

TRADEMARK ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

ETAS ID: TM404471

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	RELEASE OF SECURITY INTEREST

CONVEYING PARTY DATA

Name	Formerly	Execution Date	Entity Type
SPORTVISION, INC.		09/30/2016	Corporation: DELAWARE
SPORTVISION, LLC		09/30/2016	Limited Liability Company: DELAWARE

RECEIVING PARTY DATA

Name:	COMERICA BANK
Street Address:	39200 W. SIX MILE ROAD
Internal Address:	MC 7512
City:	LIVONIA
State/Country:	MICHIGAN
Postal Code:	48152
Entity Type:	TEXAS BANKING ASSOCIATION: TEXAS

PROPERTY NUMBERS Total: 18

Property Type	Number	Word Mark
Serial Number:	76242688	SPORTVISION
Registration Number:	2436087	SPORTVISION
Registration Number:	2172264	SPORTVISION
Registration Number:	2308438	AIRF/X
Registration Number:	2628780	TEE VELOCITY
Registration Number:	2622916	
Registration Number:	2680454	VIRTUAL CADDY
Serial Number:	75699530	IGNITE SPORTS MEDIA
Registration Number:	2443831	IGNITE SPORTS MEDIA
Registration Number:	2158157	SPORTVISION
Registration Number:	2527898	1ST & TEN
Registration Number:	2538443	L-VIS
Registration Number:	2498563	C-TRAK
Registration Number:	4228620	PITCHF/X
Registration Number:	4228621	HITF/X
Registration Number:	4232253	FIELDF/X
Registration Number:	4294438	RACEF/X

TRADEMARK

Property Type	Number	Word Mark
Serial Number:	86472593	COMMANDF/X

CORRESPONDENCE DATA

Fax Number: 8585506420

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: 858-550-6433

Email: jmfitzpatrick@cooley.com

Correspondent Name: JENNIFER FITZPATRICK

Address Line 1: C/O COOLEY LLP

Address Line 2: 4401 EASTGATE MALL

Address Line 4: SAN DIEGO, CALIFORNIA 92121

ATTORNEY DOCKET NUMBER:	036703-1106 Sportvision
NAME OF SUBMITTER:	JENNIFER FITZPATRICK
SIGNATURE:	/JENNIFER FITZPATRICK/
DATE SIGNED:	11/04/2016

Total Attachments: 8

source=Sportvision IP release (executed)#page1.tif

source=Sportvision IP release (executed)#page2.tif

source=Sportvision IP release (executed)#page3.tif

source=Sportvision IP release (executed)#page4.tif

source=Sportvision IP release (executed)#page5.tif

source=Sportvision IP release (executed)#page6.tif

source=Sportvision IP release (executed)#page7.tif

source=Sportvision IP release (executed)#page8.tif

RELEASE OF SECURITY INTEREST

This Release of Security Interest is made as of September 30, 2016, by COMERICA BANK, a Texas banking association ("Lender") in favor of SPORTVISION, INC., a Delaware corporation ("INC.") and SPORTVISION, LLC, a Delaware limited liability company ("LLC"; together with INC., each a "Company" and collectively, the "Companies") with their principal place of business located at 4619 North Ravenswood Avenue, Suite 304, Chicago, IL 60640.

Recital

WHEREAS Companies granted to Lender a security interest in the patents and trademarks described on Exhibits A - B, respectively, attached hereto (collectively, the "Intellectual Property") under an Intellectual Property Security Agreement dated as of February 2, 2004, by and between INC. and Lender, as amended from time to time including without limitation by that certain Amended and Restated Intellectual Property Security Agreement dated as of June 19, 2008, by and between INC. and Lender, and that certain First Amendment to Amended and Restated Intellectual Property Security Agreement dated as of March 25, 2014, by and between Companies and Lender (the "Security Agreement") and recorded with the US Patent and Trademark Office as set forth on Exhibits A -B.


WHEREAS Companies have no outstanding obligations to Lender under the terms of the Security Agreement, Lender agrees to release its security interest in the Intellectual Property.

Agreement

Now therefore, Lender agrees that it terminates and releases its security interest in the Intellectual Property and reassigns to Companies, without warranty or recourse, all interest of Lender in the Intellectual Property.

LENDER:

COMERICA BANK


Name: Walter Weston
Title: VP

39200 W. Six Mile Road
Livonia, MI 48152

EXHIBIT A - PATENTS

Sportvision Patents and Applications
 Vierra Magen Marcus LLP
 As of September 21, 2015

Our File No.	Country	Type	Status	Title	Inventors	App. #	App. Date	Patent #	Issue Date	Next Action	Summary
SPTV-010011US0	USA	Original	Granted	SYSTEM FOR DETERMINING THE POSITION OF AN OBJECT	RICHARD H. CAVALLARO; JERRY N. GERNER; JAMES R. GLOUDEMANS; STANLEY K. HONEY; WILLIAM F. SQUADRON; MARVIN S. WHITE	09/041,238	3/17/1998	6,133,946	10/17/2000	3/17/2018: patent expires. 1/30/12: 12 yr maintenance fee paid	AIFFx system (NBA basketball, X- Games) - camera system for determining how high a player jumped.
SPTV-010080US0	USA	Original	Granted	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	4/17/1999	6,304,665	10/16/2001	4/1/2018: patent expires. 2/8/13: 12 yr maintenance fee paid	A system for measuring how far a baseball would travel after being hit by a batter. (longball).
SPTV-010170DE0	Germany	Original	Granted	SYSTEM FOR ENHANCING A VIDEO PRESENTATION OF A LIVE EVENT	JAMES R. GLOUDEMANS; RICHARD H. CAVALLARO; JERRY N. GERNER; STANLEY K. HONEY; WALTER HSIAC; TERENCE J. O'BRIEN; MARVIN S. WHITE	99945342.6	8/31/1999	69930531	3/22/2006	8/31/16: renewal due	1st & 10 System.
SPTV-010170EP0	Europe	Original	Granted	SYSTEM FOR ENHANCING A VIDEO PRESENTATION OF A LIVE EVENT	JAMES R. GLOUDEMANS; RICHARD H. CAVALLARO; JERRY N. GERNER; STANLEY K. HONEY; WALTER HSIAC; TERENCE J. O'BRIEN; MARVIN S. WHITE	99945342.6	8/31/1999	1110382	3/22/2006	validated in EP states	
SPTV-010170FR0	France	Original	Granted	SYSTEM FOR ENHANCING A VIDEO PRESENTATION OF A LIVE EVENT	JAMES R. GLOUDEMANS; RICHARD H. CAVALLARO; JERRY N. GERNER; STANLEY K. HONEY; WALTER HSIAC; TERENCE J. O'BRIEN; MARVIN S. WHITE	99945342.6	8/31/1999	1110382	3/22/2006	8/31/16: renewal due	
SPTV-010170GB0	Great Bri	Original	Granted	SYSTEM FOR ENHANCING A VIDEO PRESENTATION OF A LIVE EVENT	JAMES R. GLOUDEMANS; RICHARD H. CAVALLARO; JERRY N. GERNER; STANLEY K. HONEY; WALTER HSIAC; TERENCE J. O'BRIEN; MARVIN S. WHITE	99945342.6	8/31/1999	1110382	3/22/2006	8/31/16: renewal due	
SPTV-010170US0	USA	Original	Granted	SYSTEM FOR ENHANCING A VIDEO PRESENTATION OF A LIVE EVENT	JAMES R. GLOUDEMANS; RICHARD H. CAVALLARO; JERRY N. GERNER; STANLEY K. HONEY; WALTER HSIAC; TERENCE J. O'BRIEN; MARVIN S. WHITE	09/160,534	9/24/1998	6,266,100	7/24/2001	9/24/18: patent expires.	
SPTV-010170US2	USA	CON	Granted	SYSTEM FOR ENHANCING A VIDEO PRESENTATION OF A LIVE EVENT	JAMES R. GLOUDEMANS; RICHARD H. CAVALLARO; JERRY N. GERNER; STANLEY K. HONEY; WALTER HSIAC; TERENCE J. O'BRIEN; MARVIN S. WHITE	09/771,238	1/26/2001	6,597,406	7/22/2003	9/4/2018: patent expires.	
SPTV-010190US0	USA	Original	Granted	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	9/24/18: patent expires.	Covers the keying process of the 1st & 10 System.
SPTV-010280US0	USA	Original	Granted	ENHANCING A VIDEO OF AN EVENT AT A REMOTE LOCATION USING DATA ACQUIRED AT THE EVENT	STANLEY K. HONEY; RICHARD H. CAVALLARO; JERRY N. GERNER; JAMES R. GLOUDEMANS; MARVIN S. WHITE	09/293,978	4/16/1999	6,466,275	10/15/2002	4/16/19: patent expires.	Collecting camera attitude information at the game, sending the attitude information to a central studio and performing the enhancement at a central studio.
SPTV-010320US0	USA	Original	Granted	SYSTEM FOR DETERMINING THE SPEED AND/OR TIMING OF AN OBJECT	RICHARD H. CAVALLARO; FRED JUDSON; HEINZMAN; STANLEY K. HONEY; KENNETH A. MILLNES; MARVIN S. WHITE	09/289,166	4/9/1999	6,292,130	9/18/2001	4/9/19: patent expires.	Determining bat speed using radars.
SPTV-010380US0	USA	Original	Granted	MEASURING CAMERA ATTITUDE	STANLEY K. HONEY; RICHARD H. CAVALLARO; MARVIN S. WHITE; TERENCE J. O'BRIEN; MATTHEW T. LAZAR; STUART K. NEUBARTH; ALAN C. PHILLIPS; KENNETH A. MILLNES	09/472,635	12/27/1999	6,985,397	11/15/2005	5/15/17: 12 yr maintenance fee due	Using FOGs and inclinometers with the shaft encoders.

EXHIBIT A - PATENTS

Sportvision Patents and Applications
 Vierra Magen Marcus LLP
 As of September 21, 2015

Our File No.	Country	Type	Status	Title	Inventors	App. #	App. Date	Patent #	Issue Date	Next Action	Summary
SPTV-01038US0	USA	Original	Granted	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	1/11/18: 12 yr maintenance fee due	The telestrator system deployed on ESPN.
SPTV-01038US1	USA	CON	Granted	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	9/17/16: 8 yr maintenance fee due	
SPTV-01038US2	USA	CON	Granted	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	1/6/18: 8 yr maintenance fee due	
SPTV-01038US3	USA	DIV	Granted	TELESTRATOR SYSTEM	KEVIN R. MEIER; WALTER HSIAO; JAMES R. GLOUDEMANS; MARVIN S. WHITE; RICHARD H. CAVALLARO; STANLEY K. HONEY	12/791,090	6/11/2010	7,928,976	4/19/2011	10/19/18: 8 yr maintenance fee due	
SPTV-01049US0	USA	Original	Granted	SYSTEM FOR DETERMINING INFORMATION ABOUT A GOLF CLUB AND/OR A GOLF BALL VIDEO COMPOSITOR	KENNETH A. MILNES; MARVIN S. WHITE; RICHARD H. CAVALLARO; STANLEY K. HONEY; FRED JUDSON HEINZMANN	09/444,790	11/22/1999	6,456,252	9/24/2002	11/22/19: patent expires	Radar system for determining the speed of a golf ball and golf club.
SPTV-01049US0	USA	Original	Granted	VIDEO COMPOSITOR	MARVIN S. WHITE; STANLEY K. HONEY; WALTER HSIAO; JAMES R. GLOUDEMANS; KEVIN R. MEIER; JAMES MCGUIFFIN; RICHARD H. CAVALLARO	09/767,777	1/23/2001	6,909,438	6/21/2005	12/21/16: 12 yr maintenance fee due	An Apparatus for keying based on colors.
SPTV-01056US0	USA	Original	Granted	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	6/22/21: patent expires 5/26/15: 12 yr maintenance fee paid	A fault tolerant GPS system that can rely on other types of data if less than four satellites are available.
SPTV-01068US0	USA	Original	Granted	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	9/8/16: 12 yr maintenance fee due	A telestrator that looks 3-D, but does not need to be registered.
SPTV-01073EP0	Europe	Original	Granted	GPS BASED TRACKING SYSTEM	RICHARD H. CAVALLARO; STANLEY K. HONEY; KENNETH A. MILNES; MARVIN S. WHITE	1952195.4	6/22/2001	1305898	9/11/2010	6/17/16: renewal fee due	RACEIX System - determines a location and other data about race cars, and enhances video accordingly.
SPTV-01073DE0	Germany	Original	Filed	GPS BASED TRACKING SYSTEM	RICHARD H. CAVALLARO; STANLEY K. HONEY; KENNETH A. MILNES; MARVIN S. WHITE	60143357.2	6/22/2001	1305898	9/11/2010	6/17/16: renewal fee due	
SPTV-01073ES0	Spain	Original	Filed	GPS BASED TRACKING SYSTEM	RICHARD H. CAVALLARO; STANLEY K. HONEY; KENNETH A. MILNES; MARVIN S. WHITE	1952195.4	6/22/2001	1305898	9/11/2010	6/17/16: renewal fee due	
SPTV-01073FR0	France	Original	Filed	GPS BASED TRACKING SYSTEM	RICHARD H. CAVALLARO; STANLEY K. HONEY; KENNETH A. MILNES; MARVIN S. WHITE	1952195.4	6/22/2001	1305898	9/11/2010	6/17/16: renewal fee due	
SPTV-01073GB0	Great Bri	Original	Filed	GPS BASED TRACKING SYSTEM	RICHARD H. CAVALLARO; STANLEY K. HONEY; KENNETH A. MILNES; MARVIN S. WHITE	1952195.4	6/22/2001	1305898	9/11/2010	6/17/16: renewal fee due	
SPTV-01073US2	USA	CON	Granted	GPS BASED TRACKING SYSTEM	KENNETH A. MILNES; STANLEY K. HONEY; JAMES O. MCGUIFFIN; MATTHEW T. LAZAR; ROBERTO J. PEON; JAMES R. GLOUDEMANS II	10/179,538	6/25/2002	6,744,403	6/11/2004	6/22/21: patent expires 8/17/15: 12 yr maintenance fee paid	
SPTV-01076US0	USA	Original	Granted	FOREGROUND DETECTION	JAMES GLOUDEMANS; WALTER HSIAO	09/928,598	8/13/2001	7,221,794	5/22/2007	11/22/18: 12 yr maintenance fee due	Surround view system.
SPTV-01076US2	USA	CON	Granted	FOREGROUND DETECTION	JAMES GLOUDEMANS; WALTER HSIAO	11/691,758	3/27/2007	7,894,669	2/25/2011	8/22/18: 8 yr maintenance fee due	

EXHIBIT A - PATENTS

Sportvision Patents and Applications
 Vierra Magen Marcus LLP
 As of September 21, 2015

Our File No.	Country	Type	Status	Title	Inventors	App. #	App. Date	Patent #	Issue Date	Next Action	Summary
SPTV-01079CA0	Canada	Original	Granted	TRACK MODEL CONSTRAINT FOR GPS POSITION	RICHARD H. CAVALLARO; STANLEY K. HONEY; KENNETH A. MILNES; MARVIN S. WHITE	2,413,691	6/22/2001	2,413,691	9/14/2010	6/22/16; renewal due	Using a track model and GPS to find the position of a race car.
SPTV-01079US0	USA	Original	Granted	TRACK MODEL CONSTRAINT FOR GPS POSITION	JAMES O. MCGUIFFIN; STANLEY K. HONEY	09/888,195	6/22/2001	6,728,637	4/27/2004	6/22/21; patent expires 8/17/15; 12 yr maintenance fee paid	
SPTV-01081US0	USA	Original	Granted	VIRTUAL STRIKE ZONE	RICHARD H. CAVALLARO; ERIC STEINBERG; ANDRE GUEZIEC; ALON MOZES	10/331,117	12/27/2002	7,341,530	3/11/2008	3/17/19; 12 yr maintenance fee due	K-Zone System being used on ESPN Sunday Night Baseball.
SPTV-0102US0	USA	Original	Granted	MEASUREMENTS USING A SINGLE IMAGE	RAND PENDLETON; MARVIN S. WHITE	11/172,340	6/30/2005	7,660,301	3/16/2010	9/16/17; 8 yr maintenance fee due	A method used in broadcasts of events for determining a position or path of an object in the world space, not positioned on a geometric model, using only a single video image. The method may then optionally add a graphic to the 2-dimensional video frame replay of the object or path of the object.
SPTV-0102US1	USA	CON	Granted	MEASUREMENTS USING A SINGLE IMAGE	RAND PENDLETON; MARVIN S. WHITE	12/546,299	8/24/2009	7,822,229	10/26/2010	4/26/18; 8 yr maintenance fee due	
SPTV-0105US0	USA	Original	Granted	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 8,456,526	6/4/2013	12/4/16; 4 yr maintenance fee due	FreezeCam. There will be a transition from video captured by a broadcast camera (or another camera) to a high resolution still image, movement around the high resolution still image, and a transition from the high resolution still image back to video from the broadcast camera (or another camera).
SPTV-0105US0	USA	Original	Granted	THREE DIMENSIONAL VIRTUAL RENDERING OF A LIVE EVENT	RAND PENDLETON	11/670,394	2/1/2007	8,016,653	9/13/2011	3/13/19; 8 yr maintenance fee due	A method of three-dimensional, virtual rendering of a live event over a device such as a personal computer. Moving and stationary objects at the event may be rendered using computer-generated graphics of the moving and stationary objects and real time positional data giving the position of the moving objects over time.
SPTV-01108US1	USA	Original	Granted	TRACKING AN OBJECT WITH MULTIPLE ASYNCHRONOUS CAMERAS	MARVIN S. WHITE; ALINA ALT	11/888,149	3/19/2007	8,395,345	12/18/2012	6/18/16; 4 yr maintenance fee due	An object is tracked using cameras with an asynchronous timing signal, by solving equations of motion.
SPTV-01108US2	USA	CON	Granted	TRACKING AN OBJECT WITH MULTIPLE ASYNCHRONOUS CAMERAS	MARVIN S. WHITE; ALINA ALT	13/662,782	10/29/2012	8,705,799	4/22/2014	10/22/17; 4 yr maintenance fee due	
SPTV-01112US1	USA	DIV	Granted	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	6/13/19; 8 yr maintenance fee due	Enables "Drift track." Camera registration/sensor data is updated during a live event based on a difference between an estimated position of an object in an image (e.g., based on GPS) and an actual position of the object in the image.

EXHIBIT A - PATENTS

Sportvision Patents and Applications
 Vierra Magen Marcus LLP
 As of September 21, 2015

Our File No.	Country	Type	Status	Title	Inventors	App. #	App. Date	Patent #	Issue Date	Next Action	Summary
SPTV-01133US1	USA	Original	Granted	LINE REMOVAL AND OBJECT DETECTION IN AN IMAGE	JAMES R. GLOUDEMANS; WALTER HSIAO; FELICIA YUE	12/121,650	5/15/2008	8,154,533	4/10/2012	10/10/15: 4 yr maintenance fee due	Virtual viewpoints. A playing field chalk line obscured by a player or ball is automatically found and repaired.
SPTV-01133EP0	Europe	Original	Pending	LINE REMOVAL AND OBJECT DETECTION IN AN IMAGE	JAMES R. GLOUDEMANS; WALTER HSIAO; MARVIN S. WHITE; RICHARD H. CAVALLARO; FELICIA YUE	8850327.1	11/13/2008			11/30/15: renewal fee due	
SPTV-01139US0	USA	Original	Allowed	PROVIDING GRAPHICS IN IMAGES DERICTING AERODYNAMIC FLOWS AND FORCES	RICHARD H. CAVALLARO; ALINA ALT; VIDYA ELANGOVAN; JAMES O. MCGUIFFIN; TIMOTHY P. HEIDMANN; REUBEN HALPER	11/960,527	12/19/2007	8,558,833	10/15/2013	4/15/17: 4 yr maintenance fee due	Draft track. Graphics depict the fluid flow around a race car and aerodynamic forces.
SPTV-01122US0	USA	Original	Granted	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	9/19/16: 4 yr maintenance fee due	Enables "draft track" by identifying the edges of the car in the image, so that the graphic can be accurately positioned.
SPTV-01123US0	USA	Original	Granted	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	8,385,558	2/26/2013	8/26/16: 4 yr maintenance fee due	Enables "draft track" by identifying the car in the image based on color, texture or a template.
SPTV-01124US0	USA	Original	Granted	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	12/4/16: 4 yr maintenance fee due	Enables "draft track" by identifying the car in the image based on a template of the car from a previous lap of the track.
SPTV-01135US0	USA	Original	Granted	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	2/28/16: 4 yr maintenance fee due	Enables "Draft track." Camera registration/sensor data is indexed to locations along the track, to estimate the position of the car in the image.
SPTV-01126US0	USA	Original	Granted	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	12/4/16: 4 yr maintenance fee due	Enables "draft track" by identifying the car in the image based on a stored color profile.
SPTV-01127US0	USA	Original	Granted	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	11/14/16: 4 yr maintenance fee due	A user interface allows an image to be repaired, such as by adding a leg to a player whose leg was obscured.
SPTV-01128US0	USA	Original	Granted	VIRTUAL VIEWPOINT ANIMATION	JAMES R. GLOUDEMANS; WALTER HSIAO; FELICIA YUE	12/121,696	5/15/2008	8,451,255	5/28/2013	11/28/16: 4 yr maintenance fee due	Virtual viewpoints. A high-resolution camera is used to provide a virtual viewpoint of an event.
SPTV-01129US0	USA	Original	Granted	FADING TECHNIQUES FOR VIRTUAL VIEWPOINT ANIMATIONS	JAMES R. GLOUDEMANS; FELICIA YUE	12/121,699	5/15/2008	8,049,750	11/11/2011	5/11/2019: 8 yr maintenance fee due	Virtual viewpoints. An object is faded out at a specified angular offset in a virtual viewpoint.
SPTV-01130EP0	Europe	Original	Pending	UPDATING BACKGROUND TEXTURE FOR VIRTUAL VIEWPOINTS ANIMATIONS	JAMES R. GLOUDEMANS; WALTER HSIAO; FELICIA YUE	8848885.3	11/13/2008			11/30/15: renewal fee due	Virtual viewpoints. A 3-D model of a stadium is periodically updated to reflect changes in lighting, advertisements, and the number of spectators.
SPTV-01130US0	USA	Original	Granted	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	11/26/18: 4 yr maintenance fee due	
SPTV-01131US0	USA	Original	Granted	3D TEXTURED OBJECTS FOR VIRTUAL VIEWPOINT ANIMATIONS	JAMES R. GLOUDEMANS; WALTER HSIAO	12/121,655	5/15/2008	8,073,190	12/6/2011	6/6/2019: 8 yr maintenance fee due	Virtual viewpoints. A 3-D model of an object such as a goal post is combined with a textured 3-D model of a sporting event.
SPTV-01132US0	USA	Original	Granted	USER INTERFACE FOR ACCESSING VIRTUAL VIEWPOINT ANIMATIONS	JAMES R. GLOUDEMANS; FELICIA YUE	12/121,665	5/15/2008	8,466,913	6/19/2013	12/18/2016: 4 yr maintenance fee due	Virtual viewpoints. A television viewer can control the virtual viewpoint of an event via a menu.

EXHIBIT A - PATENTS

Sportvision Patents and Applications
 Vierra Magen Marcus LLP
 As of September 21, 2015

Our File No.	Country	Type	Status	Title	Inventors	App. #	App. Date	Patent #	Issue Date	Next Action	Summary
SPTV-01138US1	USA	Original	Granted	TRACKING SYSTEM	RICHARD H. CAVALLARO; JAMES ORVILLE MCGUFFIN; JOHN ROY BORTON	12906,012	10/15/2010	8,884,741	11/11/2014	5/11/2018; 4 yr maintenance fee due	Automatically tracking an object by sensing its proximity to another object being tracked.
SPTV-01138US2	USA	Original	Granted	TRACKING SYSTEM USING PROXIMITY AND/OR PRESENCE	RICHARD A. CAVALLARO; JAMES ORVILLE MCGUFFIN; JOHN ROY BORTON	12906,029	10/15/2010	8,766,415	7/22/2014	1/22/2018; 4 yr maintenance fee due	
SPTV-01138US3	USA	CON	Filed	TRACKING SYSTEM USING PROXIMITY AND/OR PRESENCE	RICHARD A. CAVALLARO; JAMES ORVILLE MCGUFFIN; JOHN ROY BORTON	144506,969	10/6/2014			Awaiting 1st OA from USPTO	
SPTV-01138EP1	EP	Original	Filed	TRACKING SYSTEM	RICHARD A. CAVALLARO; JAMES ORVILLE MCGUFFIN; JOHN ROY BORTON	11706441	2/22/2011			2/28/16; renewal due	
SPTV-01138EP2	EP	Original	Filed	TRACKING SYSTEM	RICHARD A. CAVALLARO; JAMES ORVILLE MCGUFFIN; JOHN ROY BORTON	11706442,8	2/22/2011			2/28/16; renewal due	
SPTV-01139US0	USA	Original	Granted	VIDEO TRACKING OF BASEBALL PLAYERS TO DETERMINE THE START AND END OF A HALF-INNING	VIDYA ELANGOVAN; MARLENA FECHO; TIMOTHY P. HEIDMANN	12976,766	12/22/2010	8,659,663	2/25/2014	8/25/17; 4 yr maintenance fee due	
SPTV-01139US1	USA	DIV	Filed	VIDEO TRACKING OF BASEBALL PLAYERS TO DETERMINE THE START AND END OF A HALF-INNING	VIDYA ELANGOVAN; MARLENA FECHO; TIMOTHY P. HEIDMANN	147151,440	1/9/2014			Awaiting 1st OA from USPTO	
SPTV-01144US0	USA	Original	Granted	VIDEO TRACKING OF BASEBALL PLAYERS WHICH IDENTIFIES MERGED PARTICIPANTS BASED ON PARTICIPANT ROLES	VIDYA ELANGOVAN; MARLENA FECHO; TIMOTHY P. HEIDMANN	12976,758	12/22/2010	9,007,463	4/14/2015	10/14/18; 4 yr maintenance fee due	
SPTV-01147US1	USA	Convert	Granted	SIMULATION SYSTEM	RICHARD H. CAVALLARO; JOHN ROY BORTON; GERALD RUSSELL	139351,554	1/17/2012	8,977,585	3/10/2015	9/10/18; 4 yr maintenance fee due	
SPTV-01156US1	USA	Convert	Allowed	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	139551,997	7/18/2012	9,215,383		11/18/15; issue fee due	
SPTV-01156EP0	EP	Original	Filed	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	12754115,9	7/30/2012			7/31/16; renewal due	

EXHIBIT A

Patents

<u>Description</u>	Registration/ Application <u>Number</u>	Registration/ Application <u>Date</u>
System for measuring a jump	6,167,356	12/26/2000
GPS Based tracking system	09/888,208	06/22/2001
System and method for event driven programming	10/034,129	12/28/2001
Video indexing and fingerprinting for video enhancement	12/035,562	02/22/2008
Automatic measurement of advertising effectiveness	12/041,918	03/04/2008

Lender's security interest recorded at the US Patent and Trademark Office on March 3, 2004 at Reel Number 015035 and Frame Number 0519, on July 14, 2010 at Reel Number 024686 and Frame Number 0042, on May 6, 2014 at Reel Number 032833 and Frame Number 0836 and on January 13, 2016 at Reel Number 037480 and Frame Number 0668.

EXHIBIT B

Trademarks

<u>Description</u>	<u>Registration/Serial Number</u>	<u>Registration/Application Date</u>
Sportvision	76/242,688	4/18/01
Sportvision (stylized letters)	2,436,087	3/20/01
Sportvision	2,172,264	7/14/98
Airf/x	2,308,438	1/18/00
Tee Velocity	2,628,780	10/1/02
(design only)	2,622,916	9/24/02
Virtual Caddy	2,680,454	1/28/03
Ignite Sports Media	75/699,530	5/7/99
Ignite Sports Media	2,443,831	4/17/01

<u>Our File No.</u>	<u>Country</u>	<u>Status</u>	<u>Title</u>	<u>App. #</u>	<u>App. Date</u>	<u>Registration #</u>	<u>Issue Date</u>	
SPTV-01004US0	US	Registered	SPORTVISION	75/144,415	8/5/1996	2,158,157	5/19/1998	5/19/18: Section 8&9 Affidavit/Renewal due
SPTV-01016US0	US	Registered	1ST & TEN	75/573,639	10/20/1998	2,527,898	1/8/2002	1/8/22: Section 8&9 Affidavit/Renewal due
SPTV-01069US0	US	Registered	SPORTVISION	76/242,688	4/18/2001	2,835,768	4/27/2004	4/27/24: Section 8&9 Affidavit/Renewal due
SPTV-01149US0	US	Registered	L-VIS	74/690,734	8/19/1995	2,538,443	2/12/2002	2/12/22: Section 8&9 Affidavit/Renewal due
SPTV-01150US0	US	Registered	C-TRAK	75/322,788	7/11/1997	2,498,563	10/16/2001	10/16/21: Section 8&9 Affidavit/Renewal due
SPTV-01153US0	US	Registered	PITCH/x	85/323,429	5/17/2011	4,228,620	10/23/2012	10/23/18: Section 8&15 Affidavit/Renewal due
SPTV-01154US0	US	Registered	HIT/x	85/323,434	5/17/2011	4,228,621	10/23/2012	10/23/18: Section 8&15 Affidavit/Renewal due
SPTV-01155US0	US	Registered	FIELD/x	85/323,432	5/17/2011	4,232,253	10/30/2012	10/30/18: Section 8&15 Affidavit/Renewal due
SPTV-01159US0	US	Registered	RACE/x	85/494,444	12/13/2011	4,294,438	2/26/2013	2/26/19: Section 8&15 Affidavit/Renewal due
SPTV-01167US0	US	Pending	COMMANDFX	86/472,593	12/5/2014			9/18/15: Rejection Response filed

Lender's security interest recorded at the US Patent and Trademark Office on March 4, 2004 at Reel Number 2923 and Frame Number 0090, on May 6, 2014 at Reel Number 5275 and Frame Number 0083 and on January 13, 2016 at Reel Number 5708 and Frame Number 0822.