

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT3613732

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	SECURITY AGREEMENT	
CONVEYING PARTY DATA		
Name		Execution Date
SPORTVISION, INC.		11/02/2015
RECEIVING PARTY DATA		
Name:	MULTIPLIER CAPITAL, LP	
Street Address:	2 WISCONSIN CIRCLE, SUITE 700	
City:	CHEVY CHASE	
State/Country:	MARYLAND	
Postal Code:	20815	
PROPERTY NUMBERS Total: 49		
Property Type	Number	
Patent Number:	6133946	
Patent Number:	6304665	
Patent Number:	6266100	
Patent Number:	6597406	
Patent Number:	6229550	
Patent Number:	6466275	
Patent Number:	6292130	
Patent Number:	6965397	
Patent Number:	7075556	
Patent Number:	7492363	
Patent Number:	7750901	
Patent Number:	7928976	
Patent Number:	6456232	
Patent Number:	6909438	
Patent Number:	6657584	
Patent Number:	6864886	
Patent Number:	6744403	
Patent Number:	7221794	
Patent Number:	7894669	
Patent Number:	6728637	

PATENT

Property Type	Number
Patent Number:	7341530
Patent Number:	7680301
Patent Number:	7822229
Patent Number:	8456526
Patent Number:	8016653
Patent Number:	8335345
Patent Number:	8705799
Patent Number:	8077981
Patent Number:	8154633
Patent Number:	8558883
Patent Number:	8401304
Patent Number:	8385658
Patent Number:	8456527
Patent Number:	8253799
Patent Number:	8457392
Patent Number:	8441476
Patent Number:	8451265
Patent Number:	8049750
Patent Number:	9041722
Patent Number:	8073190
Patent Number:	8466913
Patent Number:	8884741
Patent Number:	8786415
Patent Number:	8659663
Patent Number:	9007463
Patent Number:	8977585
Application Number:	14506969
Application Number:	14151440
Application Number:	13551997

CORRESPONDENCE DATA

Fax Number: (800)494-7512

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 2023704750

Email: ipteam@nationalcorp.com

Correspondent Name: DARLENA BARI STARK

Address Line 1: 1025 VERMONT AVE NW, SUITE 1130

Address Line 2: NATIONAL CORPORATE RESEARCH, LTD.

Address Line 4: WASHINGTON, D.C. 20005

PATENT

REEL: 037108 FRAME: 0257

ATTORNEY DOCKET NUMBER:	F159374
NAME OF SUBMITTER:	WALTER R. MITCHELL
SIGNATURE:	/Walter R. Mitchell/
DATE SIGNED:	11/12/2015
Total Attachments: 8 source=Final IP Agreement for recording#page1.tif source=Final IP Agreement for recording#page2.tif source=Final IP Agreement for recording#page3.tif source=Final IP Agreement for recording#page4.tif source=Final IP Agreement for recording#page5.tif source=Final IP Agreement for recording#page6.tif source=Final IP Agreement for recording#page7.tif source=Final IP Agreement for recording#page8.tif	

INTELLECTUAL PROPERTY SECURITY AGREEMENT

This Intellectual Property Security Agreement is entered into as of **November 2, 2015** by and between **Multiplier Capital, LP** ("Multiplier") and **Sportvision, Inc.** a Delaware corporation ("Grantor"), with reference to the following facts:

A. Multiplier and Grantor are parties to that certain Loan and Security Agreement dated November 2, 2015 (as amended from time to time, the "Loan Agreement"). (Capitalized terms used herein have the meaning assigned in the Loan Agreement.)

B. Pursuant to the Loan Agreement, Grantor has granted to Multiplier a security interest in all of the Collateral. The Collateral includes without limitation all Intellectual Property (including without limitation the Intellectual Property described herein).

Grantor agrees as follows:

1. To secure performance of all of its "Obligations" as defined in the Loan Agreement, Grantor grants to Multiplier a security interest in all of Grantor's right, title and interest in Grantor's Intellectual Property, including without limitation (i) the trademarks and servicemarks listed on Schedule A hereto, whether registered or not, and all applications to register and registrations of the same and like protections, and the entire goodwill of the business of Borrower connected with and symbolized by such trademarks, and (ii) the patents and patent applications listed on Schedule B hereto and all like protections including, without limitation, all improvements, divisions, continuations, renewals, reissues, extensions and continuations-in-part of the same, and (iii) all copyrights, maskworks, software, computer programs and other works of authorship, including without limitation those registered with the United States Copyright Office and listed on Schedule C hereto, and all extensions and renewals thereof, and (iv) all rights to recover for past or future infringement of any of the foregoing, and (v) all right, title and interest in and to any and all present and future license agreements with respect to any of the foregoing, and (vi) all present and future accounts, accounts receivable and other rights to payment arising from, in connection with or relating to any of the foregoing.

2. Grantor represents and warrants that (i) listed on Schedule A hereto are all trademark registrations and pending registrations owned or controlled by Grantor or licensed to Grantor, (ii) listed on Schedule B are all patents and patent applications owned or controlled by Grantor or licensed to Grantor, and (iii) listed on Schedule C are all copyrights, software, computer programs, mask works, and other works of authorship owned or controlled by Grantor which are registered with the United States Copyright Office.

3. Grantor shall not, hereafter, register any maskworks, software, computer programs or other works of authorship subject to United States copyright protection with the United States Copyright Office without first complying with the following: (i) providing Secured Party with at least 15 days prior written notice thereof, (ii) providing Secured Party with a copy of the application for any such registration and (iii) executing and filing such other instruments, and taking such further actions as Secured Party may reasonably request from time to time to perfect or continue the perfection of Secured Party's interest in the Collateral, including without limitation the filing with the United States Copyright Office, simultaneously with the filing by Grantor of the application for any such registration, of a copy of this Agreement or a Supplement hereto in form acceptable to Secured Party identifying the

maskworks, software, computer programs or other works of authorship being registered and confirming the grant of a security interest therein in favor of Secured Party.

4. This Agreement is being executed and delivered pursuant to the Loan Agreement, nothing herein limits any of the terms or provisions of the Loan Agreement, and Multiplier's rights hereunder and under the Loan Agreement are cumulative. This Agreement, the Loan Agreement and the other Loan Documents set forth in full all of the representations and agreements of the parties with respect to the subject matter hereof and supersede all prior discussions, oral representations, oral agreements and oral understandings between the parties. This Agreement may not be modified or amended, nor may any rights hereunder be waived, except in a writing signed by the parties hereto. In the event of any litigation between the parties based upon, arising out of, or in any way relating to this Agreement, the prevailing party shall be entitled to recover all of his costs and expenses (including without limitation attorneys' fees) from the non-prevailing party. This Agreement and all acts, transactions, disputes and controversies arising hereunder or relating hereto, and all rights and obligations of Multiplier and Grantor shall be governed by, and construed in accordance with the internal laws (and not the conflict of laws rules) of the State of California.

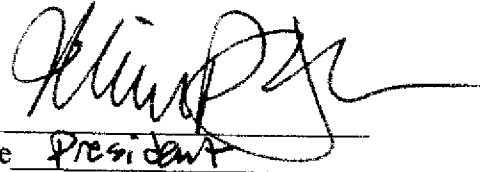
Address of Grantor:

4619 North Ravenswood Avenue
Suite 304
Chicago, IL 60640

Sportvision, Inc.

By

Title


President

Address of Multiplier:

2 Wisconsin Circle, Suite 700
Chevy Chase, MD 20815

Multiplier Capital, LP

By: Multiplier Capital GP, LLC, Its General
Partner

By

Title

Form: Version-1

maskworks, software, computer programs or other works of authorship being registered and confirming the grant of a security interest therein in favor of Secured Party.

4. This Agreement is being executed and delivered pursuant to the Loan Agreement; nothing herein limits any of the terms or provisions of the Loan Agreement, and Multiplier's rights hereunder and under the Loan Agreement are cumulative. This Agreement, the Loan Agreement and the other Loan Documents set forth in full all of the representations and agreements of the parties with respect to the subject matter hereof and supersede all prior discussions, oral representations, oral agreements and oral understandings between the parties. This Agreement may not be modified or amended, nor may any rights hereunder be waived, except in a writing signed by the parties hereto. In the event of any litigation between the parties based upon, arising out of, or in any way relating to this Agreement, the prevailing party shall be entitled to recover all of his costs and expenses (including without limitation attorneys' fees) from the non-prevailing party. This Agreement and all acts, transactions, disputes and controversies arising hereunder or relating hereto, and all rights and obligations of Multiplier and Grantor shall be governed by, and construed in accordance with the internal laws (and not the conflict of laws rules) of the State of California.

Address of Grantor:

Sportvision, Inc.

4619 North Ravenswood Avenue
Suite 304
Chicago, IL 60640

By _____
Title _____

Address of Multiplier:

Multiplier Capital, LP

2 Wisconsin Circle, Suite 700
Chevy Chase, MD 20815

By: Multiplier Capital GP, LLC, Its General
Partner

By Steven P. Skul
Title Managing Member

Form: Version-1

Schedule A

Trademarks

Title	App. #	App. Date	Registration #	Issue Date
SPORTVISION	75/144,415	8/5/1996	2,158,157	5/19/1998
1ST & TEN	75/573,639	10/20/1998	2,527,898	1/8/2002
SPORTVISION	76/242,688	4/18/2001	2,835,768	4/27/2004
L-VIS	74/690,734	6/19/1995	2,538,443	2/12/2002
C-TRAK	75/322,788	7/11/1997	2,498,563	10/16/2001
PITCHf/x	85/323,429	5/17/2011	4,228,620	10/23/2012
HITf/x	85/323,434	5/17/2011	4,228,621	10/23/2012
FIELDf/x	85/323,432	5/17/2011	4,232,253	10/30/2012
RACEf/x	85/494,444	12/13/2011	4,294,438	2/26/2013
COMMANDf/x	86/472,593	12/5/2014		

Schedule B

Patents and Patent Applications

Title	Inventors	App. #	App. Date	Patent #	Issue Date
SYSTEM FOR DETERMINING THE POSITION OF AN OBJECT	RICHARD H. CAVALLARO; JERRY N. GEPNER; JAMES R. GLOUDEMANS; STANLEY K. HONEY; WILLIAM F. SQUADRON; MARVIN S. WHITE	09/041,238	3/11/1998	6,133,946	10/17/2000
SYSTEM FOR DETERMINING THE END OF A PATH FOR A MOVING OBJECT	RICHARD H. CAVALLARO; JAMES R. GLOUDEMANS; STANLEY K. HONEY; TERENCE J. O'BRIEN; ALAN C. PHILLIPS; WILLIAM F. SQUADRON; MARVIN S. WHITE	09/283,729	4/1/1999	6,304,665	10/16/2001
SYSTEM FOR ENHANCING A VIDEO PRESENTATION OF A LIVE EVENT	JAMES R. GLOUDEMANS; RICHARD H. CAVALLARO; JERRY N. GEPNER; STANLEY K. HONEY; WALTER HSIAO; TERENCE J. O'BRIEN; MARVIN S. WHITE	09/160,534	9/24/1998	6,266,100	7/24/2001
SYSTEM FOR ENHANCING A VIDEO PRESENTATION OF A LIVE EVENT	JAMES R. GLOUDEMANS; RICHARD H. CAVALLARO; JERRY N. GEPNER; STANLEY K. HONEY; WALTER HSIAO; TERENCE J. O'BRIEN; MARVIN S. WHITE	09/771,238	1/26/2001	6,597,406	7/22/2003
BLENDING A GRAPHIC	JAMES R. GLOUDEMANS; RICHARD H. CAVALLARO; STANLEY K. HONEY; MARVIN S. WHITE	09/160,428	9/24/1998	6,229,550	5/8/2001
ENHANCING A VIDEO OF AN EVENT AT A REMOTE LOCATION USING DATA ACQUIRED AT THE EVENT	STANLEY K. HONEY; RICHARD H. CAVALLARO; JERRY N. GEPNER; JAMES R. GLOUDEMANS; MARVIN S. WHITE	09/293,378	4/16/1999	6,466,275	10/15/2002
SYSTEM FOR DETERMINING THE SPEED AND/OR TIMING OF AN OBJECT	RICHARD H. CAVALLARO; FRED JUDSON HEINZMAN; STANLEY K. HONEY; KENNETH A. MILNES; MARVIN S. WHITE	09/289,166	4/9/1999	6,292,130	9/18/2001
MEASURING CAMERA ATTITUDE	STANLEY K. HONEY; RICHARD H. CAVALLARO; MARVIN S. WHITE; TERENCE J. O'BRIEN; MATTHEW T. LAZAR; STUART K. NEWBARTH; ALAN C. PHILLIPS; KENNETH A. MILNES	09/472,635	12/27/1999	6,965,397	11/15/2005
TELESTRATOR SYSTEM	KEVIN R. MEIER; WALTER HSIAO; JAMES R. GLOUDEMANS; MARVIN S. WHITE; RICHARD H. CAVALLARO; STANLEY K. HONEY	09/425,992	10/21/1999	7,075,556	7/11/2006
TELESTRATOR SYSTEM	KEVIN R. MEIER; WALTER HSIAO; JAMES R. GLOUDEMANS; MARVIN S. WHITE; RICHARD H. CAVALLARO; STANLEY K. HONEY	11/297,036	12/8/2005	7,492,363	2/17/2009
TELESTRATOR SYSTEM	KEVIN R. MEIER; WALTER HSIAO; JAMES R. GLOUDEMANS; MARVIN S. WHITE; RICHARD H. CAVALLARO; STANLEY K. HONEY	12/359,092	1/23/2009	7,750,901	7/6/2010
TELESTRATOR SYSTEM	KEVIN R. MEIER; WALTER HSIAO; JAMES R. GLOUDEMANS; MARVIN S. WHITE; RICHARD H. CAVALLARO; STANLEY K. HONEY	12/791,090	6/1/2010	7,928,976	4/19/2011
SYSTEM FOR DETERMINING INFORMATION ABOUT A GOLF CLUB AND/OR A GOLF BALL	KENNETH A. MILNES; MARVIN S. WHITE; RICHARD H. CAVALLARO; STANLEY K. HONEY; FRED JUDSON HEINZMANN	09/444,790	11/22/1999	6,456,232	9/24/2002
VIDEO COMPOSITOR	MARVIN S. WHITE; STANLEY K. HONEY; WALTER HSIAO; JAMES R. GLOUDEMANS; KEVIN R. MEIER; JAMES MCGUFFIN; RICHARD H. CAVALLARO	09/767,777	1/23/2001	6,909,438	6/21/2005
LOCATING AN OBJECT USING GPS WITH ADDITIONAL DATA	RICHARD H. CAVALLARO; STANLEY K. HONEY; KENNETH A. MILNES; MARVIN S. WHITE	09/888,217	6/22/2001	6,657,584	12/2/2003

Schedule B

Patents and Patent Applications

Title	Inventors	App. #	App. Date	Patent #	Issue Date
ENHANCING VIDEO USING A VIRTUAL SURFACE	RICHARD H. CAVALLARO; JAMES R. GLOUDEMANS; MATTHEW T. LAZAR; KEVIN R. MEIER; ALON MOZES; ROBERTO J. PEON; ERIC M. STEINBERG	09/928,165	8/10/2001	6,864,886	3/8/2005
GPS BASED TRACKING SYSTEM	KENNETH A. MILNES; STANLEY K. HONEY; JAMES O. MCGUFFIN; MATTHEW T. LAZAR; ROBERTO J. PEON; JAMES R. GLOUDEMANS II	10/179,538	6/25/2002	6,744,403	6/1/2004
FOREGROUND DETECTION	JAMES GLOUDEMANS; WALTER HSIAO	09/929,598	8/13/2001	7,221,794	5/22/2007
FOREGROUND DETECTION	JAMES GLOUDEMANS; WALTER HSIAO	11/691,758	3/27/2007	7,894,669	2/22/2011
TRACK MODEL CONSTRAINT FOR GPS POSITION	THOMAS J. FORD; PATRICK C. FENTON; JAMES O. MCGUFFIN; STANLEY K. HONEY	09/888,195	6/22/2001	6,728,637	4/27/2004
VIRTUAL STRIKE ZONE	RICHARD H. CAVALLARO; ERIC STEINBERG; ANDRE GUEZIEC; ALON MOZES	10/331,117	12/27/2002	7,341,530	3/11/2008
MEASUREMENTS USING A SINGLE IMAGE	RAND PENDLETON; MARVIN S. WHITE	11/172,340	6/30/2005	7,680,301	3/16/2010
MEASUREMENTS USING A SINGLE IMAGE	RAND PENDLETON; MARVIN S. WHITE	12/546,299	8/24/2009	7,822,229	10/26/2010
VIDEO EFFECT USING MOVEMENT WITHIN AN IMAGE	JAMES R. GLOUDEMANS; WALTER HSIAO; JOHN LACROIX; RICHARD H. CAVALLARO; MARVIN S. WHITE	11/467,467	8/25/2006	8,456,526	6/4/2013
THREE DIMENSIONAL VIRTUAL RENDERING OF A LIVE EVENT	RAND PENDLETON	11/670,394	2/1/2007	8,016,653	9/13/2011
TRACKING AN OBJECT WITH MULTIPLE ASYNCHRONOUS CAMERAS	MARVIN S. WHITE; ALINA ALT	11/688,149	3/19/2007	8,335,345	12/18/2012
TRACKING AN OBJECT WITH MULTIPLE ASYNCHRONOUS CAMERAS	MARVIN S. WHITE; ALINA ALT	13/662,782	10/29/2012	8,705,799	4/22/2014
PROVIDING VIRTUAL INSERTS USING IMAGE TRACKING WITH CAMERA AND POSITION SENSORS	VIDYA ELANGOVAN; MARVIN S. WHITE; RICHARD H. CAVALLARO; KENNETH A. MILNES	11/960,586	12/19/2007	8,077,981	12/13/2011
LINE REMOVAL AND OBJECT DETECTION IN AN IMAGE	JAMES R. GLOUDEMANS; WALTER HSIAO; FELICIA YUE	12/121,650	5/15/2008	8,154,633	4/10/2012
PROVIDING GRAPHICS IN IMAGES DEPICTING AERODYNAMIC FLOWS AND FORCES	RICHARD H. CAVALLARO; ALINA ALT; VIDYA ELANGOVAN; JAMES O. MCGUFFIN; TIMOTHY P. HEIDMANN; REUBEN HALPER	11/960,527	12/19/2007	8,558,883	10/15/2013
DETECTING AN OBJECT IN AN IMAGE USING EDGE DETECTION AND MORPHOLOGICAL PROCESSING	VIDYA ELANGOVAN; RICHARD H. CAVALLARO	11/960,565	12/19/2007	8,401,304	3/19/2013
DETECTING AN OBJECT IN AN IMAGE USING MULTIPLE TEMPLATES	VIDYA ELANGOVAN; MARVIN S. WHITE; RICHARD H. CAVALLARO; KENNETH A. MILNES	11/960,571	12/19/2007	8,385,658	2/26/2013
DETECTING AN OBJECT IN AN IMAGE USING TEMPLATES INDEXED TO LOCATION OR CAMERA SENSORS	VIDYA ELANGOVAN; MARVIN S. WHITE; RICHARD H. CAVALLARO; KENNETH A. MILNES; TIMOTHY P. HEIDMANN	11/960,577	12/19/2007	8,456,527	6/4/2013
DETECTING AN OBJECT IN AN IMAGE USING CAMERA REGISTRATION DATA INDEXED TO LOCATION OR CAMERA SENSORS	VIDYA ELANGOVAN; KENNETH A. MILNES; TIMOTHY P. HEIDMANN	11/960,600	12/19/2007	8,253,799	8/28/2012

Schedule B

Patents and Patent Applications

Title	Inventors	App. #	App. Date	Patent #	Issue Date
IDENTIFYING AN OBJECT IN AN IMAGE USING COLOR PROFILES	VIDYA ELANGOVAN; MARVIN S. WHITE; RICHARD H. CAVALLARO; KENNETH A. MILNES	11/960,606	12/19/2007	8,457,392	6/4/2013
IMAGE REPAIR INTERFACE FOR PROVIDING VIRTUAL VIEWPOINTS	JAMES R. GLOUDEMANS; WALTER HSIAO; FELICIA YUE	12/121,660	5/15/2008	8,441,476	5/14/2013
VIRTUAL VIEWPOINT ANIMATION	JAMES R. GLOUDEMANS; WALTER HSIAO; FELICIA YUE	12/121,696	5/15/2008	8,451,265	5/28/2013
FADING TECHNIQUES FOR VIRTUAL VIEWPOINT ANIMATIONS	JAMES R. GLOUDEMANS; FELICIA YUE	12/121,699	5/15/2008	8,049,750	11/1/2011
UPDATING BACKGROUND TEXTURE FOR VIRTUAL VIEWPOINTS ANIMATIONS	JAMES R. GLOUDEMANS; WALTER HSIAO; FELICIA YUE	12/121,701	5/15/2008	9,041,722	5/26/2015
3D TEXTURED OBJECTS FOR VIRTUAL VIEWPOINT ANIMATIONS	JAMES R. GLOUDEMANS; WALTER HSIAO	12/121,655	5/15/2008	8,073,190	12/6/2011
USER INTERFACE FOR ACCESSING VIRTUAL VIEWPOINT ANIMATIONS	JAMES R. GLOUDEMANS; FELICIA YUE	12/121,665	5/15/2008	8,466,913	6/18/2013
TRACKING SYSTEM	RICHARD H. CAVALLARO; JAMES ORVILLE MCGUFFIN; JOHN ROY BORTON	12/906,012	10/15/2010	8,884,741	11/11/2014
TRACKING SYSTEM USING PROXIMITY AND/OR PRESENCE	RICHARD A. CAVALLARO; JAMES ORVILLE MCGUFFIN; JOHN ROY BORTON	12/906,029	10/15/2010	8,786,415	7/22/2014
TRACKING SYSTEM USING PROXIMITY AND/OR PRESENCE	RICHARD A. CAVALLARO; JAMES ORVILLE MCGUFFIN; JOHN ROY BORTON	14/506,969	10/6/2014		
VIDEO TRACKING OF BASEBALL PLAYERS TO DETERMINE THE START AND END OF A HALF-INNING	VIDYA ELANGOVAN; MARLENA FECHO; TIMOTHY P. HEIDMANN	12/976,766	12/22/2010	8,659,663	2/25/2014
VIDEO TRACKING OF BASEBALL PLAYERS TO DETERMINE THE START AND END OF A HALF-INNING	VIDYA ELANGOVAN; MARLENA FECHO; TIMOTHY P. HEIDMANN	14/151,440	1/9/2014		
VIDEO TRACKING OF BASEBALL PLAYERS WHICH IDENTIFIES MERGED PARTICIPANTS BASED ON PARTICIPANT ROLES	VIDYA ELANGOVAN; MARLENA FECHO; TIMOTHY P. HEIDMANN	12/976,758	12/22/2010	9,007,463	4/14/2015
SIMULATION SYSTEM	RICHARD H. CAVALLARO; JOHN ROY BORTON; GERALD RUSSELL	13/351,554	1/17/2012	8,977,585	3/10/2015
SYSTEM FOR ENHANCING VIDEO FROM A MOBILE CAMERA	KENNETH A. MILNES; STANLEY K. HONEY; JAMES O. MCGUFFIN; RICHARD A. CAVALLARO; JOHN R. BORTON; RAND PENDELTON	13/551,997	7/18/2012		

SCHEDULE C

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None