

05-19-2008

(Rev. 08/05)

RE

EET

United States Patent and Trademark

Office OMB No. 0651-0027 (exp. 06/30/2008)



103503635

To the Director of the U.S. Patent and Trademark

ments or the new address (es) below.

1. Name of conveying party(ies):
SILICON VALLEY BANK

Additional name(s) of conveying party (ies) attached? ☐ Yes ☒ No

3. Nature of conveyance/Execution Date(s):

Execution Date: **May 8, 2008**

- ☐ Assignment ☐ Merger
☐ Security Agreement ☐ Change of Name
☐ Joint Research Agreement
☐ Government Interest Assignment
☐ Executive Order 9424, Confirmatory License
☒ Other: **Release**

4. Application or patent number(s):

A. Patent Application No.(s)

09877166

10013187

09602290

2. Name and address of receiving party(ies):

Name: **Imove, Inc.**

Internal Address:

Street Address: **1732 NW Quimby Ste 200**

City: **Portland**

State: **OR**

Country: **USA** Zip: **97209**

Additional name(s) & address (es) attached? ☐ Yes ☒ No

☐ This document is being filed together with a new application.

B. Patent No.(s)

5694531 7050085 6738073

6031540 7196722 6690374

6337683 6731305

6323858 6683608

6320584 6654019

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: **Silicon Valley Bank**

Internal Address: **COLLATERAL HF154**

Street Address: **3003 TASMAN DRIVE**

City: **SANTA CLARA**

State: **CA**

Zip: **95054**

Phone Number: **(408) 919-0310**

Fax Number: **(408) 654-6313**

Email Address: **svaldivia@svb.com**

6. Total number of applications and patents involved: **15**

7. Total fee (37 CFR 1.21 (h) & 3.41) **\$ 600.00**

- ☐ Authorized to be charged by credit card
☐ Authorized to be charged to deposit account
☒ Enclosed
☐ None required (government interest not affecting title)

8. Payment Information

a. Credit Card Last 4 Numbers

Expiration Date

b. Deposit Account Number

Authorized User Name

9. Signature: _____

Signature

May 8, 2008

Date

Susana Valdivia

Name of Person Signing

05/16/2008 NJAMA1 00000051 09877166

01 FC:0021

Total number of pages including cover sheet, attachments, and documents: **600**

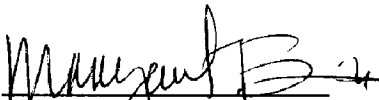
Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:
 Mail Stop Assignment Recordation Services, Director of the USPTO, P.O. Box 1450, Alexandria, V.A. 22313-1450

**RELEASE OF SECURITY AGREEMENT COVERING
INTERESTS IN PATENTS**

Silicon Valley Bank ("Secured Party"), hereby releases its security interest in the interests of **Imove, Inc.** ("Assignor") in the **patented** works set forth in that certain **Intellectual Property Security Agreement** dated November 1, 2006, executed by Assignor in favor of Secured Party recorded with the United States Department of Commerce, Patent and Trademark Office on November 29, 2006, Reel 018635, Frame(s) 0186.

Date: **May 8, 2008**

SILICON VALLEY BANK

By: 
Name: **Margaret Fujii**
Title: **Operations Manager**

INTELLECTUAL PROPERTY SECURITY AGREEMENT

This Intellectual Property Security Agreement (this "IP Agreement") is made as of the 1st day of November, 2006 by and between IMOVE, Inc. ("Grantor"), and Silicon Valley Bank, a California banking corporation ("Bank").

RECITAL

Bank will make credit extensions to Grantor as described in the Loan and Security Agreement (as amended, restated, or otherwise modified, the "Loan Agreement"), but only if Grantor grants Bank a security interest in its Copyrights, Trademarks, Patents, and Mask Works. Defined terms used but not defined herein shall have the same meanings as in the Loan Agreement.

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged and intending to be legally bound, as collateral security for the prompt and complete payment when due of Grantor's Obligations under the Loan Agreement, Grantor hereby represents, warrants, covenants and agrees as follows:

1. Grant of Security Interest. As collateral security for the prompt and complete payment and performance of all of Grantor's present or future Indebtedness, obligations and liabilities to Bank, Grantor hereby grants a security interest in all of Grantor's right, title and interest in, to and under its intellectual property (all of which shall collectively be called the "Intellectual Property Collateral"), including, without limitation, the following:

(a) Any and all copyright rights, copyright applications, copyright registrations and like protections in each work or authorship and derivative work thereof, whether published or unpublished and whether or not the same also constitutes a trade secret, now or hereafter existing, created, acquired or held, including without limitation those set forth on Exhibit A attached hereto (collectively, the "Copyrights");

(b) Any and all trade secrets, and any and all intellectual property rights in computer software and computer software products now or hereafter existing, created, acquired or held;

(c) Any and all design rights that may be available to Grantor now or hereafter existing, created, acquired or held;

(d) All patents, patent applications and like protections including, without limitation, improvements, divisions, continuations, renewals, reissues, extensions and continuations-in-part of the same, including without limitation the patents and patent applications set forth on Exhibit B attached hereto (collectively, the "Patents");

(e) Any trademark and servicemark rights, whether registered or not, applications to register and registrations of the same and like protections, and the entire goodwill of the business of Grantor connected with and symbolized by such trademarks, including without limitation those set forth on Exhibit C attached hereto (collectively, the "Trademarks");

(f) All mask works or similar rights available for the protection of semiconductor chips, now owned or hereafter acquired, including, without limitation those set forth on Exhibit D attached hereto (collectively, the "Mask Works");

(g) Any and all claims for damages by way of past, present and future infringements of any of the rights included above, with the right, but not the obligation, to sue for and collect such damages for said use or infringement of the intellectual property rights identified above;

(h) All licenses or other rights to use any of the Copyrights, Patents, Trademarks, or Mask Works and all license fees and royalties arising from such use to the extent permitted by such license or rights;

(i) All amendments, extensions, renewals and extensions of any of the Copyrights, Trademarks, Patents, or Mask Works; and

(j) All proceeds and products of the foregoing, including without limitation all payments under insurance or any indemnity or warranty payable in respect of any of the foregoing.

2. Authorization and Request. Grantor authorizes and requests that the Register of Copyrights and the Commissioner of Patents and Trademarks record this IP Agreement.

3. Covenants and Warranties. Grantor represents, warrants, covenants and agrees as follows:

(a) Grantor is now the sole owner of the Intellectual Property Collateral, except for non-exclusive licenses granted by Grantor in the ordinary course of business;

(b) Performance of this IP Agreement does not conflict with or result in a breach of any other agreement covering the Intellectual Property Collateral to which Grantor is bound, except to the extent that such other intellectual property agreements prohibit the assignment of the rights thereunder to a third party without the licensor's or other party's consent;

(c) During the term of this IP Agreement, Grantor will not transfer or otherwise encumber any interest in the Intellectual Property Collateral, except for Permitted Liens;

(d) Each of the Patents is valid and enforceable, and no part of the Intellectual Property Collateral has been judged invalid or unenforceable, in whole or in part, and, to Grantor's knowledge, no claim has been made that any part of the Intellectual Property Collateral violates the rights of any third party;

(e) Grantor shall promptly advise Bank of any material adverse change in the composition of the Intellectual Property Collateral, including but not limited to any subsequent ownership right of the Grantor in or to any Trademark, Patent, Copyright, or Mask Work specified in this IP Agreement;

(f) Grantor shall (i) protect, defend and maintain the validity and enforceability of the Trademarks, Patents, Copyrights, and Mask Works, (ii) use its best efforts to detect infringements of the Trademarks, Patents, Copyrights, and Mask Works and promptly advise Bank in writing of material infringements detected and (iii) not allow any Trademarks, Patents, Copyrights, or Mask Works to be abandoned, forfeited or dedicated to the public without the written consent of Bank, which shall not be unreasonably withheld, unless Grantor determines that reasonable business practices suggest that abandonment is appropriate;

(g) Grantor shall not register any Copyrights or Mask Works with the United States Copyright Office unless it: (i) has given at least fifteen (15) days' prior notice to Bank of its intent to register such Copyrights or Mask Works and has provided Bank with a copy of the application it intends to file with the United States Copyright Office (excluding exhibits thereto); (ii) executes a security agreement or such other documents as Bank may reasonably request in order to maintain the perfection and priority of Bank's security interest in the Copyrights proposed to be registered with the United States Copyright Office; and (iii) records such security documents with the United States Copyright Office contemporaneously with filing the Copyright application(s) with the United States Copyright Office. Grantor shall promptly provide to Bank a copy of the Copyright application(s) filed with the United States Copyright Office, together with evidence of the recording of the security documents necessary for Bank to maintain the perfection and priority of its security interest in such Copyrights or Mask Works. Grantor shall provide written notice to Bank of any application filed by Grantor in the United States Patent Trademark Office for a patent or to register a trademark or service mark within 30 days of any such filing;

(h) This IP Agreement creates, and in the case of after acquired Intellectual Property Collateral, this IP Agreement will create at the time Grantor first has rights in such after acquired Intellectual Property Collateral, in favor of Bank a valid and perfected first priority security interest in the Intellectual Property Collateral in the United States securing the payment and performance of the obligations evidenced by the Loan Agreement upon making the filings referred to in clause (i) below;

(i) To its knowledge (except for, and upon, the filing with the United States Patent and Trademark office with respect to the Patents and Trademarks and the Register of Copyrights with respect to the Copyrights and Mask Works necessary to perfect the security interests created hereunder, and except as has been already made or obtained) no authorization, approval or other action by, and no notice to or filing with, any U.S. governmental authority or U.S. regulatory body is required either (i) for the grant by Grantor of the security interest granted hereby or for the execution, delivery or performance of this IP Agreement by Grantor in the U.S. or (ii) for the perfection in the United States or the exercise by Bank of its rights and remedies thereunder;

(j) All information heretofore, herein or hereafter supplied to Bank by or on behalf of Grantor with respect to the Intellectual Property Collateral is accurate and complete in all material respects;

(k) Grantor shall not enter into any agreement that would materially impair or conflict with Grantor's obligations hereunder without Bank's prior written consent, which consent shall not be unreasonably withheld. Grantor shall not permit the inclusion in any material contract to which it becomes a party of any provisions that could or might in any way prevent the creation of a security interest in Grantor's rights and interest in any property included within the definition of the Intellectual property Collateral acquired under such contracts, except that certain contracts may contain anti-assignment provisions that could in effect prohibit the creation of a security interest in such contracts; and

(l) Upon any executive officer of Grantor obtaining actual knowledge thereof, Grantor will promptly notify Bank in writing of any event that materially adversely affects the value of any Intellectual Property Collateral, the ability of Grantor to dispose of any Intellectual Property Collateral or the rights and remedies of Bank in relation thereto, including the levy of any legal process against any of the Intellectual Property Collateral.

4. Bank's Rights. Bank shall have the right, but not the obligation, to take, at Grantor's sole expense, any actions that Grantor is required to take under this IP Agreement but which Grantor fails to take. Grantor shall reimburse and indemnify Bank for all costs and reasonable expenses incurred in the exercise of its rights under this section 4.

5. Inspection Rights. Grantor hereby grants to Bank and its employees, representatives and agents the right to visit, during reasonable hours upon prior reasonable notice to Grantor, and any of Grantor's plants and facilities that manufacture, install or store products (or that have done so during the

prior six-month period) that are sold utilizing any of the Intellectual Property Collateral, and to inspect the products and quality control records relating thereto upon reasonable written notice to Grantor and as often as may be reasonably requested, but not more than one (1) in every six (6) months so long as no Event of Default has occurred and is continuing; provided, however, nothing herein shall entitle Bank access to Grantor's trade secrets and other proprietary information.

6. Further Assurances; Attorney in Fact.

(a) On a continuing basis, Grantor will, subject to any prior licenses, encumbrances and restrictions and prospective licenses, make, execute, acknowledge and deliver, and file and record in the proper filing and recording places in the United States, all such instruments, including appropriate financing and continuation statements and collateral agreements and filings with the United States Patent and Trademarks Office and the Register of Copyrights, and take all such action as may reasonably be deemed necessary or advisable, or as requested by Bank, to perfect Bank's security interest in all Copyrights, Patents, Trademarks, and Mask Works and otherwise to carry out the intent and purposes of this IP Agreement, or for assuring and confirming to Bank the grant or perfection of a security interest in all Intellectual Property Collateral.

(b) Grantor hereby irrevocably appoints Bank as Grantor's attorney-in-fact, with full authority in the place and stead of Grantor and in the name of Grantor, Bank or otherwise, from time to time in Bank's discretion, upon Grantor's failure or inability to do so, to take any action and to execute any instrument which Bank may deem necessary or advisable to accomplish the purposes of this IP Agreement, including:

(i) To modify, in its sole discretion, this IP Agreement without first obtaining Grantor's approval of or signature to such modification by amending Exhibit A, Exhibit B, Exhibit C, and Exhibit D hereof, as appropriate, to include reference to any right, title or interest in any Copyrights, Patents, Trademarks or Mask Works acquired by Grantor after the execution hereof or to delete any reference to any right, title or interest in any Copyrights, Patents, Trademarks, or Mask Works in which Grantor no longer has or claims any right, title or interest; and

(ii) To file, in its sole discretion, one or more financing or continuation statements and amendments thereto, relative to any of the Intellectual Property Collateral without the signature of Grantor where permitted by law.

7. Events of Default. The occurrence of any of the following shall constitute an Event of Default under this IP Agreement:

(a) An Event of Default occurs under the Loan Agreement; or

(b) Grantor breaches any warranty or agreement made by Grantor in this IP Agreement.

8. Remedies. Upon the occurrence and continuance of an Event of Default, Bank shall have the right to exercise all the remedies of a secured party under the California Uniform Commercial Code, including without limitation the right to require Grantor to assemble the Intellectual Property Collateral and any tangible property in which Bank has a security interest and to make it available to Bank at a place designated by Bank. Bank shall have a nonexclusive, royalty free license to use the Copyrights, Patents, Trademarks, and Mask Works to the extent reasonably necessary to permit Bank to exercise its rights and remedies upon the occurrence of an Event of Default. Grantor will pay any expenses (including reasonable attorney's fees) incurred by Bank in connection with the exercise of any of Bank's rights hereunder, including without limitation any expense incurred in disposing of the Intellectual Property Collateral. All of Bank's rights and remedies with respect to the Intellectual Property Collateral shall be cumulative.

9. Indemnity. Grantor agrees to defend, indemnify and hold harmless Bank and its officers, employees, and agents against: (a) all obligations, demands, claims, and liabilities claimed or asserted by any other party in connection with the transactions contemplated by this IP Agreement, and (b) all losses or expenses in any way suffered, incurred, or paid by Bank as a result of or in any way arising out of, following or consequential to transactions between Bank and Grantor, whether under this IP Agreement or otherwise (including without limitation, reasonable attorneys fees and reasonable expenses), except for losses arising from or out of Bank's gross negligence or willful misconduct.

10. Reassignment. At such time as Grantor shall completely satisfy all of the obligations secured hereunder, Bank shall execute and deliver to Grantor all deed, assignments, and other instruments as may be necessary or proper to reinvest in Grantor full title to the property assigned hereunder, subject to any disposition thereof which may have been made by Bank pursuant hereto.

11. Course of Dealing. No course of dealing, any failure to exercise, or any delay in exercising any right, power or privilege hereunder shall operate as a waiver thereof.

12. Attorneys' Fees. If any action relating to this IP Agreement is brought by either party hereto against the other party, the prevailing party shall be entitled to recover reasonable attorneys' fees, costs and disbursements.

13. Amendments. This IP Agreement may be amended only by a written instrument signed by both parties hereto.

14. Counterparts. This IP Agreement may be executed in two or more counterparts, each of which shall be deemed an original but all of which together shall constitute the same instrument.

15. Law and Jurisdiction. This IP Agreement shall be governed by and construed in accordance with the laws of the State of California, without regard for choice of law provisions. Grantor and Bank consent to the nonexclusive jurisdiction of any state or federal court located in California.

16. Confidentiality. In handling any confidential information, Bank shall exercise the same degree of care that it exercises with respect to its own proprietary information of the same types to maintain the confidentiality of any non-public information thereby received or received pursuant to this IP Agreement except that the disclosure of this information may be made (i) to the affiliates of the Bank, (ii) to prospective transferee or purchasers of an interest in the obligations secured hereby, (iii) as required by law, regulation, rule or order, subpoena judicial order or similar order and (iv) as may be required in connection with the examination, audit or similar investigation of Bank.

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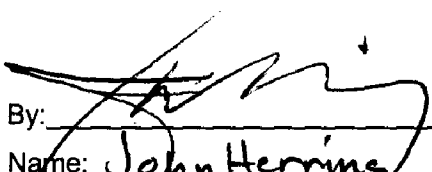
IN WITNESS WHEREOF, the parties hereto have executed this IP Agreement on the day and year first above written.

Address of Grantor:

1732 NW Quimby
Portland, OR 97209

GRANTOR:

IMOVE, INC.

By: 
Name: John Herring
Title: CEO

Address of Bank:

3003 Tasman Drive
Santa Clara, CA 95054

BANK:

SILICON VALLEY BANK

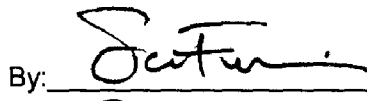
By: 
Name: Scott Fournier
Title: Relationship Manager

EXHIBIT "A"

COPYRIGHTS

SCHEDULE A - ISSUED COPYRIGHTS

<u>COPYRIGHT</u> <u>DESCRIPTION</u>	<u>REGISTRATION</u> <u>NUMBER</u>	<u>DATE OF</u> <u>ISSUANCE</u>
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SCHEDULE B - PENDING COPYRIGHT APPLICATIONS

<u>COPYRIGHT</u> <u>DESCRIPTION</u>	<u>APPLICATION</u> <u>NUMBER</u>	<u>DATE OF</u> <u>FILING</u>	<u>CREATION</u>	<u>FIRST DATE</u> <u>OF PUBLIC</u> <u>DISTRIBUTION</u>
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EXHIBIT "B"

PATENTS

<u>PATENT</u> <u>DESCRIPTION</u>	<u>DOCKET NO.</u>	<u>COUNTRY</u>	<u>SERIAL NO.</u>	<u>FILING DATE</u>	<u>STATUS</u>
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EXHIBIT "C"

TRADEMARKS

<u>TRADEMARK DESCRIPTION</u>	<u>COUNTRY</u>	<u>SERIAL NO.</u>	<u>REG. NO</u>	<u>STATUS</u>
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EXHIBIT "D"

MASK WORKS

<u>MASK WORK DESCRIPTION</u>	<u>COUNTRY</u>	<u>SERIAL NO.</u>	<u>REG. NO</u>	<u>STATUS</u>
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iMove Patent Status – CONFIDENTIAL
(last revised 4/28/06)

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IMV No.	F&W No.	Patent	Category	Inventors	Description	Title	Filings	Status / Next Step
000	7772	LAGA navigation	LAGA	Stuart J. Golin; Jonathan A. Eggert	"Look Anywhere, Go Anywhere" (LAGA) navigation interpolating from a grid of spherical panoramas.	Method and Apparatus for Simulating Movement in Multidimensional Space with Polygonal Projections	Reg 11/02/95 08/552,299 Issued 12/02/97 #5,694,531 093 is CIP 093C1, 093C2 are offspring	6/02/09 – Maintenance fee due
092 (Tier 1)	7469	Panoramic movies	Panoramic video	Scott Gilbert, David J. Kaiman, Michael C. Park, G. David Ripley	Simulating movement through a space using a sequence of up to spherical real or CG seamed panoramas..	Panoramic Movies which Simulate Movement through Multidimensional Space	Prov 5/13/98 Reg 5/12/99 09/310,715 Issued 1/8/02 #6,337,683 096 is CIP 092C1 is CONT 098 is CIP 154-3, 163, 173 is offspring PCT 5/12/99 US99/10403 NF 5/12/99 EP 99925592 JP 548,770/2000 CA 2,371,349	US: 7/08/09 – Maintenance fee due. EP: Waiting for office action. Art. 34 amendments were not included in filing <u>5/12/06 – annuity due.</u> JP: Abandoned. CA: Abandoned.
092 C1 (Tier 1)	7470	Panoramic movies	Panoramic video	Scott Gilbert, David J. Kaiman, Michael C. Park, G. David Ripley	Adds uncompressed imagery and stationary camera, just-in-time seaming, real-time viewing	Panoramic Movies which Simulate Movement through Multidimensional Space	CONT of 092, 05/12/99; which has prov 5/13/98 Reg 10/22/01 10/003,399 Issued 11/25/03 #6,654,019	5/25/07 - Maintenance fee due

IMV No.	F&W No.	Patent	Category	Inventors	Description	Title	Filings	Status / Next Step
093	7471	LAGA spherical panoramas from subhemispherical fisheye images	LAGA	Stuart J. Golin, Scott Gilbert, Thomas Baker	Use of subhemispherical fisheye images to capture pan grid for LAGA navigation.	Method and Apparatus for Simulating Movement in Multidimensional Space with Polygonal Projections from Sub-hemispherical Imagery	154-3, 163 is CIP. 173 is offspring. CIP of 000, 11/02/95 Reg 12/01/97 08/980,503 Issued 2/29/00 #6,031,540 093C1 is CONT. 093C2 is offspring.	8/28/07 – Maintenance fee due
093 C1	7472	Spherical panoramas from fisheye images	Panoramic stills	Stuart J. Golin, Scott Gilbert, Thomas Baker	Forming a spherical panorama using four or more fisheye images.	Method and Apparatus for Simulating Movement in Multidimensional Space with Polygonal Projections from Sub-hemispherical Imagery	CONT of 093, 12/01/97; which is CIP of 000, 11/02/95 Reg 12/13/99 09/460,453 Issued 11/20/01 #6,320,584 093C2 is CONT.	5/20/09 – Maintenance fee due.
093 C2	7473	Spherical panoramas from fisheye images	Panoramic stills	Stuart J. Golin, Scott Gilbert, Thomas Baker	Adds pans from two or three images, partial spherical pans, and any number of fisheye images, taken from viewer-selected viewpoint.	Seaming Polygonal Projections from Subhemispherical Imagery	CONT of 093C1, 12/13/99; which is CONT of 093, 12/01/97; which is CIP of 000, 11/02/95 Reg 10/2/01 09/970,418 Issued 1/27/04 #6,683,608	7/27/07 – Maintenance fee due.

IMV No.	F&W No.	Patent	Category	Inventors	Description	Title	Filings	Status / Next Step
096 (Tier 1)	7475	Panoramic video camera	Panoramic video	Scott Gilbert, David J. Kaiman, Michael C. Park, G. David Ripley	Multi-lens camera with overlapping synchronized progressively-scanned digital views, linked to controlling and image storage computer.	A System for Digitally Capturing and Recording Panoramic Movies	CIP of 092, 5/12/99; which has prov, 05/13/98 Reg 6/23/99 09/338790 Issued 11/27/01 #6,323,858 154-3 is offspring. PCT 5/12/00 US99/15989 NF 11/01 JP 544,742/2002 EP 99937258.4, DE and UK. CA 2372110 IL 146362	01/27/09 - Maintenance fee due. JP: 7/15/06 - Rqst. for Exam. due. JP counsel to confirm request filed. EP: Validated in DE and GB. 7/15/06 - <u>Annuities due.</u> <u>CPI to confirm payment of fees.</u> CA: Waiting for office action. 4/17/06 - Office Action Response filed 12/22/03 - Amendment filed to conform claims to U.S. case. IL: Waiting for first office action. 4/14/06 - Response to Notice Prior to Examination filed. Exam requested.
121 (Tier	7481	Panoramic	Panoramic	Michael C.	Multilens camera that stores	Camera System	Prov 7/17/00	11/4/07 - Exam requested.

IMV No.	F&W No.	Patent	Category	Inventors	Description	Title	Filings	Status / Next Step
2)		video camera resident data	video	Park, David Kaiman	video, camera serial number, and seaming parameters. Seaming panoramas using above info.	Which Records Camera Identification in Image File	CIP of 123, 10/26/00 Reg 7/13/01 09/904,390 Issued 5/4/04 #6,731,305 PCT - see 123	Maintenance fee due Foreign: see 123
154-3 (Tier 2)	7492 (US) 7490 (PCT)	Integrated hi-res window	Panoramic video	Michael C. Park, G. David Ripley	Wide angle camera system, hi res camera capturing subset FOV (EO, IR, radar), display of overlaid result; opt'l separate hi-res view, radar-directed hi-res view, individually-exposed images	Camera System With Both a Wide Angle View and a High Resolution View	Prov 10/19/01 CIP of 154, 11/16/01 CIP of 154-3, 11/23/01 CIP of 096 C1, 10/04/01; which is CONT of 096, 6/23/99 CIP of 092 C1, 10/22/01; which is CONT of 092, 5/12/99 CIP of 123, 10/26/00. Reg. 4/30/02 10/136,659 Issued 5/18/04 #6,738,073 163 is CIP. 173 is offspring. PCT 10/16/02 (combined w/ Reg 11/16/01	11/18/07 - Maintenance fee due PCT expired.

IMV No.	F&W No.	Patent	Category	Inventors	Description	Title	Filings	Status / Next Step
163 (Tier 2)	7496 (Prov) 7497 (Util)	Linked spherical camera systems for security and surveillance	Panoramic video	Michael C. Park, Gwendolyn Hunt, G. David Ripley	Includes object tracking across cameras that are placed to collectively cover an entire area of interest, e.g. public areas of an airport	Security Camera System to Track Moving Objects in Both Forward and Reverse Direction	09/992,090 and Reg 11/23/01 09/994,081) Publ. 12/5/02 No NF Prov 5/17/02 60/381,444 CIP of 092 C1, 10/22/01; which is CONT of 092, 5/12/99 CIP of 154-3, 4/30/02; which has prov 11/19/01 and is CIP of 154, 11/16/01 and CIP of 154-2, 11/23/01 Reg 8/28/02 10/228,541 Issued 2/10/04 #6,690,374 173 is CIP PCT 4/28/03 No NF	8/10/07 - Maintenance fee due

IMV No.	F&W No.	Patent	Category	Inventors	Description	Title	Filings	Status / Next Step
123 (Tier 2)	7484	Multilens camera calibration	Panoramic video	Michael C. Park, Scott Wilson	Calibrating a multilens camera using a structure with lines of indices which each lens of a camera positioned in the center of structure sees on each of it edges to be seamed, and seaming images from such calibration data	System and Method for Camera Calibration	Reg 10/26/00 09/697,605 Publ. 2/21/02 121 is CIP. 154-3 is CIP. PCT 10/25/01 US01/45495 (combined with 121) NF 10/25/01 EP 019890185 JP 2002538671 CA 2427053 IL 155563	US: Awaiting issuance. 7/12/05 – Issue fee paid. EP: Waiting for office action. CA: 10/25/06 – annuity due. Waiting for office action. 4/14/06 – Office Action Response filed. IL: Waiting. JP: Abandoned.

IMV No.	F&W No.	Patent	Category	Inventors	Description	Title	Filings	Status / Next Step
133-US-2 (Tier 3)	7488	Multicamera video	Multicamera video	Patrick White, Brian Hunt, G. David Ripley	Multiple main video streams and composite thumbnail stream, serving one main and composite stream to user. Quickclips option.	Multiple Camera Video System Which Displays Selected Images	Prov 5/18/00 Prov 12/7/00 Reg 5/18/01 09/860,962 Publ 10/23/03 US-2003-0197785 158 is CIP	Waiting for office action. 3/1/06 – Amendment filed. 8/8/05 – Response to Restriction Requirement filed. 3/22/05 – Amendment filed.

IMV No.	F&W No.	Patent	Category	Inventors	Description	Title	Filings	Status / Next Step
098 C1 (Tier 3)	8902	Panoram a seaming techniqu es	Panoram ic stills	Michael C. Park, Scott Gilbert	Building pans from multiple images using control points controlling image mapping into the panorama and an alpha channel controlling degree and proportions of seam blending.	Interactive Image Seamer for Panoramic Images	Prov 7/6/99 CON of 098 CIP of 092, 5/12/99 Reg 6/23/00 09/602,290 Publ 12/23/04 as 2004-0257384 No PCT	US: Waiting for office action. File preliminary amendment? 7/19/04 - Filed corrected application papers.
122 (Tier 3)	7483	Streamin g of panorami c video	Panoram ic video	Mark DeNies	Streaming slices of pans from server to client that contain client-selected view plus a guardband around this view. Move to Dropped? JP and IL (not sure) still pending	Streaming Panoramic Video	Prov 6/9/00 Reg 6/9/01 09/877,166 PCT 1/02 US01/18731 NF 12/2/02 CA 2411852 EP 01942165 JP 2002-502,936 IL 153164	US: Abandoned. CA: Abandoned. EP: Abandoned. JP: 6/8/08 - Rqst for Exam due. IL: Wait for office action.
158 (Tier 3)	7494	Multicam era video streamin g, usage profiling	Multicam era video	Patrick White, Brian Hunt, G. David Ripley	Continuation of 133; adds latency compensation and usage stats collecting, aggregating, and reporting	Intelligent Buffering and Reporting in a Multiple Camera Data Streaming System	Prov 5/18/00 Prov 12/7/00 CIP of 133, 5/18/01 CIP of 133-US-2, 5/18/01 Reg 12/7/01	Waiting for office action

IMV No.	F&W No.	Patent	Category	Inventors	Description	Title	Filings	Status / Next Step
173- Usa (Tier 1)	7932	Spherical Surveillance System Architecture	Panoramic video	G. David Ripley, Michael C. Park, Sean Burke, Mark Denies, Gwendolyn Hunt, Mark Lam	Covers Surveillance system architecture	Spherical Surveillance System Architecture	10/013, 187 PCT - see 133 No NF CIP of 163, 8/27/2002; which is CIP of 092 C1, 10/22/01; which is CONT of 092, filed 5/12/99. CIP of 163, 8/27/2002; which is CIP of 154-3, 4/30/02; which is CIP of 154, 11/16/01 and CIP of 154-2, 11/23/01 Reg 8/22/03 PCT 3/23/04 US2004/027392 NF EP 8/23/04 04786563.9	US: Waiting for office action EP: 8/23/07 - annuity due

IMV No.	F&W No.	Patent	Category	Inventors	Description	Title	Filings	Status / Next Step
161 (Tier 3)	7495	Warping of spherical imagery to reflect environmental factors	Panoramic video	Michael C. Park, Roger Thomas	A view of an area, e.g. battlefield from an airplane, is distorted to account for environmental factors, e.g. wind speed, air speed.	Image Distortion for Gun Sighting and Other Applications	Reg 2/23/02 10/083,273 No PCT	Abandoned.
133 (Tier 3)	7487	Multicamera video	Multicamera video	Patrick White, Brian Hunt, G. David Ripley	Multiple main video streams and composite thumbnail stream, serving one main and composite stream to user. Quickclips option.	Multiple Camera Video System Which Displays Selected Images	Prov 5/18/00 Prov 12/7/00 Reg 5/18/01 09/861,434 158 is CIP PCT 5/18/01 US01/16289 (combined with 158) No NF	Abandoned. Same as 133-US-2 but missing appendix.
098 (Tier 3)	7477	Panoramic seaming techniques	Panoramic stills	Michael C. Park, Scott Gilbert	Building pans from multiple images using control points controlling image mapping into the panorama and an alpha channel controlling degree and proportions of seam blending.	Interactive Image Seamer for Panoramic Images	Prov 7/6/99 CIP of 092, 5/12/99 Reg 6/23/00 09/602,290 098 C1 is CON No PCT	No response to final office action submitted, CON filed 2/26/04.

IMV No.	F&W No.	Patent	Category	Inventors	Description	Title	Filings	Status / Next Step
096 C1	7474	Panoramic video camera	Panoramic video		Adds minor improvements.	A System for Digitally Capturing and Recording Panoramic Movies	Reg 10/04/01 09/971,950	Abandoned.
120	7479	Camera System Including a GPS Receiver	Panoramic video		Incorporation of GPS data with each frame	Camera System Including a GPS Receiver	Prov 7/13/00	Abandoned.
124	7485	Improved MPEG Compression	Video compression		Using MPEG error resiliency features to improve compression ratio	Improved MPEG Compression	Prov 8/2/00	Abandoned.
157	7493	Generalized processing of multilens camera images	Panoramic video		Enables single tools and viewer to process imagery from range of multilens cameras whose data streams include parameterized descriptions of the camera's characteristics	Generalized processing of multilens camera images	Prov 11/27/01	Abandoned.

IMV No.	F&W No.	Patent	Category	Inventors	Description	Title	Filings	Status / Next Step
171-PRO V	7498	Multilens camera motion detection and object tracking	Panoramic video	Michael C. Park, G. David Ripley, Gwendolyn Hunt	Covers unique situation in multi-lens cameras where motion detection and object tracking activities spill from one lens' FOV into a neighboring lens' FOV. Also improves accuracy of motion detection in a dual-resolution spherical system, where the broad-area lower-resolution imagery is first scanned for potential objects of interest (motion, etc.), then the high-resolution capability is used to confirm or refute findings.	Multilens camera motion detection and object tracking	Prov. 12/31/02 60/437,267	Abandoned.
171-US	7656 (UTL to be filed)							
172-PRO V	7499	Image gain map	Panoramic video	Michael C. Park, G. David Ripley	Takes advantage of SVS-3500's ability to modify each CCD pixel cell in real time from a dynamically-changing gain map, resulting in imagery with much greater dynamic range	Wide Area Camera Image Gain Map	Prov. 12/31/02 60/437,267	Abandoned.
172-US	7657 (UTL to be filed)							

"Reg" is filing date for full U.S. patent, "Prov" is filing date for U.S. provisional patent, "PCT" is filing date for worldwide patent. "CONT" is Continuation (of prior application). "CIP" is Continuation In Part (of prior application). "DIV" is divisional (of prior application) "NF" is National filings of a PCT application, done for the designated countries.