2d 1346, 1349 (Fed. Cir. 1983). The MPEP is consistent with the Federal Circuit, noting that "an affidavit under 37 CFR 1.132 may be submitted to show that the relevant portions of the reference originated with or were obtained from applicant" MPEP § 716.10. *Id.*

Absent clear and unambiguous evidence provided by the Examiner to contradict the applicant's Rule 132 Affidavit, the Board of *Nykoluk* expressly permitted the use of a Rule 132 Affidavit by the applicant, as opposed to the authors of the reference, to disqualify the reference, even though there was no co-authorship.

In another decision by the Board, albeit non-published and non-precedential, the Board reversed an Examiner's refusal to disqualify a reference where there was no co-authorship and the Examiner had demanded supporting Affidavits by the authors of the reference, as opposed to Affidavits from the applicants alone. See *Ex parte 5872952 et al.*, Appeal No. 2005-2512 (Bd. Pat. App. & Int. 2006). The Board, in considering the Examiner's possible concerns that applicant, not being an author of the relevant documents, "lacks first-hand knowledge of facts to support his testimony that the subject matter in those documents was derived from him and [co-

inventor]” expressly disagreed with, and discounted such a concern where the evidence of record did not contradict the inventor’s Affidavit. In particular, the Board stated:

It is also significant that [applicant’s] testimony regarding inventorship of the [reference] subject matter does not conflict with (1) the [reference] documents themselves, which do not name any authors, let alone appear to attribute the disclosed subject matter to the authors, as in Katz, or (2) any other evidence of record regarding inventorship, as in Kroger. *Id* at 35.

The Board held that applicant’s uncontradicted statements were sufficient to disqualify the cited reference using a Rule 132 Affidavit³⁵, even though there was no co-authorship.

From the above, it is clear that relevant case law, and its interpretation and application by the Board and CAFC, does not require co-authorship in order to use a Rule 132 Affidavit to disqualify a reference.

During the reexamination proceeding, Appellant submitted a Rule 132 Affidavit and Supplemental Declaration by the co-inventors of the ‘133 patent establishing that they (1) conceived of the subject matter recited in claims 17-18 and 43 of the ‘133 patent³⁶ as employees of Appellant (Pictometry International Corp.), (2) [p]rior to September 5, 2002, Steven Schultz, along with the other co-inventors, actually reduced to practice the subject matter of claims 17-18 of the ‘133 patent³⁷, (3) Steven Schultz developed and used software named Electronic Field Study (EFS) which incorporates the subject matter recited in claims 17-18 and 43 of the ‘133 patent resulting in an actual reduction to practice of the inventive concepts recited

³⁵ Although the submittals by the Applicant were styled as “Declaration of the Inventor” and “Second Declaration of the Inventor,” the declarations were not submitted to antedate the cited reference. Instead, the declarations were submitted to show that the cited reference derived their knowledge from the Applicants.

³⁶ See ¶ 3 of the Affidavit Under 37 C.F.R. 1.132 and ¶2 of the Supplemental Declaration Under 37 C.F.R. §1.132

³⁷ See ¶ 3 of the Affidavit Under 37 C.F.R. 1.132

in claims 17-18 and 43³⁸; (4) that Appellant (Pictometry International Corp.) provided the EFS software to the Merrimack Valley Planning Commission³⁹; and (5) that the Rattigan article reports test(s) conducted by the town of Andover, MA, using the software provided by Pictometry to the Merrimack Valley Planning Commission. But for Applicants' conception, actual reduction to practice of the EFS software, and testing of the EFS software with the Merrimack Valley Planning Commission, Mr. Rattigan would not have been able to report on the testing. The uncontested facts of record establish that Mr. David Rattigan derived his knowledge of the relevant subject matter from Applicants and therefore the Rattigan article does not describe work by "another."

Further, the Rattigan article itself clearly shows that it is describing the testing of "Pictometry's" system, and even includes an interview with Mr. Richard A. Kaplan, Pictometry's President and CEO, discussing the beta testing of "Pictometry's" system. Thus, Rattigan clearly and unambiguously attributes his knowledge of the relevant subject matter to Appellant, i.e., Pictometry International Corp., and is consistent with the 37 C.F.R. 1.132 Affidavit and Supplemental Declaration.

And lastly, it also important to note that neither the Examiner nor Third Party Requestor has provided any evidence contradicting, or suggesting in any manner that the evidence submitted via Appellant's Rule 132 Affidavit is incorrect or insufficient to show that Rattigan derived his knowledge of the relevant subject matter from Applicants or that it describes their work. Indeed, Mr. Rattigan was not reporting on his own invention, testing or use of the software

³⁸ See ¶5 of the Supplemental Declaration

³⁹ See ¶6 of the Affidavit Under 37 C.F.R. 1.132

- he was reporting on the use of Pictometry's software by the Merrimack Valley Planning Commission.

The only issue raised by the Examiner regarding the Appellant's Rule 132 Affidavit and Supplemental Declaration was whether or not Rule 132 is the proper mechanism to disqualify a cited reference where there is no co-authorship. For the reasons set forth above, Appellant respectfully submits that there is no requirement for co-authorship and that the Examiner has therefore misinterpreted relevant case law and applied an incorrect legal standard to the resolution of this question. Had the Examiner applied the correct legal standard, the Rattigan reference would have been disqualified as prior art in accordance with the Rule 132 Affidavit and Supplemental Declaration, thereby overcoming the only remaining rejection in the RAN.

In view of the arguments set forth above, Appellant respectfully submits that the Rattigan article does not qualify as prior art in the reexamination proceeding and therefore should be disqualified. Since Rattigan does not qualify as prior art, Appellant requests reconsideration and withdrawal of the rejection of claims 17-18 and 43 under 35 U.S.C. § 103(a) as being unpatentable over Ciampa (WO 99/18732) in view of Rattigan, and passage of said claims to issuance.

B. Disqualification of Rattigan ("Towns Get a New View From Above," The Boston Globe, September 5, 2002, by David Rattigan) as a prior art reference via a 37 C.F.R. § 1.131 Declaration

In the Right of Appeal Notice (RAN) mailed February 26, 2010, the Examiner did not disqualify Rattigan ("Towns Get a New View From Above," The Boston Globe, September 5,

2002, by David Rattigan) (“Rattigan”) as a prior art reference in view of Appellant’s 37 C.F.R. § 1.131 Declaration (Rule 131 Declaration⁴⁰) because the Rule 131 Declaration, in the Examiner’s opinion did not show an actual reduction to practice.⁴¹

In particular, the Examiner stated in the RAN that the User Guide “clearly” establishes conception, but “clearly” does not establish an actual reduction to practice because the “user guide explains the software that constitutes the actual reduction to practice, but the user guide is not the software, nor does it constitute an actual reduction to practice.”

The Examiner is correct in that the User Guide is not the software, but the User Guide does show the software operating on a computer system. See for example, Fig. 2-1 on page 2-2 which shows a screen shot of the software dated August 30, 2000:

⁴⁰ As an additional matter, Appellant wishes to point out that, due to a clerical error, the Rule 131 Declaration submitted by Appellant on October 27, 2009, inadvertently omitted page 3. Although page 3 would have been helpful to the Examiner, the omission is not believed to be material to the issue at hand since the omitted material was directed to a feature of the invention that is not at issue with respect to the Rattigan article. In particular, page 3 was discussing the relative elevation measurement mode included in the EFS software package and which was corroborated by Exhibit B of the Declaration.

⁴¹ See page 6, third paragraph of the RAN.

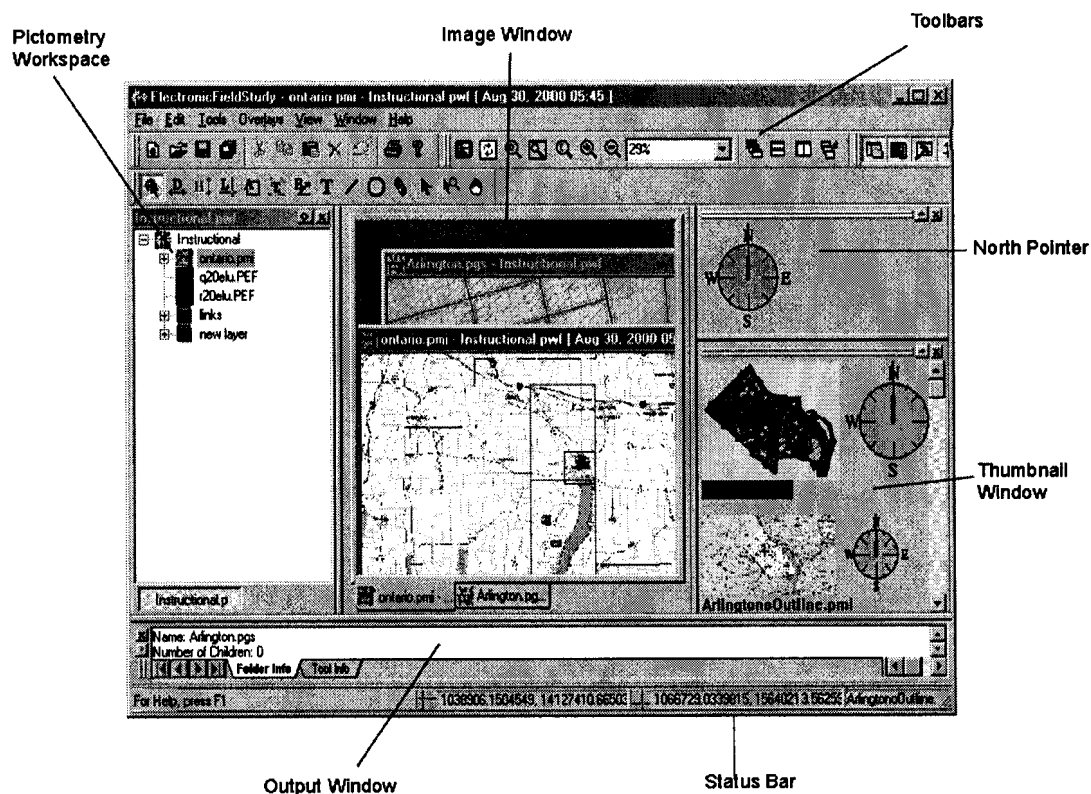


Figure 2-1: EFS Workspace

The requirements for a Rule 131 Affidavit are best found in 37 C.F.R. § 1.131 itself which establishes that a Rule 131 Affidavit can be used to “establish invention of the subject matter of the rejected claim prior to the effective date of the reference.” In order to establish invention:


The showing of facts shall be such, in character and weight, as to establish reduction to practice [or in the alternative] conception of the invention prior to the effective date of the reference coupled with due diligence from prior to said date to a subsequent reduction to practice or to the filing of the application.

Further, the affiant need only show sufficient possession of such part of the invention as the reference in question is offered to show.⁴² With regards to this point, it is important to note that the Rattigan reference is only offered for the proposition that it teaches:


- (1) a height measuring mode calculating a height difference between two or more selected points; and
- (2) an area measurement mode calculating the area encompassed by at least three points.⁴³

Further, it is well established that circumstantial evidence alone is sufficient to demonstrate an actual reduction to practice of the claimed invention. As explained by the CAFC;

"In order to establish an actual reduction to practice, an inventor's testimony must be corroborated by independent evidence." *Cooper v. Goldfarb*, 154 F.3d 1321, 1330, 47 USPQ2d 1896, 1903 (Fed. Cir. 1998). The sufficiency of such corroborating evidence is evaluated under a "rule of reason," considering all of the pertinent evidence. *Id.* ("The rule requires an evaluation of all pertinent evidence when determining the credibility of an inventor's testimony. . . . In order to corroborate a reduction to practice, it is not necessary to produce an actual over-the-shoulder observer. Rather, sufficient circumstantial evidence of an independent nature can satisfy the corroboration requirement."). See *Loral Fairchild Corp. v. Matsushita Electrical Ind. Co. Ltd*, 266 F.3d 1358, 1363 (Fed. Cir. 2001).

The software User Guide existed prior to the Rattigan article and unambiguously describes and shows screen shots of Appellant's Electronic Field Study (EFS) software that embodies, in relevant part, the inventive concepts relating to the "height measurement mode" and the "area measurement mode," as recited in claims 17-18 and 43 of the '133 patent. In particular, icons for placing the computer system into the height measurement mode () and


⁴² See *In re Stempel*, 241 F.2d 755 (CCPA 1957).

the area measurement mode () are shown in Fig. 2-1 above. Further, the “height measurement mode” is described on page 4-8 of the user guide, which includes a screenshot of the EFS software being used to measure the height of an object. In particular, page 4-8 shows:

Measuring the Height of an Object

The Height Tool enables you to measure the height of an object in an oblique image.

To measure the height of an object:

- 1 Click the **Height Tool** ().
- 2 Select a starting point at the base of an object (such as the base of a building), hold down the mouse button, and drag to the ending point.

NOTE: You must measure upwards starting at the base of an object to obtain the most accurate height. Measuring from the top of an object down will not result in the same value as measuring from the bottom up. All measurements must be made from the ground plane.

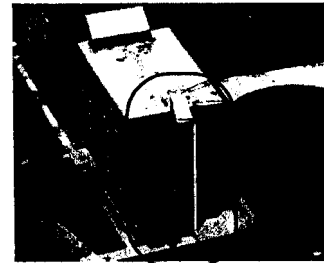


Figure 4-14: Measuring Height

Additional description and/or illustrations of the height measurement tool of the EFS software is provided on pages 2-7 to 2-8, 7-6, and B-4 of the user guide. Figure 4-14 is a partial screen shot showing the computer system placed into the height measurement mode, and having the starting and ending points selected on the displayed image. The notations to the left of Figure 4-14 are instructions for placing the computer system into a measurement mode for measuring the height of the object, and selecting the starting and ending points on the displayed image. The notations also show that the software was used and tested since it states “you must measure upwards starting at the base of an object to obtain the most accurate height. Measuring from the top of an object down will not result in the same value as measuring from the bottom up. All measurements must be made from the ground plane.” How would one know that

⁴³ See page 10, paragraphs 14-16 of the RAN.


measuring from the top to the bottom would not result in the same value as measuring from the bottom up if the height measurement tool had not been tested?

The “area measurement mode” is also described and illustrated on page 4-8 of the user guide. In particular, page 4-8 shows:


Determining the Area of an Object

The Area Tool enables you to measure the area of an object or location in an image. You can measure the area of a square, rectangle, parallelogram, or even a freeform shape.

To determine standard area:

- 1 Click the Area Tool (.
- 2 Select a starting point, hold down the mouse button, and draw the first line along one edge of an object.
- 3 Press and hold the CTRL key. Then drag the mouse along an adjoining edge of the object. The tool creates a boxed line around the perimeter of the object.
- 4 Release the mouse button and CTRL key. The area appears in the Status Bar. Additional measurements are displayed on the Tool Info tab of the Output Window.

To determine area using a freeform line:

- 1 Click the Area Tool (.
- 2 Press and hold the ALT key. Select a starting point, hold down the mouse button and draw a freeform line. Ensure that the start point and stop point are joined.
- 3 Release the mouse button and ALT key. The area appears in the Status Bar.

TIP: Pressing and releasing the ALT key enables you to toggle between freeform lines and straight lines.

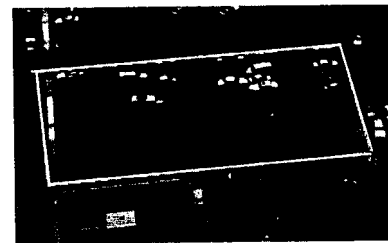


Figure 4-15: Measuring Area



Figure 4-16: Measuring Area Using A Freeform Line

Additional descriptions and/or illustrations of the area measurement tool can be found on pages 2-7 to 2-8, 7-6, and B-4 of the User Guide. Figure 4-15 is a partial screen shot showing the computer system placed into the area measurement mode, with an area encompassed by at least three points. The notations to the left of Figure 4-15 are instructions for placing the computer system into the area measurement mode, and selecting the starting and ending points on the

displayed image, and the computer system calculating the area (“The area appears in the Status Bar.”). An example Status Bar is shown on page 2-4 as follows:



Figure 2-8: Status Bar

Therefore, the User Guide provides persuasive proof showing that the EFS software was created, used and actually worked as an area measurement mode calculating the area encompassed by at least three points.

An actual reduction to practice may also require recognition and appreciation of the invention before the critical date. See MPEP 2138.05. The User Guide satisfies this element as well by providing various references recognizing and appreciating the accurate measurements provided by the EFS software. For example, page 1-1 of the User Guide states:

What is Pictometry?

Pictometry® is a revolutionary digital imaging process and software program that maps each pixel of a digital land image to actual geographic coordinates. It allows all features in a land image to be easily located and accurately measured.

Pictometry has made it possible to efficiently map and depict the earth's surface with photographic detail never before possible. It is the most efficient and cost effective way to perform field study observations using high quality images.

See also, page 2-8 which shows that the height measurement tool and the area measurement tool were recognized and appreciated:

Height Tool. Measures the height of objects.



Area Tool. Calculates the area of the current selection on an image.



As discussed above, the Rattigan article is only offered to show “a height measurement mode” and “an area measurement mode.” Therefore, the Rule 131 Declaration and its corroborating evidence need only show conception and actual reduction to practice of these two features in order to properly antedate and disqualify the Rattigan article as a prior art reference. The User Guide clearly describes and illustrates with screen shots Appellant’s EFS software incorporating said features, as recited in claims 17-18 and 43 of the ‘133 patent.

Further, since claims 17-18 and 43 are method claims, one actual reduction to practice is the use of the computer system running the EFS software to place the computer system into a desired one of a plurality of measurement modes, and selecting the starting and ending points on the displayed image to cause the computer system to retrieve the positional data corresponding to the starting and ending points and calculate the desired measurement dependent at least in part upon said positional data. The Applicants’ testimony in Paragraphs 5 and 9 of the Rule 131 Declaration clearly shows that the subject matter of claims 17-18 and 43 were reduced to practice.

Therefore, the Appellant’s Rule 131 Declaration, the User Guide submitted therewith, and even the Rattigan article show that the EFS software actually existed and was used for its intended purpose prior to the publication date of the Rattigan article reporting on the EFS software.

In view of the arguments set forth above, Appellant respectfully submits that the Rattigan article does not qualify as prior art in the reexamination proceeding and therefore should be

disqualified. Since Rattigan does not qualify as prior art, Appellant respectfully requests reconsideration and withdrawal of the rejection of claims 17-18 and 43 under 35 U.S.C. § 103(a) as being unpatentable over Ciampa (WO 99/18732) in view of Rattigan, and passage of said claims to issuance.

C. Rejection of Claims 17-18 and 43 under 35 U.S.C. § 103(a) as being unpatentable over Ciampa (WO 99/18732) in view of Rattigan (“Towns Get a New View From Above,” The Boston Globe, September 5, 2002, by David Rattigan)

In the Right of Appeal Notice (RAN) mailed February 26, 2010, the Examiner rejected claims 17-18 and new claim 43 under 35 U.S.C. § 103(a) as being unpatentable over Ciampa in view of Rattigan. In particular, the Examiner suggests that the Ciampa reference teaches each and every feature recited in independent claims 17 and 43, except for the “height” and the “area” measurement modes and then offers the Rattigan article for the proposition that it teaches those features.

To begin with, Appellant respectfully submits that the Rattigan article does not qualify as a prior art reference in the reexamination proceeding and therefore the rejection based on the Rattigan reference is improper.

However, even if the Rattigan article qualifies as a prior art reference, the combination of Ciampa and Rattigan does not disclose the inventive concepts recited in claims 17-18 and 43 of the ‘133 patent because neither reference teaches the “relative elevation measurement mode calculating the difference in elevation of two or more selected points” and Rattigan does not teach the height measurement mode set forth in independent claims 7 and 43.

To begin with, Ciampa teaches a system that is primarily directed to the collection and

automatic georeferencing of oblique images in order to create “an automatically computationally georeferenced digital image.” As best described by Ciampa:

The method of the invention comprises the following steps. The image is first digitally captured by a "digital" camera or other digitizing device, along with the aforementioned shot data. "Shot data" is then analyzed by the computer, including location (i.e., latitude, longitude and altitude); camera bearing or heading (the compass direction in which the lens is pointing); the camera depression angle or azimuth; and the camera roll (i.e., the yaw of the camera, with respect to its horizontal axis). The shot data is then mathematically adjusted (trigonometrically) to coordinate the points on the ground plane with the points in the image plane, so as to produce an automatically computationally georeferenced digital image. Elevation data may be used to corroborate or enhance the accuracy of the trigonometric interpolation. See page 3, lines 17-30. (emphasis added)

In the RAN, the Examiner finds that Ciampa teaches a “relative elevation measurement mode calculating the difference in elevation between two or more selected points” and cites to page 5, lines 28-29 of Ciampa. Page 5, lines 28-29 of Ciampa states:

Elevation data may be used to corroborate or enhance the accuracy of the trigonometric interpolations.

However, Ciampa only teaches the use of elevation data for enhancing the accuracy of trigonometric interpolations for a single selected point (see page 10, lines 2-3 of Ciampa) rather than a relative elevation measurement mode calculating the difference in elevation between two or more selected points. In particular, Ciampa provides a detailed description of its trigonometric interpolation process at page 9, line 27 to page 11, line 21 to georeference, i.e., adjust, each pixel within the captured digital image. Therein, Ciampa states that the “[g]round location for terrain “T” that is not flat is adjusted by using DEM data and an iterative algorithm.” Essentially, Ciampa selects a point assumed for a flat terrain, references that point to the DEM [elevation] data, and if the elevation is the same, the process is complete. If not, Ciampa adjusts

the camera elevation “to account for the difference in the ground elevation of the selected point.” Ciampa uses this iterative process until the elevation of the single selected point is the same as the elevation information contained in the DEM file.

The Examiner explains on pages 16-17 of the RAN that the selected point for the flat terrain is the “second point” and it “is the adjustment of the elevation from the assumed flat terrain point to the actual selected point that constitutes the relative elevation measurement mode claimed.” However, this is not correct. Ciampa only teaches the assumption of multiple elevation values for the same selected point as part of an iterative process for enhancing the accuracy of the calculated ground location.

It is understood that it is proper for the Examiner to rely on the express, implicit, and inherent disclosures of a prior art reference in the rejection of claims under 35 U.S.C. 102 or 103. See MPEP 2112. However, the fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. See MPEP 2112. The claimed feature, must have been “necessarily present in the prior art”. *Id.* Thus, inherency may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient. See MPEP 2112. In the present case, Ciampa expressly teaches geo-referencing of a single selected point with an iterative process, rather than a relative elevation measurement mode calculating the difference in elevation between two or more selected points. As shown in Fig. 5(b), the iterative process uses multiple assumed elevation values, i.e., an assumed elevation value G_1 and the DEM data G_2 to calculate a pixel location (P_x, P_y) of a particular point selected on a displayed image. [See page 10, lines 3-4; page 11, line 1 “the selected point”; and page 11, line 3 “the selected point”.]

The relative elevation measurement mode is also not implicitly or inherently taught in Ciampa since it merely teaches an iterative approach for enhancing the accuracy of trigonometric interpolations for a single selected point.

The Ciampa reference does not teach the relative elevation measurement mode calculating the difference in elevation of two or more selected points as recited in claims 17-18 and 43. Therefore, reconsideration and withdrawal of the rejection of claims 17-18 and 43 of the '133 patent is respectfully requested.

With regards to the Rattigan reference, it is offered for the proposition that it discloses a "height measuring mode" and an "area measurement mode." Appellant respectfully disagrees and submits that Rattigan does not teach or suggest a height measuring mode calculating a height difference between two or more selected points.

In support of the proposition that Rattigan "includes a height (altitude) measuring mode calculating a height difference between two or more selected points," the Examiner directs Appellants attention to page 1, fourth paragraph, line 5. The sentence relied on by the Examiner states that:

the images can integrate with Geographic Imaging Software and [Appellants own] Electronic Field Study software to measure length, area, or distance; determine longitude, latitude, and altitude; fix the bearing of a road and angles of intersecting roads; calculate perimeter and acreage, and more.

The Examiner suggests that "height" and "altitude" are synonymous with each other and therefore the Rattigan article discloses the height measuring mode. Appellant respectfully disagrees and submits that height and altitude are not the same thing. Altitude generally refers to the elevation of an object above sea level or above the earth's surface. In particular, a

measurement of the altitude of an object necessarily includes a reference point, e.g., 3,000 feet above sea level. Height, on the other hand, generally refers to a fixed dimension of a particular object taken generally along the vertical axis of the object. The height of an object is generally stated in an absolute unit of length, e.g., 300 feet. As a practical example, the height of an airplane (say 150 feet) is completely independent and different from the altitude the plane might be flying at (say 3,000 feet above sea level). Since height and altitude are not synonymous with each other, the Rattigan article does not disclose the height measuring mode, as recited in the claims.

However, even if height and altitude were synonymous with each other, the Rattigan article's simple description of the ability of Appellant's EFS software to "determine ... altitude" is not the same thing as "a height measuring mode calculating the height difference between two or more selected points." Rattigan only suggests determining an altitude, not determining the altitude of two or more selected points and then calculating the difference in altitude between those points. Therefore, Appellant respectfully submits that the Rattigan article describing Appellant's own EFS software does not disclose a height measuring mode calculating a height difference between two or more selected points.

In view of the above, even if Ciampa and Rattigan were combined, the resultant combination does not teach or suggest the inventive concepts recited in claims 17-18 and 43 of the '133 patent. Therefore, reconsideration and withdrawal of the rejection of claims 17-18 and 43 of the '133 patent under 35 U.S.C. § 103(a) is respectfully requested.

CONCLUSION

Appellant respectfully requests reconsideration and withdrawal of the Examiner's rejections of claims 17-18 and 43.

Respectfully submitted,

May 25, 2010
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Claims Appendix

17. A computerized method for taking measurements from an oblique image displayed on a computer system, at least one input device connected to said computer system, an image data file accessible by said computer system, said image data file including captured images and positional data corresponding thereto, said computerized method comprising:

placing the computer system into a desired one of a plurality of measurement modes, the

desired measurement mode configured for calculating a desired measurement;

selecting a starting point on the displayed image;

retrieving the positional data corresponding to said starting point;

selecting an end point on the displayed image;

retrieving the positional data corresponding to said end point; and

calculating the desired measurement dependent at least in part upon said positional data of said starting and end points;

wherein said plurality of measurement modes comprise a distance measuring mode

calculating a distance between two or more selected points, a height measuring

mode calculating a height difference between two or more selected points, a

relative elevation measurement mode calculating the difference in elevation of

two or more selected points, and an area measurement mode calculating the area

encompassed by at least three points.

18. The method of claim 17, comprising the further steps of:

selecting one or more intermediate points on said displayed image; and

retrieving the positional data corresponding to said intermediate points.

43. A computerized method for taking measurements from an oblique image displayed on a computer system, at least one input device connected to said computer system, an image data file accessible by said computer system, said image data file including captured images and corresponding positional data captured with the images, said computerized method comprising:
- placing the computer system into a desired one of a plurality of measurement modes, the
desired measurement mode configured for calculating a desired measurement;
selecting a starting point on the displayed image;
retrieving the positional data corresponding to said starting point;
calculating the geographic location corresponding to said starting point using the
corresponding positional data;
selecting an end point on the displayed image;
retrieving the positional data corresponding to said end point;
calculating the geographic location corresponding to said end point using the
corresponding positional data; and
calculating the desired measurement dependent at least in part upon said geographic
locations of said starting and end points;
wherein said plurality of measurement modes comprise a distance measuring mode
calculating a distance between two or more selected points, a height measuring
mode calculating a height difference between two or more selected points, a
relative elevation measurement mode calculating the difference in elevation of

two or more selected points, and an area measurement mode calculating the area encompassed by at least three points.

Evidence Appendix

A copy of the Ciampa and Rattigan references are attached hereto and marked as Exhibit 1 and Exhibit 2, for the convenience of the Board.

A copy of Appellant's Affidavit and Declaration, and corroborating evidence submitted in accordance with 37 C.F.R. § 1.131 and 1.132 are attached hereto and marked as Exhibit 3 and Exhibit 4, for the convenience of the Board.

Related Proceedings Appendix

None.

Certificate of Service

It is hereby certified that in accordance with 37 C.F.R. § 1.903, a copy of this Appeal Brief has been served, pursuant to 37 C.F.R. § 1.33(c), on the date stated next to the signature below by first class mail upon the Representative of the Requester at:

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