

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference T0450.70040	FOR FURTHER ACTION		See item 4 below
International application No. PCT/US2006/010325	International filing date (<i>day/month/year</i>) 22 March 2006 (22.03.2006)	Priority date (<i>day/month/year</i>) 22 March 2005 (22.03.2005)	
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237			
Applicant PINOTAGE, L.L.C.			

<p>1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).</p> <p>2. This REPORT consists of a total of 12 sheets, including this cover sheet.</p> <p>In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.</p>																								
<p>3. This report contains indications relating to the following items:</p> <table> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. I</td> <td>Basis of the report</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. II</td> <td>Priority</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. III</td> <td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. IV</td> <td>Lack of unity of invention</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. V</td> <td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. VI</td> <td>Certain documents cited</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. VII</td> <td>Certain defects in the international application</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. VIII</td> <td>Certain observations on the international application</td> </tr> </table> <p>4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).</p>	<input checked="" type="checkbox"/>	Box No. I	Basis of the report	<input type="checkbox"/>	Box No. II	Priority	<input checked="" type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input checked="" type="checkbox"/>	Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/>	Box No. VI	Certain documents cited	<input type="checkbox"/>	Box No. VII	Certain defects in the international application	<input type="checkbox"/>	Box No. VIII	Certain observations on the international application
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	Date of issuance of this report 25 September 2007 (25.09.2007)
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PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY
(PCT Rule 43*bis*.1)

To:

see form PCT/ISA/220

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/US2006/010325

International filing date (day/month/year)
22.03.2006

Priority date (day/month/year)
22.03.2005

International Patent Classification (IPC) or both national classification and IPC
INV. G03B17/08

Applicant
PINOTAGE, L.L.C.

1. This opinion contains indications relating to the following items:

- Box No. I Basis of the opinion
- Box No. II Priority
- Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- Box No. IV Lack of unity of invention
- Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- Box No. VI Certain documents cited
- Box No. VII Certain defects in the international application
- Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**


If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1*bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



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Date of completion of
this opinion

see form
PCT/ISA/210

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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/US2006/010325

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of:
 - the international application in the language in which it was filed
 - a translation of the international application into , which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1 (b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
 - a sequence listing
 - table(s) related to the sequence listing
 - b. format of material:
 - on paper
 - in electronic form
 - c. time of filing/furnishing:
 - contained in the international application as filed.
 - filed together with the international application in electronic form.
 - furnished subsequently to this Authority for the purposes of search.
3. In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/US2006/010325

Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of

- the entire international application
- claims Nos. 9-23,25

because:

- the said international application, or the said claims Nos. relate to the following subject matter which does not require an international search (*specify*):
- the description, claims or drawings (*indicate particular elements below*) or said claims Nos. are so unclear that no meaningful opinion could be formed (*specify*):
- the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed (*specify*):
- no international search report has been established for the whole application or for said claims Nos. 9-23,25
- a meaningful opinion could not be formed without the sequence listing; the applicant did not, within the prescribed time limit:
 - furnish a sequence listing on paper complying with the standard provided for in Annex C of the Administrative Instructions, and such listing was not available to the International Searching Authority in a form and manner acceptable to it.
 - furnish a sequence listing in electronic form complying with the standard provided for in Annex C of the Administrative Instructions, and such listing was not available to the International Searching Authority in a form and manner acceptable to it.
 - pay the required late furnishing fee for the furnishing of a sequence listing in response to an invitation under Rules 13ter.1(a) or (b).
- a meaningful opinion could not be formed without the tables related to the sequence listings; the applicant did not, within the prescribed time limit, furnish such tables in electronic form complying with the technical requirements provided for in Annex C-bis of the Administrative Instructions, and such tables were not available to the International Searching Authority in a form and manner acceptable to it.
- the tables related to the nucleotide and/or amino acid sequence listing, if in electronic form only, do not comply with the technical requirements provided for in Annex C-bis of the Administrative Instructions.
- See Supplemental Box for further details

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/US2006/010325

Box No. IV Lack of unity of invention

1. In response to the invitation (Form PCT/ISA/206) to pay additional fees, the applicant has, within the applicable time limit:
- paid additional fees
 - paid additional fees under protest and, where applicable, the protest fee
 - paid additional fees under protest but the applicable protest fee was not paid
 - not paid additional fees
2. This Authority found that the requirement of unity of invention is not complied with and chose not to invite the applicant to pay additional fees.
3. This Authority considers that the requirement of unity of invention in accordance with Rule 13.1, 13.2 and 13.3 is
- complied with
 - not complied with for the following reasons:
see separate sheet
4. Consequently, this report has been established in respect of the following parts of the international application:
- all parts.
 - the parts relating to claims Nos. 1-8,24

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	5-8,24
	No: Claims	1-4
Inventive step (IS)	Yes: Claims	5,6
	No: Claims	1-4,7-8,24
Industrial applicability (IA)	Yes: Claims	1-8,24
	No: Claims	

2. Citations and explanations

see separate sheet

Re Item IV

Lack of unity of invention

1.1 This Authority considers that there are 6 inventions covered by the claims indicated as follows:

- I) **Claims 1-8,24** directed to an imaging device mounting assembly provided with a sub-assembly and a resilient material interfaced between the outer housing and the sub-assembly.
- II) **Claims 9-13** directed to an imaging device mounting assembly with means for providing the device with tilting capabilities.
- III) **Claims 14** directed to an imaging device mounting assembly sealed to be water resistant.
- IV) **Claims 15-17** directed to an imaging device mounting assembly with a heater to control the temperature of the imaging device.
- V) **Claims 18-23** directed to an imaging device mounting assembly including a night vision camera.
- VI) **Claim 24** directed to an imaging device mounting assembly adapted to be deployable

into a remote location and to transmit data to a second location.

- 1.2 The reasons for which the inventions are not so linked as to form a single general inventive concept, as required by Rule 13.1 PCT, are as follows.

In **claims 1-3**, in the expressions "*... to meet MIL-S-901D (NAVY) ...*" the term MIL-S-901-D refers to a number of mechanical test (shock tests) that the device has to pass in order to be in compliance with the specification. Therefore claims 1 - 3 do not meet the requirements of Article 6 PCT in that the matter for which protection is sought is not clearly defined since the claims attempt to define the subject-matter in terms of the result to be achieved, which merely amounts to a statement of the underlying problem, without providing the technical features necessary for achieving this result. For examination purposes the cited expressions will be therefore disregarded.

The prior art has been identified as document D1: JP 2003 015207 A and discloses (the references in parentheses applying to this document and particularly to description and figures 2 and 3):

an imaging device mounting assembly comprising: an outer housing (par. 11; parts 5 and 6); an imaging device enclosed within the outer housing (par. 9; part 1); and means for mounting the imaging device within the outer housing (par. 11 and 23; parts 7,8 and 36); wherein the means for mounting the imaging device within the outer housing comprises a resilient material interfaced between the outer housing and the imaging device (par. 11 and 23; parts 8 and 36), where the resilient material is arranged with respect to the outer housing and the imaging device in a manner that at least partially dampens movements to minimize any resulting damage to the imaging device (par. 11 and 23).

Invention 1

It follows that the following technical feature of claims 1-8, 24 makes a contribution over the prior art and can be considered as a special technical features within the meaning of Rule 13.2 PCT:

a sub-assembly for securing the imaging device wherein the sub-assembly is enclosed within the outer housing, and wherein the resilient material is interfaced between the outer housing and the sub-assembly where the resilient material is arranged with respect to the outer housing and the sub-assembly in a manner that at least partially dampens movement to minimize any resulting damage to the imaging device.

The problem solved by this special technical feature can therefore be construed as to further dampen movement and minimize damage to the imaging device.

Invention 2

It follows that the following technical feature of claims 9-13 makes a contribution over the prior art and can be considered as a special technical features within the meaning of Rule 13.2 PCT:

a cantilever arm sub-assembly rotatably connected to the outer housing, wherein the cantilever arm sub-assembly is constructed and arranged to provide the imaging device with tilting capabilities.

The problem solved by this special technical feature can therefore be construed as to position an imaging device in a wide range of configurations.

Invention 3

It follows that the following technical feature of claim 14 makes a contribution over the prior art and can be considered as a special technical features within the meaning of Rule 13.2 PCT:

the outer housing is sealed to be water resistant such that the mounting assembly is submersible under up to 2 meters of water for a duration of time between at least 2 hours and up to 78 hours, without affecting the functionality of the imaging device within the outer housing.

The problem solved by this special technical feature can therefore be construed as to allow image device mounting assembly to be submersible under water.

Invention 4

It follows that the following technical feature of claims 15-17 makes a contribution over the prior art and can be considered as a special technical features within the meaning of Rule 13.2 PCT:

a heater to control the temperature of the imaging device.

The problem solved by this special technical feature can therefore be construed as to prevent frost and the freezing of the glass parts of the device.

Invention 5

It follows that the following technical feature of claims 18-23 makes a contribution over the prior art and can be considered as a special technical features within the meaning of Rule 13.2 PCT:

a night vision camera included in the mounting assembly.

The problem solved by this special technical feature can therefore be construed as to provide the device with night vision capabilities.

Invention 6

It follows that the following technical feature of claims 25 makes a contribution over the prior art and can be considered as a special technical features within the meaning of Rule 13.2 PCT:

a portable imaging sub-assembly adapted to mount the imaging device mounting assembly, the portable imaging sub-assembly being adapted to be deployable into a remote location, the portable imaging sub-assembly being adapted to transmit data received from the imaging device at the remote location to a second location.

The problem solved by this special technical feature can therefore be construed as to

provide a user in a remote location with real time imaging from the imaging device.

- 1.3 In conclusion, the groups of claims are not linked by common or corresponding special technical features and define 6 different inventions not linked by a single general inventive concept.

The application, hence does not meet the requirements of unity of invention as defined in Rules 13.1 and 13.2 PCT.

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability, citations and explanations supporting such statement

2. Reference

Reference is made to the following documents:

D1: PATENT ABSTRACTS OF JAPAN vol. 2003, no. 05, 12 May 2003 (2003-05-12)
-& JP 2003 015207 A (SONY CORP), 15 January 2003 (2003-01-15)

D2: "MIL-S-901D (NAVY) SHOCK TESTS, H.I. (HIGH-IMPACT) SHIPBOARD MACHINERY, EQUIPMENT, AND SYSTEMS, REQUIREMENTS FOR" [Online] 17 March 1989 (1989-03-17), , XP002394828 Retrieved from the Internet: URL:<http://www.dcfp.navy.mil/library/dcpubs/MIL-S-901D.pdf>>

2. Clarity

- 2.1 In **claim 1**, in the expression "... *such that the mounting assembly is adapted to meet MIL-S-901D (NAVY)*" the term MIL-S-901-D refers to a number of mechanical test (shock tests) that the device has to pass in order to be in compliance with the specification. Therefore the cited expression defines the invention by a result to be achieved (see Guidelines C III - 4.7) and for examination purposes will be disregarded.
- 2.2 In **claims 2** and **3** the expressions containing the terms MIL-S-901D (NAVY), for the same reasons expressed in subparagraph 2.1, for examination purposes will be discarded.

3. Novelty

- 3.1 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of **claim 1**, the lack of clarity mentioned above notwithstanding, is not new in the sense of Article 33(2) PCT.

The document D1 discloses (the references in parentheses applying to this document and particularly to description and figures 2,3):

An imaging device mounting assembly, comprising: an outer housing (par.11; parts 5 and 6); an imaging device enclosed within the outer housing (par.9; part 1); and means for mounting the imaging device within the outer housing (par.11 and 23; parts 7, 8 and 36).

- 3.2 Dependent claims **2 - 4** do not contain any features which, in combination with the fea-

tures of any claim to which they refer, meet the requirements of the PCT in respect of novelty, the reasons being as follows:

claim 2 and 3: following clarity objection stated in 6. 2 subject-matter is the same as in claim 1

claim 4: see D1 par. 11, 23 and fig. 2 ref. 8 and 36

4. Inventive step

4.1 Dependent claims 7 , 8 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of inventive step, because these features belong to common knowledge and the skilled person would therefore regard it as a design option to include them in the imaging device mounting assembly in order to solve the problem posed.

5. Positive assessment

5.1 The combination of the features of dependent claims 5, 6 is neither known from, nor rendered obvious by, the available prior art. The reasons are as follows:

The use of a sub-assembly for securing a camera, interfaced to an outer housing through a resilient material that partially dampens movement to minimize any resulting damage to said camera would not be seen by the skilled person as an obvious solution to the problem posed.