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APPLICATION NUMBER FILING OR 371(C) DATE FIRST NAMED APPLICANT ATTY. DOCKET NO./IITLE

Peter L. Venetianer

11/098,385 04/05/2005

4079-102

CONFIRMATION NO. 8277
POA ACCEPTANCE LETTER

145076 Avigilon Corporation Box 378, #101-1001 West Broadway Vancouver, BC V6H 4E4 CANADA



Date Mailed: 09/06/2017

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 08/28/2017.

The Power of Attorney in this application is accepted. Correspondence in this application will be mailed to the above address as provided by 37 CFR 1.33.

Questions about the contents of this notice and the requirements it sets forth should be directed to the Office of Data Management, Application Assistance Unit, at (571) 272-4000 or (571) 272-4200 or 1-888-786-0101.

/tha/		



United States Patent and Trademark Office

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APPLICATION NUMBER FILING OR 371(C) DATE FIRST NAMED APPLICANT ATTY. DOCKET NO./TITLE

11/098,385 04/05/2005 Peter L. Venetianer

4079-102 **CONFIRMATION NO. 8277**

6449 ROTHWELL, FIGG, ERNST & MANBECK, P.C. 607 14th Street, N.W. SUITE 800 WASHINGTON, DC 20005



Date Mailed: 09/06/2017

NOTICE REGARDING CHANGE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 08/28/2017.

• The Power of Attorney to you in this application has been revoked by the assignee who has intervened as provided by 37 CFR 3.71. Future correspondence will be mailed to the new address of record(37 CFR 1.33).

> Questions about the contents of this notice and the requirements it sets forth should be directed to the Office of Data Management, Application Assistance Unit, at (571) 272-4000 or (571) 272-4200 or 1-888-786-0101.

/tha/

POWER OF ATTORNEY TO PROSECUTE APPLICATIONS BEFORE THE USPTO

	reby revo			ttorney given	in the ap	oplication identified in t	he attached statement
	reby app						
	Practitioners associated with Customer Number: 145076						
	OR				JU1 C	,	
	Practi	tioner(s)	named below (if more than	ı ten patent practi	tioners are	to be named, then a custor	ner number must be used):
			Name	Registration Number	7 [Name	Registration Number
		***************************************	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		\sqcap		
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				<u></u>	L.		I
							ffice (USPTO) in connection with ords or assignments documents
			ccordance with 37 CFR 3.				Ž
Plea	se change l	the corre	spondence address for the	application identi	fied in the	attached statement under 3	7 CFR 3,73(c) to:
T _B	The a	ddress a	ssociated with Customer N	lumber: 4 A I			
OR	J	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		14:	5076	•	
\Box	Firm or				-,,		
ii	Individual Name Address						
	City	State Zip					
	-		State Zip				
	Country						
	Telephon	е			E	mail	
Λ	Maria A Linux		ress: Avigilon Fortress Corporat	tion	2000	***************************************	***************************************
Assig	nee Name	and Add	ress: 2900 - 550 Burrard Street Vancouver, British Columb				
						Form PTO/AIA/96 or equi	
The	i in each a practition	applicati ers appo	on in which this form is ointed in this form, and	s used. The sta must identify tl	tement ui ne applica	nder 37 CFR 3.73(c) may ation in which this Powe	be completed by one of r of Attorney is to be filed.
9000000000	***************************************		Si	GNATURE of A	ssignee	of Record	
***************	The	individu	ial woose signature and	f title is supplied	below is	authorized to act on bel	***************************************
Sign	ature	3444	<u> </u>	***************************************		Date Augus	+ 25, 2017
Nam	ie	Joel	Schuster			Telephone CC	4-631-5182
Title	Secretary and Director						

This collection of information is required by 37 CFR 1.31, 1.32 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

- The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
- A record from this system of records may be disclosed, as a routine use, in the course of presenting
 evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in
 the course of settlement negotiations.
- A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
- 4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
- A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
- A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
- 7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
- 8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
- A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

	ENT UNDER 37 CFR 3.73(c)
Applicant/Patent Owner: Avigilon Fortress Corpora	ation
	Filed/Issue Date: January 11, 2011
Titled: VIDEO SURVEILLANCE SYSTEM EMP	LOYING VIDEO PRIMITIVES
Avigilon Fortress Corporation	a Corporation
(Name of Assignee)	(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)
states that, for the patent application/patent identified	d above, it is (choose one of options 1, 2, 3 or 4 below):
1. The assignee of the entire right, title, and into	erest.
2. $\hfill \square$ An assignee of less than the entire right, title	, and interest (check applicable box):
	ip interest is
There are unspecified percentages of owr right, title and interest are:	nership. The other parties, including inventors, who together own the entire
Additional Statement(s) by the owner(s) he right, title, and interest.	olding the balance of the interest <u>must be submitted</u> to account for the entire
3. The assignee of an undivided interest in the of the other parties, including inventors, who together of	entirety (a complete assignment from one of the joint inventors was made). own the entire right, title, and interest are:
Additional Statement(s) by the owner(s) ho right, title, and interest.	olding the balance of the interest <u>must be submitted</u> to account for the entire
	ke ($e.g.$, bankruptcy, probate), of an undivided interest in the entirety (a The certified document(s) showing the transfer is attached.
The interest identified in option 1, 2 or 3 above (not c	option 4) is evidenced by either (choose one of options A or B below):
	tent application/patent identified above. The assignment was recorded in ce at Reel, Frame, or for which a copy
B. A chain of title from the inventor(s), of the par	tent application/patent identified above, to the current assignee as follows:
1. From: VENETIANER, PETER L. et al	. To: OBJECTVIDEO, INC.
	e United States Patent and Trademark Office at
Reel 016453 , Frame 0968	
· · · · · · · · · · · · · · · · · · ·	e United States Patent and Trademark Office at

[Page 1 of 2]

[Page 1 01 2]
This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

		STATEME	ENT UNDER 37 CFR 3.73(c)	
3. From: _			To:	
	The docume	nt was recorded in the	United States Patent and Trademark Office at	
	Reel	, Frame	or for which a copy thereof is attached.	
4. From: _			To:	
			United States Patent and Trademark Office at	
	Reel	, Frame	, or for which a copy thereof is attached.	
5. From: _			To:	
	The docume	nt was recorded in the	United States Patent and Trademark Office at	
	Reel	, Frame	or for which a copy thereof is attached.	
6. From: _			To:	
	The document was recorded in the United States Patent and Trademark Office at			
	Reel	, Frame	, or for which a copy thereof is attached.	
	Additional documents in the chain of title are listed on a supplemental sheet(s).			
	As required by 37 CFR 3.73(c)(1)(i), the documentary evidence of the chain of title from the original owner to the assignee was, or concurrently is being, submitted for recordation pursuant to 37 CFR 3.11.			
	[NOTE: A separate copy (i.e., a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, to record the assignment in the records of the USPTO. See MPEP 302.08]			
The unders	signed (whose title i	s supplied below) is aut	thorized to act on behalf of the assignee.	
/Daniel	Hammond/		August 25, 2017	
Signature			Date	
Daniel	Hammond		56642	
Printed or Typed Name Title or Registration Number				

[Page 2 of 2]

Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

- The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
- 2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
- 3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
- 4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
- A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
- 6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
- 7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
- 8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
- A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Electronic Acknowledgement Receipt		
EFS ID:	30205669	
Application Number:	11098385	
International Application Number:		
Confirmation Number:	8277	
Title of Invention:	VIDEO SURVEILLANCE SYSTEM EMPLOYING VIDEO PRIMITIVES	
First Named Inventor/Applicant Name:	Peter L. Venetianer	
Customer Number:	6449	
Filer:	Daniel A. Hammond/Susan Pon	
Filer Authorized By:	Daniel A. Hammond	
Attorney Docket Number:	4079-102	
Receipt Date:	28-AUG-2017	
Filing Date:	05-APR-2005	
Time Stamp:	19:47:36	
Application Type:	Utility under 35 USC 111(a)	

Payment information:

Submitted with Payment		no				
File Listin	g:					
Document Number	Document Description		File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
				887562		
1	Power of Attorney	PO	A_Avigilon_Fortress_Corpor ation.pdf	35110485e03a4bc6025fbaa70d7e3950fe01 f65d	no	2
Warnings:				•	•	

The page size in the PDF is too large. The pages should be 8.5 x 11 or A4. If this PDF is submitted, the pages will be resized upon entry into the Image File Wrapper and may affect subsequent processing					
Information:					
2	Assignee showing of ownership per 37 CFR 3.73	Statement Under 37.pdf	93459 7d7627564a1d98ad5567397e6d288a8fa7d 29f4e	no	3
Warnings:	•	•			
Information:					
		Total Files Size (in bytes):	98	31021	

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3301766

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST

CONVEYING PARTY DATA

Name	Execution Date
AVIGILON FORTRESS CORPORATION	04/07/2015

RECEIVING PARTY DATA

Name:	HSBC BANK CANADA	
Street Address:	B5 WEST GEORGIA STREET	
Internal Address:	SUITE 200	
City:	VANCOUVER	
State/Country:	CANADA	
Postal Code:	V6C 3G1	

PROPERTY NUMBERS Total: 102

Property Type	Number
Patent Number:	6696945
Patent Number:	7046732
Patent Number:	6987883
Patent Number:	6999600
Patent Number:	7224852
Patent Number:	6970083
Patent Number:	7646401
Patent Number:	7733369
Patent Number:	7391907
Patent Number:	7424167
Patent Number:	7583815
Patent Number:	7868912
Patent Number:	7613322
Patent Number:	7825954
Patent Number:	7613324
Patent Number:	7796780
Patent Number:	7884849
Patent Number:	8711217
Patent Number:	7891330

Property Type	Number
Patent Number:	7424175
Patent Number:	7949150
Patent Number:	8334906
Patent Number:	7925536
Patent Number:	7822275
Patent Number:	8564661
Patent Number:	8180490
Patent Number:	8405720
Patent Number:	8150103
Patent Number:	8401229
Patent Number:	8848053
Patent Number:	8457401
Patent Number:	7932923
Patent Number:	8497906
Patent Number:	8823804
Patent Number:	8526678
Patent Number:	8948458
Application Number:	11057154
Application Number:	11167218
Application Number:	11220970
Application Number:	11602490
Application Number:	11826324
Application Number:	12155476
Application Number:	13082686
Application Number:	13673178
Application Number:	13684025
Application Number:	13713674
Application Number:	13744264
Application Number:	13744266
Application Number:	13744251
Application Number:	13744254
Application Number:	13781240
Application Number:	13804280
Application Number:	13838511
Application Number:	14634838
Application Number:	13843455
Application Number:	13838665
Application Number:	13886420

Property Type	Number
Application Number:	14610582
Application Number:	14058423
Application Number:	14203065
Application Number:	61968015
Application Number:	14674889
Application Number:	61973611
Application Number:	14252661
Application Number:	61988666
Application Number:	14455868
Application Number:	14470848
Application Number:	14500108
Application Number:	62061935
Application Number:	62066734
Application Number:	62088316
Application Number:	62088373
Application Number:	62088394
Application Number:	62088443
Application Number:	62088446
Application Number:	14576818
Application Number:	62101755
Application Number:	62101733
Application Number:	62101707
Application Number:	62101646
Application Number:	62104507
Application Number:	62104480
Application Number:	62109748
Application Number:	62109780
Application Number:	62109768
Application Number:	62109802
Application Number:	62109817
Application Number:	62110174
Application Number:	62110184
Application Number:	62110190
Application Number:	62110199
Application Number:	62110249
Application Number:	62109841
Application Number:	62109861
Application Number:	62109889

Property Type	Number
Application Number:	62109907
Application Number:	62109922
Application Number:	62110085
Application Number:	62110251
Application Number:	62110266
Application Number:	62110297
Application Number:	62110273

CORRESPONDENCE DATA

Fax Number:

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: 3127018944

Email: ptierney@mayerbrown.com, msherlock@mayerbrown.com,

ipdocket@mayerbrown.com

Correspondent Name: PATRICK TIERNEY
Address Line 1: PO BOX 2828

Address Line 4: CHICAGO, ILLINOIS 60690-2828

ATTORNEY DOCKET NUMBER:	15475652
NAME OF SUBMITTER:	PATRICK TIERNEY
SIGNATURE:	/PT/
DATE SIGNED:	04/08/2015
	This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 22

source=Patent Pledge - Avigilon Fortress pdf#page1.tif source=Patent Pledge - Avigilon Fortress_pdf#page2.tif source=Patent Pledge - Avigilon Fortress_pdf#page3.tif source=Patent Pledge - Avigilon Fortress_pdf#page4.tif source=Patent Pledge - Avigilon Fortress_pdf#page5.tif source=Patent Pledge - Avigilon Fortress pdf#page6.tif source=Patent Pledge - Avigilon Fortress_pdf#page7.tif source=Patent Pledge - Avigilon Fortress_pdf#page8.tif source=Patent Pledge - Avigilon Fortress pdf#page9.tif source=Patent Pledge - Avigilon Fortress pdf#page10.tif source=Patent Pledge - Avigilon Fortress pdf#page11.tif source=Patent Pledge - Avigilon Fortress_pdf#page12.tif source=Patent Pledge - Avigilon Fortress pdf#page13.tif source=Patent Pledge - Avigilon Fortress_pdf#page14.tif source=Patent Pledge - Avigilon Fortress_pdf#page15.tif source=Patent Pledge - Avigilon Fortress pdf#page16.tif source=Patent Pledge - Avigilon Fortress pdf#page17.tif source=Patent Pledge - Avigilon Fortress pdf#page18.tif source=Patent Pledge - Avigilon Fortress_pdf#page19.tif source=Patent Pledge - Avigilon Fortress_pdf#page20.tif source=Patent Pledge - Avigilon Fortress_pdf#page21.tif source=Patent Pledge - Avigilon Fortress_pdf#page22.tif

PATENT PLEDGE AND SECURITY AGREEMENT

PATENT PLEDGE AND SECURITY AGREEMENT (this "<u>Agreement</u>") dated as of April 7, 2015, between Avigilon Fortress Corporation (the "<u>Grantor</u>") and HSBC BANK CANADA as administration agent (the "<u>Agent</u>").

WHEREAS, in connection with and as a condition to that certain Credit Agreement dated as of April 7, 2015, by and among, Avigilon Corporation, as borrower, the other Loan Parties party from time to time thereto, the Agent, as administration agent for and on behalf of the Lenders, and the Lenders party from time to time thereto (as further amended, restated, supplemented or otherwise modified from time to time, the "Credit Agreement"), the Grantor, in its best interest, is party to a General Security Agreement, dated as of April 7, 2015 (as amended, supplemented, amended and restated or otherwise modified from time to time, the "Security Agreement"), by and between the Grantor and the Agent for the benefit of the Secured Creditors;

WHEREAS, pursuant to the Security Agreement, the Grantor has granted to the Agent a security interest in certain of the Grantor's personal property and fixture assets, including without limitation the patents and patent applications listed on <u>Schedule A</u> attached hereto, all to secure the payment and performance of the Secured Obligations; and

WHEREAS, pursuant to the Security Agreement, the Grantor is required to execute and deliver to the Agent, for the benefit of the Secured Creditors, an agreement in substantially the form of this Agreement;

WHEREAS, this Agreement is supplemental to the provisions contained in the Security Agreement;

NOW, THEREFORE, in consideration of the premises contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto hereby agree as follows:

1. **DEFINITIONS.**

Capitalized terms used herein and not otherwise defined herein shall have the respective meanings provided therefor in the Credit Agreement and the Security Agreement.

"Patent Collateral" means (a) all inventions and discoveries, whether patentable or not, all letters patent and applications for letters patent throughout the world, including without limitation those patents referred to in Schedule A hereto, and any patent applications in preparation for filing, (b) all reissues, divisions, continuations, continuations-in-part, extensions, renewals and reexaminations of any of the items described in clause (a), (c) all patent licenses, and other agreements providing the Grantor with the right to use any items of the type referred to in clauses (a) and (b) above, and (d) all proceeds of, and rights associated with, the foregoing (including licenses, royalties income, payments, claims, damages and proceeds of infringement suits), the right to sue third parties for past, present or future infringements of any patent or patent application, and for breach or enforcement of any patent license.

2. GRANT OF SECURITY INTEREST.

The Grantor hereby unconditionally grants, assigns and pledges to Agent, for the benefit of the Secured Creditors, to secure the Secured Obligations, a continuing security interest in all of the Grantor's right, title and interest in and to the Patent Collateral, whether now owned or hereafter acquired or arising, which includes, without limitation, the Patent Collateral with respect to those patents referred to on Schedule A (the "Security Interest"). This Agreement and the Security Interest created hereby secures the prompt and indefeasible payment in full and performance of the Secured Obligations, whether now existing or arising hereafter.

3. REPRESENTATIONS AND WARRANTIES.

The Grantor represents that except for the Patent Collateral specified in Schedule A hereto, the Grantor does not own and has no interests in any Patent Collateral as of the date hereof. The Grantor further represents and warrants that, with respect to all Patent Collateral specified in Schedule A hereto, (a) such Patent Collateral (except for any Patent Collateral that is immaterial to the business of the Grantor) is valid, subsisting, unexpired and enforceable and has not been abandoned or adjudged invalid or unenforceable, in whole or in part, except to the extent that any invalidity, non-subsistence, expiry, unenforceability, abandonment, adjudged invalidity or adjudged unenforceability of any such Patent Collateral has not had nor could reasonably be expected to have a Material Adverse Effect, (b) the Grantor is the sole and exclusive owner of the entire and unencumbered right, title and interest in and to such Patent Collateral (except for any Patent Collateral that is immaterial to the business of the Grantor), subject to Permitted Encumbrances, and no claim has been made that the use of such Patent Collateral does or may, conflict with, infringe, misappropriate, dilute, misuse or otherwise violate any of the rights of any third party in any material respects, (c) the Grantor has made, or intends to make, all necessary filings and recordations to protect its interest in such material Patent Collateral, including recordations of any of its interests in such material Patent Collateral in the United States Patent and Trademark Office and in corresponding offices throughout the world, and, to the extent necessary, has used, or intends to use, proper statutory notice in connection with its use of any material patent, (d) the Grantor has not made a previous assignment, sale, transfer or agreement constituting a present or future assignment, sale or transfer of any Patent Collateral for purposes of granting a security interest or as Collateral that has not been terminated or released (other than Permitted Encumbrances), and (e) the consummation of the transactions contemplated by the Credit Agreement and the Security Agreement will not result in the termination or material impairment of any material portion of the Patent Collateral, except to the extent that any termination or material impairment of any material portion of any Patent Collateral has not had nor could reasonably be expected to have a Material Adverse Effect.

4. <u>SECURITY AGREEMENT.</u>

The Security Interest granted pursuant to this Agreement is granted in conjunction with the security interests granted to Agent, for the benefit of the Secured Creditors, pursuant to the Security Agreement. The Grantor hereby acknowledges and affirms that the rights and remedies of the Agent with respect of the Security Interest in the Patent Collateral made and granted hereby are more fully set forth in the Security Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein. Nothing contained in this Agreement shall be deemed to extend the time of attachment or perfection of or otherwise impair the security interest in any of the Patent

Collateral granted to the Agent under the Security Agreement. To the extent there is any inconsistency between this Agreement and the Security Agreement, the Security Agreement shall control.

5. TERMINATION.

This Agreement shall terminate automatically upon termination of the Security Agreement.

6. GOVERNING LAW; CONSENT TO JURISDICTION.

This Agreement shall be governed by and construed in accordance with the laws of the State of New York and the federal laws of the United States applicable therein. The Grantor and each of the Beneficiaries each hereby attorn and submit to the non-exclusive jurisdiction of the courts of the State of New York. For the purpose of all legal proceedings, this Agreement shall be deemed to have been performed in the State of New York and the courts of the State of New York shall have jurisdiction to entertain any action or proceeding arising under this Agreement. Notwithstanding the foregoing, nothing herein shall be construed nor operate to limit the right of the Grantor or any Beneficiary to commence any action or proceeding relating hereto in any other jurisdiction, nor to limit the right of the courts of any other jurisdiction to take jurisdiction over any action, proceeding or matter relating hereto.

THE GRANTOR IRREVOCABLY AND UNCONDITIONALLY SUBMITS, FOR ITSELF AND ITS PROPERTY, TO THE NONEXCLUSIVE JURISDICTION OF THE COURTS OF THE STATE OF NEW YORK SITTING IN NEW YORK COUNTY AND OF THE UNITED STATES DISTRICT COURT OF THE SOUTHERN DISTRICT OF NEW YORK, AND ANY APPELLATE COURT FROM ANY THEREOF, IN ANY ACTION OR PROCEEDING ARISING OUT OF OR RELATING TO THIS AGREEMENT, OR FOR RECOGNITION OR ENFORCEMENT OF ANY JUDGMENT, AND THE GRANTOR IRREVOCABLY AND UNCONDITIONALLY AGREES THAT ALL CLAIMS IN RESPECT OF ANY SUCH ACTION OR PROCEEDING MAY BE HEARD AND DETERMINED IN SUCH NEW YORK STATE COURT OR, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, IN SUCH FEDERAL COURT. THE GRANTOR AGREES THAT A FINAL JUDGMENT IN ANY SUCH ACTION OR PROCEEDING SHALL BE CONCLUSIVE AND MAY BE ENFORCED IN OTHER JURISDICTIONS BY SUIT ON THE JUDGMENT OR IN ANY OTHER MANNER PROVIDED BY LAW. NOTHING IN THIS AGREEMENT SHALL AFFECT ANY RIGHT THAT ANY SECURED PARTY MAY OTHER WISE HAVE TO BRING ANY ACTION OR PROCEEDING RELATING TO THIS AGREEMENT AGAINST ANY OTHER GRANTOR OR ITS PROPERTIES IN THE COURTS OF ANY JURISDICTION.

7. WAIVER OF JURY TRIAL; WAIVER OF VENUE.

THE GRANTOR HEREBY KNOWINGLY, VOLUNTARILY AND INTENTIONALLY WAIVES TO THE FULLEST EXTENT PERMITTED BY LAW ANY RIGHTS IT MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY LITIGATION BASED HEREON, OR ARISING OUT OF, UNDER, OR IN CONNECTION WITH, EACH DOCUMENT, OR ANY COURSE OF CONDUCT, COURSE OF DEALING, STATEMENTS (WHETHER ORAL OR WRITTEN) OR ACTIONS OF THE AGENT, ANY OTHER SECURED PARTY OR ANY OBLIGOR IN CONNECTION THEREWITH. THE GRANTOR ACKNOWLEDGES AND AGREES THAT

IT HAS RECEIVED FULL AND SUFFICIENT CONSIDERATION FOR THIS PROVISION (AND EACH OTHER PROVISION OF EACH OTHER DOCUMENT TO WHICH IT IS A PARTY) AND THAT THIS PROVISION IS A MATERIAL INDUCEMENT FOR THE AGENT, EACH LENDER AND ISSUING LENDER ENTERING INTO THE DOCUMENTS.

THE GRANTOR IRREVOCABLY AND UNCONDITIONALLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LEGAL REQUIREMENT, ANY OBJECTION THAT IT MAY NOW OR HEREAFTER HAVE TO THE LAYING OF VENUE OF ANY ACTION OR PROCEEDING ARISING OUT OF OR RELATING TO THIS AGREEMENT IN ANY COURT REFERRED TO IN SECTION 7. THE GRANTOR HERETO HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LEGAL REQUIREMENT, THE DEFENSE OF AN INCONVENIENT FORUM TO THE MAINTENANCE OF SUCH ACTION OR PROCEEDING IN ANY SUCH COURT.

8. COUNTERPARTS.

This Agreement may be executed in counterparts, each of which shall constitute an original, but all of which when taken together shall constitute a single contract. This Agreement shall become effective when the Agent shall have received counterparts of this Agreement that, when taken together, bear the signatures of the Grantor and the Agent. Delivery of an executed signature page to this Agreement by facsimile transmission shall be as effective as delivery of a manually signed counterpart of this Agreement. Delivery by a party of an executed signature page of this Agreement by portable document format (.pdf) or any other electronic means intended to preserve the original graphic and pictorial appearance of a signature has the same effect as delivery of an executed original of this Agreement.

9. AMENDMENTS, ETC.

This Agreement may not be amended or modified in any respect except by written instrument signed by the Grantor and the Agent. No waiver of any provision of this Agreement by the Agent shall be effective unless the same is in writing and signed by the Agent, and then such waiver shall be effective only in the specific instance and for the specific purpose for which it is given. The rights of the Agent under this Agreement may only be assigned in accordance with the requirements of the Credit Agreement. The Grantor may not assign its obligations under this Agreement.

10. MISCELLANEOUS.

This Agreement is a Document executed pursuant to the Credit Agreement and shall unless otherwise expressly indicated herein) be construed, administered and applied in accordance with the terms and provisions thereof.

The headings of each section of this Agreement are for convenience only and shall not define or limit the provisions thereof. This Agreement and all rights and obligations hereunder shall be binding upon the Grantor and its successors and assigns, and shall inure to the benefit of the Agent and its successors and assigns, subject to the limitations as set forth in the Credit Agreement. If any term of this Agreement shall be held to be invalid, illegal or unenforceable, the validity of all other terms hereof shall

in no way be affected thereby, and this Agreement shall be construed and be enforceable as if such invalid, illegal or unenforceable term had not been included herein.

All references to instruments, documents, contracts, and agreements (including this Agreement) are references to such instruments, documents, contracts, and agreements as the same may be amended, supplemented, and otherwise modified from time to time, unless otherwise specified and shall include all schedules and exhibits thereto unless otherwise specified. The words "hereof", "herein", and "hereunder" and words of similar import when used in this Agreement shall refer to this Agreement as a whole and not to any particular provision of this Agreement. The term "including" means "including, without limitation,".

[Signature Pages to Follow]

IN WITNESS WHEREOF, this Agreement has been executed as of the day and year first above written.

AVIGILON FORTRESS CORPORATION

By:

Name: Alexander Fernandes

Title: President

HSBC BANK CANADA, as Agent

By:

Name: Title:

CURTIS STANDERWICK ASSISTANT VICE PRESIDENT LANGE CORPORATE BC

Ву:

Name: Title: TODD PATCHELL
VICE PRESIDENT
REGION HEAD OF LARGE CORPORATE

SCHEDULE A

Issued Patents

Country	Filing Date	Patent No	<u>Title</u>
US	July 3, 2000	6,738,424	Scene Model Generation from Video For Use in Video Processing
US	October 24, 2000	6,954,498	Interactive Video Manipulation
US	March 16, 2001	7,321,624	Bit-Rate Allocation for Object-Based Video Encoding
US	March 23, 2001	6,625,310	Video Segmentation using Statistical Pixel Modeling
CN	October 9, 2002	ZL02819985.5	Video Tripwire
DE	October 9, 2002	60239883	Video Tripwire
DK	October 9, 2002	1435170	Video Tripwire
EP	October 9, 2002	1435170	Video Tripwire
ES	October 9, 2002	1435170	Video Tripwire
FI .	October 9, 2002	1435170	Video Tripwire
FR	October 9, 2002	1435170	Video Tripwire
GB	October 9, 2002	1435170	Video Tripwire
HK	October 9, 2002	1071956	Video Tripwire
IT	October 9, 2002	1435170	Video Tripwire
KR	October 9, 2002	10-0905504	Video Tripwire
MX	October 9, 2002	256447	Video Tripwire
NL	October 9, 2002	1435170	Video Tripwire

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SE	October 9, 2002	1435170	Video Tripwire
US	October 9, 2001	6,696,945	Video Tripwire
US	October 18, 2001	7,046,732	Video Coloring Book
US	December 31, 2002	6,987,883	Video Scene Background Maintenance using Statistical Pixel Modeling
CN	December 23, 2003	ZL200380110119 .4	Video Scene Background Maintenance using Change Detection and Classification
DE	December 23, 2003	60340236	Video Scene Background Maintenance using Change Detection and Classification
DK	December 23, 2003	1588317	Video Scene Background Maintenance using Change Detection and Classification
FI	December 23, 2003	1588317	Video Scene Background Maintenance using Change Detection and Classification
FR	December 23, 2003	1588317	Video Scene Background Maintenance using Change Detection and Classification
GB	December 23, 2003	1588317	Video Scene Background Maintenance using Change Detection and Classification
нк	October 3, 2006	1088968	Video Scene Background Maintenance using Change Detection and Classification
IT	December 23, 2003	1588317	Video Scene Background Maintenance using Change Detection and Classification
MX	December 23, 2003	258937	Video Scene Background Maintenance using Change Detection and Classification
NL	December 23, 2003	1588317	Video Scene Background Maintenance using Change Detection and Classification
SG	December 23, 2003	114035	Video Scene Background Maintenance using Change Detection and Classification
US	January 30, 2003	6,999,600	Video Scene Background Maintenance using Change Detection and Classification
US	September 22, 2003	7,224,852	Video Segmentation using Statistical Pixel Modeling

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KR	June 9, 2006	10-1085578	Video Tripwire (CIP)
MX	May 12, 2006	264306	Video Tripwire (CIP)
SG	November 12, 2004	122,329	Video Tripwire (CIP)
US	November 12, 2003	6,970,083	Video Tripwire (CIP)
US	January 30, 2004	7,646,401	Video Based Passback Event Detection
US	September 28, 2004	7,733,369	View Handling in Video Surveillance Systems
YU	June 7, 2006	1872583	Method of Video Processing, Computer Readable Medium Containing Instructions Implementing Said Method and Video Processing System
US	October 1, 2004	7,391,907	Spurious Object Detection in a Video Surveillance System
US	October 1, 2004	7,424,167	Tide Filtering for Video Surveillance System
US	April 5, 2005	7,583,815	Wide-Area Site-Based Video Surveillance System
AL	April 5, 2006	1872583	Method of Video Processing, Computer Readable Medium Containing Instructions Implementing Said Method and Video Processing System
AT	April 5, 2006	1872583	Method of Video Processing, Computer Readable Medium Containing Instructions Implementing Said Method and Video Processing System
BA	April 5, 2006	1872583	Method of Video Processing, Computer Readable Medium Containing Instructions Implementing Said Method and Video Processing System
BE	April 5, 2006	1872583	Method of Video Processing, Computer Readable Medium Containing Instructions Implementing Said Method and Video Processing System

BG	April 5, 2006	1872583	Method of Video Processing, Computer Readable Medium Containing Instructions Implementing Said Method and Video Processing System
СН	April 5, 2006	1872583	Method of Video Processing, Computer Readable Medium Containing Instructions Implementing Said Method and Video Processing System
CN	June 27, 2006	ZL200680030697 .0	Video Surveillance System Employing Video Primitives
CY	April 5, 2006	1872583	Method of Video Processing, Computer Readable Medium Containing Instructions Implementing Said Method and Video Processing System
CZ	April 5, 2006	1872583	Method of Video Processing, Computer Readable Medium Containing Instructions Implementing Said Method and Video Processing System
DE	April 5, 2006	1872583	Method of Video Processing, Computer Readable Medium Containing Instructions Implementing Said Method and Video Processing System
DK	April 5, 2006	1872583	Method of Video Processing, Computer Readable Medium Containing Instructions Implementing Said Method and Video Processing System
EE	April 5, 2006	1872583	Method of Video Processing, Computer Readable Medium Containing Instructions Implementing Said Method and Video Processing System
ES	April 5, 2006	1872583	Method of Video Processing, Computer Readable Medium Containing Instructions Implementing Said Method and Video Processing System
FI	April 5, 2006	1872583	Method of Video Processing, Computer Readable Medium Containing Instructions Implementing Said Method and Video Processing System

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FR	April 5, 2006	1872583	Method of Video Processing, Computer Readable Medium Containing Instructions Implementing Said Method and Video Processing System
GB	April 5, 2006	1872583	Method of Video Processing, Computer Readable Medium Containing Instructions Implementing Said Method and Video Processing System
GR	April 5, 2006	1872583	Method of Video Processing, Computer Readable Medium Containing Instructions Implementing Said Method and Video Processing System
HR	April 5, 2006	1872583	Method of Video Processing, Computer Readable Medium Containing Instructions Implementing Said Method and Video Processing System
HU	April 5, 2006	1872583	Method of Video Processing, Computer Readable Medium Containing Instructions Implementing Said Method and Video Processing System
IE	April 5, 2006	1872583	Method of Video Processing, Computer Readable Medium Containing Instructions Implementing Said Method and Video Processing System
IS	April 5, 2006	1872583	Method of Video Processing, Computer Readable Medium Containing Instructions Implementing Said Method and Video Processing System
IT	April 5, 2006	1872583	Method of Video Processing, Computer Readable Medium Containing Instructions Implementing Said Method and Video Processing System
LT	April 5, 2006	1872583	Method of Video Processing, Computer Readable Medium Containing Instructions Implementing Said Method and Video Processing System
LU	April 5, 2006	1872583	Method of Video Processing, Computer Readable Medium Containing Instructions Implementing Said Method and Video Processing System

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April 5, 2006	1872583	Method of Video Processing, Computer Readable Medium Containing Instructions Implementing Said Method and Video Processing System
	April 5, 2006  April 5, 2006	April 5, 2006 1872583  April 5, 2006 1872583

TR	April 5, 2006	1872583	Method of Video Processing, Computer Readable Medium Containing Instructions Implementing Said Method and Video Processing System
US	April 5, 2005	7,868,912	Video Surveillance System Employing Video Primitives
US	May 19, 2005	7,613,322	Periodic Motion Detection with Applications to Multi-Grabbing
US	May 31, 2005	7,825,954	Multi-state Target Tracking
US	June 24, 2005	7,613,324	Detection of Change of Posture in Video
US	June 24, 2005	7,796,780	Target Detection and Tracking from Overhead Video Streams
US	September 26, 2005	7,884,849	Video Surveillance System with Omni- directional Camera
US	December 15, 2005	8,711,217	Video Surveillance System Employing Video Primitives
US	January 31, 2007	7,801,330	Target Detection and Tracking from Video Streams
CN	March 1, 2007	ZL200780017762 .0	Video Segmentation Using Statistical Pixel Modeling
KR	November 13, 2008	10-1392294	Video Segmentation Using Statistical Pixel Modeling
US	February 27, 2007	7,424,175	Video Segmentation using Statistical Pixel Modeling
US	April 2, 2007	7,949,150	Automatic Camera Calibration and Geo- Registration Using Objects that Provide Positional Information
US	May 4, 2007	8,334,906	Video Imagery-Based Sensor
US	May 25, 2007	7,925,536	Intelligent Video Verification Of Point-Of-Sale (Pos) Transactions
US	June 4, 2007	7,822,275	Methods for Detecting Water Regions in Video

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US	July 26, 2007	8,564,661	Video Analytic Rule Detection System and Method
US	January 4, 2008	8,180,490	Video-based Sensing for Daylighting Controls
US	August 8, 2008	8,405,720	Automatic calibration of PTZ Camera system
US	September 3, 2008	8,150,103	Background Modeling With Feature Blocks
US	September 4, 2008	8,401,229	Stationary Target Detection by Exploiting Changes in Background Model
US	September 26, 2008	8,848,053	Automatic Extraction of Secondary Video Streams
US	February 10, 2009	8,457,401	Video Segmentation using Statistical Pixel Modeling
CN	July 17, 2002	ZL02822772.7	Video Surveillance System Employing Video Primitives
НК	August 11, 2005	1073375	Video Surveillance System Employing Video Primitives
JР	July 17, 2002	4369233	Video Surveillance System Employing Video Primitives
US	September 29, 2009	7,932,923	Video Surveillance System Employing Video Primitives
US	May 17, 2010	8,497,906	View Handling in Video Surveillance Systems
US	January 19, 2012	8,823,804	Method for Finding Paths in Video
US	February 19, 2013	8,526,678	Stationary Target Detection by Exploiting Changes in Background Model
KR	June 13, 2008	10-1375583	Object Density Estimation in Video
US	August 2, 2013	8,948,458	Stationary Target Detection by Exploiting Changes in Background Model (Cont)
ES	December 23, 2003	1588317	Video Scene Background Maintenance using Change Detection and Classification

SE December 23, 2003 Video Scene Background Maintenance using Change Detection and Classification	Change Detection and Classification
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# Pending Patent Applications

Country	Filing Date	Application No.	<u>Title</u>
US	February 2, 2005	11/057,154	Video surveillance systsem employing video primitives
EP	July 17, 2002	02 752 397.6	Video Surveillance System Employing Video Primitives
CA	November 12, 2004	2545535	Video Tripwire
US	June 28, 2005	11/167,218	Video Surveillance System Employing Video Primitives
US	September 8, 2005	11/220,970	Scanning Camera-Based Video Surveillance System
CN	January 26, 2006	CN 200680012471	Video surveillance system employing video primitives
CN	April 5, 2006	CN 200680019911	Video Surveillance System Employing Video Primitives
EP	June 23, 2006	EP20060785442	Target Detection And Tracking From Overhead Video Streams
EP	June 27, 2006	EP20060774199	Video Surveillance System Employing Video Primitives
US	November 21, 2006	11/602,490	Object Density Estimation In Video
US	July 13, 2007	11/826,324	Video Analysis For Retail Business Process Monitoring
US	June 4, 2008	12/155,476	Intelligent Video Network Protocol
НК	April 5, 2006	8107304.8	Video Surveillance System Employing Video Primitives
НК	September 5, 2008	8109917.3	Target Detection And Tracking From Overhead Video Streams

US	April 8, 2011	13/082,686	Intelligent Video Verification Of Point-Of-Sale (POS) Transactions (Div)
EP	January 31, 2012	12151067.1	Video Surveillance System Employing Video Primitives (CIP)
EP	January 31, 2012	12151069.7	Video Surveillance System Employing Video Primitives (CIP)
US	November 9, 2012	13/673,178	Video Imagery-Based Sensor (Cont)
US	November 21, 2012	13/684,025	Automatic Event Detection, Text Generation, and Use Thereof
US	December 13, 2012	13/713,674	A Multichannel Video Content Analysis System using Video Multiplexing
US	January 17, 2013	13/744,264	System and method for building automation using video content analysis with depth sensing
US	January 17, 2013	13/744,266	System and method for home health care monitoring
US	January 17, 2013	13/744,251	System and method for monitoring a retail environment using video content analysis with depth sensing
US	January 17, 2013	13/744,254	System and method for video content analysis using depth sensing
US	February 28, 2013	13/781,240	Automatic Calibration Of PTZ Camera System (Div)
US	March 14, 2013	13/804,280	People tracking and best shot detection system
US	March 15, 2013	13/838,511	Crowd Estimation And Monitoring System Using A Generic Human Model
US	March 1, 2015	14/634,838	Crowd Estimation And Monitoring System Using A Generic Human Model
AE	September 12, 2013	(PCT/US2013/059471)	Methods, devices and systems for detecting objects in a video

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September 12, 2013	2013315491	Methods, devices and systems for detecting objects in a video
September 12, 2013	BR112015005282-7	Methods, devices and systems for detecting objects in a video
September 12, 2013	2884383	Methods, devices and systems for detecting objects in a video
September 12, 2013	(PCT/US2013/059471)	Methods, devices and systems for detecting objects in a video
September 12, 2013	PCT388/2015	Methods, devices and systems for detecting objects in a video
September 12, 2013	(PCT/US2013/059471)	Methods, devices and systems for detecting objects in a video
September 12, 2013	P00201501382	Methods, devices and systems for detecting objects in a video
September 12, 2013	(PCT/US2013/059471)	Methods, devices and systems for detecting objects in a video
September 12, 2013	(PCT/US2013/059471)	Methods, devices and systems for detecting objects in a video
September 12, 2013	(PCT/US2013/059471)	Methods, devices and systems for detecting objects in a video
September 12, 2013	(PCT/US2013/059471)	Methods, devices and systems for detecting objects in a video
September 12, 2013	(PCT/US2013/059471)	Methods, devices and systems for detecting objects in a video
September 12, 2013	PI 2015000611	Methods, devices and systems for detecting objects in a video
September 12, 2013	(PCT/US2013/059471)	Methods, devices and systems for detecting objects in a video
September 12, 2013	2015109072	Methods, devices and systems for detecting objects in a video
September 12, 2013	(PCT/US2013/059471)	Methods, devices and systems for detecting objects in a video
September 12, 2013	11201501725R	Methods, devices and systems for detecting objects in a video
	September 12, 2013  September 12, 2013	September 12, 2013         BR112015005282-7           September 12, 2013         2884383           September 12, 2013         (PCT/US2013/059471)           September 12, 2013         PCT388/2015           September 12, 2013         (PCT/US2013/059471)           September 12, 2013         (PCT/US2013/059471)

ТН	September 12, 2013	1501001359	Methods, devices and systems for detecting objects in a video
VN	September 12, 2013	1-2015-00830	Methods, devices and systems for detecting objects in a video
WO	September 12, 2013	PCT/US2013/059471	Methods, devices and systems for detecting objects in a video
US	March 15, 2013	13/843,455	Video Surveillance Systems, Devices And Methods With Improved 3D Human Pose And Shape Modeling
US	March 15, 2013	13/838,665	View Handling In Video Surveillance Systems (Cont)
US	May 3, 2013	13/886,420	Video Segmentation Using Statistical Pixel Modeling (Cont)
US	January 30, 2015	14/610,582	Stationary Target Detection by Exploiting Changes in Background Model (Cont)
US	October 21, 2013	14/058,423	Video Analytic Rule Detection System And Method
US	March 10, 2014	14/203,065	Video Surveillance System Employing Video Primitives
USP	March 20, 2014	61/968,015	System and Method for Identifying Faces in Unconstrained Media
US	March 31, 2015	14/674889	SYSTEM AND METHOD FOR RECOGNITION OF COMPLEX EVENTS UNDER UNCERTAINTY
USP	April 1, 2014	61/973,611	SYSTEM AND METHOD FOR RECOGNITION OF COMPLEX EVENTS UNDER UNCERTAINTY
US	April 14, 2014	14/252,661	Graph Matching By Sub-Graph Grouping and Indexing
USP	May 5, 2014	61/988,666	Real-Time Video Overlays
US	August 8, 2014	14/455,868	Method for Finding Paths in Video

US	August 27, 2014	14/470,848	Systems and Methods for Processing Crowd-Sourced Multimedia Items
US	September 29, 2014	14/500,108	Automatic Extraction Of Secondary Video Streams
USP	October 9, 2014	62/061,935	System and Method for Large Volume Data Analytics
USP	October 21, 2014	62/066,734	Method and System for Thermal Image Analysis
EP	November 18, 2014	14193634.4	Video Surveillance System Employing Video Primitives
USP	December 5, 2014	62/088,316	Using Digital Elevation Model Data to Identify and Classify Targets
USP	December 5, 2014	62/088,373	Fixed Feature Removal
USP	December 5, 2014	62/088,394	Time-Of-Approach Rule
USP	December 5, 2014	62/088,443	Automatic Rule Creation
USP	December 5, 2014	62/088,446	Rules Based on Map Data
US	December 19, 2014	14/576,818	System and Method for Identifying Faces in Unconstrained Media
WO	December 19, 2014	PCT/US2014/071548	System and Method for Identifying Faces in Unconstrained Media
USP	January 5, 2015	62/099,836	Automatic Ship Verification
USP	January 9, 2015	62/101,755	SMUDGE REMOVAL
USP	January 9, 2015	62/101,733	Automated Scene Understanding
USP	January 9, 2015	62/101,707	3D Reconstruction Using UAVs
USP	January 9, 2015	62/101,646	TIME OF FLIGHT
USP	January 16, 2015	62/104,507	SMART GATE
USP	January 16, 2015	62/104,480	Geo-Registration of Moving Ground Sensors
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USP	January 30, 2015	62/109,748	SCENE ELEMENT EXTRACTION AND CLASSIFICATION
USP	January 30, 2015	62/109,780	OBJECT RE-IDENTIFICATION BY TRANSFER LEARNING
USP	January 30, 2015	62/109,768	TRACKING BASKETBALL PLAYERS IN REALTIME
USP	January 30, 2015	62/109,802	REPEATED PATTERN DETECTION AND MATCHING
USP	January 30, 2015	62/109,817	RECORDING USER INTERFACES
USP	January 30, 2015	62/110,174	DISTRIBUTED ARCHITECTURE FOR SKYLINE MATCHING
USP	January 30, 2015	62/110,184	MULTI-USER SUPPORT IN REALTIME MAP OVERLAY
USP	January 30, 2015	62/110,190	VIDEO IMAGE SUMMARY
USP	January 30, 2015	62/110199	MODELING TRAFFIC PATTERNS
USP	January 30, 2015	62/110,249	HASHTAG TREND PREDICTION
USP	January 30, 2015	62/109,841	DEM DATA BOUNDARY HANDLING
USP	January 30, 2015	62/109,861	CAMERA CALIBRATION DATA COMBINED WITH DEM DATA
USP	January 30, 2015	62/109,889	OPTIMIZED TRANSFORM CODING
USP	January 30, 2015	62/109,907	ENFORCED PERFORMANCE CONSTRAINTS
USP	January 30, 2015	62/110,085	SATELLITE STEREO MATCHING TO OBTAIN HEIGHTS
USP	January 30, 2015	62/110,251	LANDMARK CONFIGURATION MATCHING
USP	January 30, 2015	62/110,266	CHARACTER OCR
USP	January 30, 2015	62/110,297	PRIVACY PROTECTION

USP	January 30, 2015	62/110,273	PERIMETER COVERAGE ASSESSMENT
USP	January 30, 2015	62/109,922	MULTI-SOURCE CAMERA CALIBRATION

AO 120 (Rev. 08/10) Mail Stop 8 TO:

# REPORT ON THE FILING OR DETERMINATION OF AN

P.O. Box 1450 Alexandria, VA 22313-1450			ACTION REGARDING A	A PATENT OR
			1116 you are hereby advised that a court act in District of Virginia volves 35 U.S.C. § 292.):	on the following
DOCKET NO.	DATE FILED	U.S. DI	STRICT COURT	
3:12CV363 PLAINTIFF	3/11/2012		Richmond	
ObjectVideo, Inc.			DEFENDANT Pelco, Inc.	
PATENT OR TRADEMARK NO.	DATE OF PATEN OR TRADEMARI	L	HOLDER OF PATENT OR TRA	ADEMARK
1 6,696,945	2/24/2004		ObjectVideo	
2 6,970,083	11/29/2005		ObjectVideo	
3 7,868,912	1/11/2011		ObjectVideo	
4 7,932,923	4/26/2011	ObjectVideo		
5				
	In the above—entitled cas	se, the following	patent(s)/ trademark(s) have been included:	
DATE INCLUDED	INCLUDED BY	Amendment	Answer Cross Bill	Other Pleading
PATENT OR TRADEMARK NO.	DATE OF PATEN OR TRADEMARI		HOLDER OF PATENT OR TRA	
1				
2				
3				
4				
5				
	ove—entitled case, the follow	wing decision ha	as been rendered or judgement issued:	
DECISION/JUDGEMENT				
CLERK		(BY) DEPUTY	CLERK	DATE
Fernando (	Galindo		Rohert I. Walker	5/14/2012

Copy 1—Upon initiation of action, mail this copy to Director Copy 3—Upon termination of action, mail this copy to Director Copy 2—Upon filing document adding patent(s), mail this copy to Director Copy 4—Case file copy



#### United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address COMMISSIONER FOR PATENTS
POST 1450
Alexandria, Virgnia 22313-1450
www.usplo.gov

APPLICATION NUMBER FILING OR 371(C) DATE FIRST NAMED APPLICANT ATTY. DOCKET NO./TITLE Peter L. Venetianer

11/098,385 04/05/2005

OV-103(215811 US) **CONFIRMATION NO. 8277** 

74712 Muir Patent Consulting, PLLC 9913 Georgetown Pike, Suite 200 **POWER OF ATTORNEY NOTICE** 

P.O. Box 1213 Great Falls, VA 22066



Date Mailed: 05/03/2012

#### NOTICE REGARDING CHANGE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 04/26/2012.

• The Power of Attorney to you in this application has been revoked by the assignee who has intervened as provided by 37 CFR 3.71. Future correspondence will be mailed to the new address of record(37 CFR 1.33).

/gbien-aime/ Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

page 1 of 1



#### United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS PALEARDRIA, Vignia 22313-1450 www.uspto.gov

APPLICATION NUMBER FILING OR 371(C) DATE FIRST NAMED APPLICANT ATTY. DOCKET NO./IITLE

Peter L. Venetianer

11/098,385 04/05/2005

4079-102

**CONFIRMATION NO. 8277** 

6449 ROTHWELL, FIGG, ERNST & MANBECK, P.C. 607 14th Street, N.W. SUITE 800 WASHINGTON, DC 20005 POA ACCEPTANCE LETTER

Date Mailed: 05/03/2012

#### NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 04/26/2012.

The Power of Attorney in this application is accepted. Correspondence in this application will be mailed to the above address as provided by 37 CFR 1.33.

/gbien-aime/

Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

POWER OF ATTORNEY	Application Number	11/098,385
and	Filing Date	April 5, 2005
CORRESPONDENCE ADDRESS	First Named Inventor	Venetianer et al.
INDICATION FORM	Art Unit	
	Examiner Name	
	Attorney Docket Number	4079-102
	Title Video Tripwire	

The below-named Assignee of record of the entire interest in the subject application, through its authorized representative identified below, hereby revokes all previous powers of attorney given in the above-identified application and hereby appoints the practitioners associated with the Customer Number 06449 as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

#### Statement under 37 CFR 3.73(b)

A chain of title from the inventors, of the patent application/patent identified above, to the current assignee as follows:

- Assignment From: Peter L. Venetianer, Mark C. Allmen, Paul C. Brewer, Andrew J. Chosak, John I.W. Clark, Matthew F. Frazier, Niels Haering, Tasuki Hirata, Caspar Horne, Alan J. Lipton, William E. Severson, James S. Sfekas, Thomas E. Slowe, Thomas M. Strat, John F. Tilki, Zhong Zhang To: Diamondback Vision, Inc. The document was recorded in the U.S. Patent and Trademark Office at Reel 012473, Frame 0085.
- Change of Name From: Diamondback Vision, Inc. To: ObjectVideo, Inc. The document was recorded in the U.S. Patent and Trademark Office at Reel 014743, Frame 0573.
- Security Agreement From: ObjectVideo, Inc. To: RJF OV, LLC
   The document was recorded in the U.S. Patent and Trademark Office at
   Reel 020478, Frame 0711.
- Grant of Security Interest in Patent Rights From: ObjectVideo, Inc. To: RJF OV, LLC
  The document was recorded in the U.S. Patent and Trademark Office at
  Reel 021744, Frame 0464.
- Release of Security Agreement/Interest From: RJF OV, LLC To: ObjectVideo, Inc.
  The document was recorded in the U.S. Patent and Trademark Office at
  Reel 027810, Frame 0117.

# ACKNOWLEDGEMENT AND CONSENT BY ASSIGNEE TO OBTAIN INSTRUCTIONS FROM ANOTHER PARTY

Assignee, through its undersigned authorized representative, hereby acknowledges that the practitioners appointed herein may obtain instructions as to any action to be taken in the U.S. Patent and Trademark Office on any application to which this power of attorney may be directed, or on any patent which may issue on any such application, from assignee's third-party agents or attorneys, or other designee, who have been authorized by assignee to convey such instructions, and assignee expressly consents to this arrangement. In the event of a change in the persons from whom instructions are to be taken, the practitioners appointed herein shall be so notified by the assignee.

Assignee Name	ObjectVideo, Inc.	
Signature of Authorized Représentative	0000	ب ا بغ د
Typed or Printed Name	Christopher Capuano	
Typed or Printed Title	General Counsel & VP, Corporate Development	124.5
Date	April 26, 2012	

#### CERTIFICATE OF SERVICE

It is hereby certified that the attached **POWER OF ATTORNEY AND CORRESPONDENCE ADDRESS INDICATION FORM** is being served on the attorney of record for the 3rd party Requester in the above-captioned Reexamination by first class mail at the third party requester's address:

Kenyon & Kenyon LLP

One Broadway

New York, 1/1/10004

Martin M. Zoltick

Reg. No. 35,745

April 26, 2012

Electronic Acknowledgement Receipt			
EFS ID:	12636684		
Application Number:	11098385		
International Application Number:			
Confirmation Number:	8277		
Title of Invention:	VIDEO SURVEILLANCE SYSTEM EMPLOYING VIDEO PRIMITIVES		
First Named Inventor/Applicant Name:	Peter L. Venetianer		
Customer Number:	74712		
Filer:	Martin M. Zoltick/Carolyn Harty		
Filer Authorized By:	Martin M. Zoltick		
Attorney Docket Number:	OV-103(215811 US)		
Receipt Date:	26-APR-2012		
Filing Date:	05-APR-2005		
Time Stamp:	15:20:09		
Application Type:	Utility under 35 USC 111(a)		

# Payment information:

Submitted with	Payment	no	no				
File Listing:							
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)		
1	Power of Attorney	poa2.pdf	115331	no	2		
·		p	900bd79b8f326d62aef68b17a4614e01892 3ec2c		_		
Warnings:							
Information:							

	1	no	21215	certserv.pdf	Miscellaneous Incoming Letter	2
10cu/41.5uc.50101104ecto1ecoto25927.to00 458a	'		f6c07413dc5561d1fd4ed61e8dda5927f066 458a	certserv.pdi	Miscellarieous incoming Letter	2

#### Warnings:

The page size in the PDF is too large. The pages should be 8.5 x 11 or A4. If this PDF is submitted, the pages will be resized upon entry into the Image File Wrapper and may affect subsequent processing

#### Information:

Total Files Size (in bytes): 136546

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

#### New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

#### National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

#### New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

AO 120 (Rev. 08/10)

TO:

# Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

#### REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK

In Complian filed in the U.S. Dis	-	15 U.S.C. § 1116 you are hereby advised that a court action has been  ObjectVideo, Inc. v. Bosch, et al. on the following
☐ Trademarks or	✓ Patents. (  the patent action	
DOCKET NO. 3:1/cV 2/7	DATE FILED 4/6/2011	U.S. DISTRICT COURT ObjectVideo, Inc. v. Bosch, et al.
PLAINTIFF	_	DEFENDANT
ObjectVideo, Inc.		Robert Bosch; Bosch Security Sys., Inc.; Samsung Group; Samsung Tech. Co., Ltd.; Samsung Opto-Electcs. America, Inc.; Sony Corp.; Sony Elects., Inc.
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1 6,696,945	2/24/2004	ObjectVideo, Inc.
2 6,970,083	11/25/2005	ObjectVideo, Inc.
3 7,613,324	11/3/2009	ObjectVideo, Inc.
4 7,868,912	1/11/2011	ObjectVideo, Inc.
5		
DATE INCLUDED	INCLUDED BY	e following patent(s)/ trademark(s) have been included: endment
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1		
2	·	
3		
4		
5		
In the abo	ve—entitled case, the following of	decision has been rendered or judgement issued:
DECISION/JUDGEMENT		
CLERK <b>Fernando</b>	Galindo, Clerk	DATE APR - 7 2011

Copy 1—Upon initiation of action, mail this copy to Director Copy 3—Upon termination of action, mail this copy to Director Copy 2—Upon filing document adding patent(s), mail this copy to Director Copy 4—Case file copy

AO 120 (Rev. 08/10) Mail Stop 8 e U.S. Patent and T TO:

# REPORT ON THE

P.O. Box 1450 Alexandria, VA 22313-1450			ACTION REGARDING A PATENT OR TRADEMARK		
filed in the U.S. Dis	▼	ojectVid	1116 you are hereby advised that a court action has been eo, Inc. v. Bosch, et al. on the following a 35 U.S.C. § 292.):		
DOCKET NO. 3:1/cV 2/7	DATE FILED 4/6/2011	U.S. DI	STRICT COURT ObjectVideo, Inc. v. Bosch, et al.		
PLAINTIFF ObjectVideo, Inc.			DEFENDANT  Robert Bosch; Bosch Security Sys., Inc.; Samsung Group; Samsung Tech. Co., Ltd.; Samsung Opto-Electcs. America, Inc.; Sony Corp.; Sony Elects., Inc.		
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK		HOLDER OF PATENT OR TRADEMARK		
1 6,696,945	2/24/2004	Obje	ctVideo, Inc.		
2 6,970,083	11/25/2005	Obje	ctVideo, Inc.		
3 7,613,324	11/3/2009	ObjectVideo, Inc.			
4 7,868,912	1/11/2011	Obje	ctVideo, Inc.		
5					
		following	patent(s)/ trademark(s) have been included:		
DATE INCLUDED	INCLUDED BY	dment	☐ Answer ☐ Cross Bill ☐ Other Pleading		
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK		HOLDER OF PATENT OR TRADEMARK		
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4		ļ			
5		<u> </u>			
In the abo	ve-entitled case, the following de	ecision h	s been rendered or judgement issued:		
DECISION/JUDGEMENT					
CLERK Fernando	Galindo, Clerk	DEPUTY	CLERK DATE APR - 7 2011		

Copy 1—Upon initiation of action, mail this copy to Director Copy 3—Upon termination of action, mail this copy to Director Copy 2—Upon filing document adding patent(s), mail this copy to Director Copy 4—Case file copy



#### UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450

P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

 APPLICATION NO.
 ISSUE DATE
 PATENT NO.
 ATTORNEY DOCKET NO.
 CONFIRMATION NO.

 11/098,385
 01/11/2011
 7868912
 OV-103(215811 US)
 8277

74712 7590 12/22/2010

Muir Patent Consulting, PLLC 9913 Georgetown Pike, Suite 200 P.O. Box 1213 Great Falls, VA 22066

#### **ISSUE NOTIFICATION**

The projected patent number and issue date are specified above.

#### Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment is 1612 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Application Assistance Unit (AAU) of the Office of Data Management (ODM) at (571)-272-4200.

APPLICANT(s) (Please see PAIR WEB site http://pair.uspto.gov for additional applicants):

Peter L. Venetianer, McLean, VA; Alan J. Lipton, Herndon, VA; Andrew J. Chosak, Arlington, VA; Matthew F. Frazier, Arlington, VA; Niels Haering, Reston, VA; Gary W. Myers, Ashburn, VA; Weihong Yin, Herndon, VA; Zhong Zhang, Herndon, VA;

IR103 (Rev. 10/09)

#### PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 (571) 273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for weightening a separate "FEE ADDRESS" for the patents of the

maintenance fee notifications. Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address) Muir Patent Consulting, PLLC 9913 Georgetown Pike, Suite 200 P.O. Box 1213 Certificate of Mailing or Transmission Great Falls, VA 22066 I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below. (Depositor's name (Date APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 11/098.385 2005-04-05 Peter L. Venetianer OV-103 8277 TITLE OF INVENTION: APPLN. TYPE SMALL ENTITY PUBLICATION FEE TOTAL FEE(S) DUE ISSUE FEE DATE DUE 755 2010-11-30 nonprovisional 300 1055 EXAMINER CLASS-SUBCLASS ART UNIT Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). 2. For printing on the patent front page, list Muir Patent Consulting, PLLC (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required. 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type) PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment. (A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY) ObjectVideo, Inc. 11600 Sunrise Valley Drive, Suite 290 Reston, VA 20191 ☐ Individual ☐ Corporation or other private group entity ☐ Government Please check the appropriate assignee category or categories (will not be printed on the patent): 4a. The following fee(s) are enclosed: 4b. Payment of Fee(s): Issue Fee A check in the amount of the fee(s) is enclosed. Publication Fee (No small entity discount permitted) Payment by credit card. Form PTO-2038 is attached. 2 The Director is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number 50-4574 Advance Order - # of Copies 5. Change in Entity Status (from status indicated above) a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2). The Director of the USPTO is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above. NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office. Authorized Signature /Patrick D. Muir/ Date 2010-11-30

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PTOL-85 (Rev. 08-08) Approved for use through  $08/31/2010,\,\mathrm{OMB}\,\,0651\text{-}0033$ 

Typed or printed name Patrick D. Muir, Reg. #37,403

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Registration No. 37,403

#### **Privacy Act Statement**

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

- The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
- 2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
- 3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
- 4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
- 5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
- 6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
- 7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
- 8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
- 9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Electronic Patent Application Fee Transmittal					
Application Number:	11098385				
Filing Date:	05-	05-Apr-2005			
Title of Invention:  VIDEO SURVEILLANCE SYSTEM EMPLOYING VIDEO PRIMITIVES				ITIVES	
First Named Inventor/Applicant Name:	Peter L. Venetianer				
Filer:	Patrick Daniel Muir/Melissa McGinn				
Attorney Docket Number: OV-103(215811 US)					
Filed as Small Entity					
Utility under 35 USC 111(a) Filing Fees					
Description Fee Code Quantity Amount USD(\$)				Sub-Total in USD(\$)	
Basic Filing:					
Pages:					
Claims:					
Miscellaneous-Filing:					
Petition:					
Patent-Appeals-and-Interference:					
Post-Allowance-and-Post-Issuance:	Post-Allowance-and-Post-Issuance:				
Utility Appl issue fee		2501	1	755	755
Publ. Fee- early, voluntary, or normal		1504	1	300	300

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Extension-of-Time:				
Miscellaneous:				
	Tot	al in USD	(\$)	1055

Electronic Acknowledgement Receipt		
EFS ID:	8930731	
Application Number:	11098385	
International Application Number:		
Confirmation Number:	8277	
Title of Invention:	VIDEO SURVEILLANCE SYSTEM EMPLOYING VIDEO PRIMITIVES	
First Named Inventor/Applicant Name:	Peter L. Venetianer	
Customer Number:	74712	
Filer:	Patrick Daniel Muir/Melissa McGinn	
Filer Authorized By:	Patrick Daniel Muir	
Attorney Docket Number:	OV-103(215811 US)	
Receipt Date:	30-NOV-2010	
Filing Date:	05-APR-2005	
Time Stamp:	13:14:18	
Application Type:	Utility under 35 USC 111(a)	

# Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$1055
RAM confirmation Number	10670
Deposit Account	504574
Authorized User	

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

Charge any Additional Fees required under 37 C.F.R. Section 1.16 (National application filing, search, and examination fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.17 (Patent application and reexamination processing fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.19 (Document supply fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.20 (Post Issuance fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.21 (Miscellaneous fees and charges)

#### File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)			
1	Issue Fee Payment (PTO-85B)	OV_103_issue_fee.pdf	229576		_			
'	issue ree rayment (F10-636)	OV_105_issue_fee.pui	56976a541bd806b3bd24682f71774631950 1f230	no	2			
Warnings:								
Information:								
2	Fee Worksheet (PTO-875)	fee-info.pdf	31711	no	2			
	ree worksheet (r10-6/3)	rec illo.pui	d4243c539f4ff4ea334b7e9a49c47b9c9793 b037	110				
Warnings:								
Information:								
		26	51287					

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

#### New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

#### National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

#### New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.



Substitute for form 1449/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Sheet 1 of 1

Complete if Known					
Application Number	11/098,385 - Conf. # 8277				
Filing Date	April 5, 2005				
First Named Inventor	Peter L. Venetianer				
Art Unit	2621				
Examiner Name	Mehrdad Dastouri				
Attorney Docket Number	37112-215811				

Examiner   Cite		Document Number	Publication Date MM-DD-YYYY	Name of Patentee or	Pages, Columns, Lines, Where Relevant Passages or Relevant	
Initials*	No.1	Number-Kind Code ² ( if known)	WINI-OLD-TTTT	Applicant of Cited Document	Figures Appear	
	AA	6,987,528	01/17/06	Nagahisa		
	AB	6,741,977	05/25/04	Nagaya , ,		
	AC	6,542,840	04/01/03	Shusaku Okarnoto et al.		
	AD	6,816,184	11/2004	Brill et al.		
	AE	7,023,469	04/2006	Olson		
	AF	6,924,801	08/2005	Dorbie		
	AG	6,844,818	01/2005	Grech-Cini		
	AH	2002/0024446	02/2002	Grech-Cini		
	AI	2002/0163521	11/2002	Ellenby et al.		
	AJ	6,088,484	07/2000	Mead		
	AK	2002/0051058	05/2002	Ito et al.		
	AL	6,829,371	12/2004	Nichani et al.		
	AM	6,404,455	06/2002	Ito et al.		
	AN	2003/0053659	03/2003	Pavlidis et al.		
	AO	4,737,847	04/1988	Araki et al.		
	AP	2002/0135483	09/2002	Merheim et al.	·	
	AQ	5,802,361	09/1998	Wang et al.		
	AR	5,515,453	05/1996	Hennessey et al.		
	AS	4,908,704	03/1990	Fujioka et al.		
	AT	5,872,865	02/1999	Normile et al.		

A) 10/18/10

		FOREI	GN PATENT	DOCUMENTS		
Examiner	Cite No.1	_Foreign Patent Document	Publication	Name of Patentee or	Pages, Columns, Lines,	
Initials*		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)	Date MM-DD-YYYY	Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear	l™
	BA	JP 10-048008	2/20/98	Omron		V
	BB	JP 2000-339923	8/12/2000	Mitsubishi		V
	BC	JP 2000-224542	11/08/2000	Hitachi		V
	BD	EP 1024666 A2	8/02/2000	Hitachi		$\Box$
	BE	JP 2001-175868	6/29/01	NEC Corp		V
	BF	JP 2000-175174	6/23/2000	Mitsubishi		V
	BG	JP 2001-285681	10/12/2001	Matsushita		1
	ВН	EP 1120746 A2	8/01/2001	Matsushita		

"EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Drew line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional), See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent document, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS								
Examiner Initials	Cite No.1	Include name of the author ( in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²					
	CA	JP Office Action issued in PCT/US02/22688, along with an English translation 10/09/2	φ <del>Q</del> 7					
			T					

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

^{&#}x27;Applicant's unique citation designation number (optional). 'Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature /Tung Vo/ (03/31/2009)	Date Considered	03/31/2009
7 (4114 10) (00) (7200)		

DC2/90320

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /T.V./



### UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS P.O. BOX 1450 Alexandra, Virginia 22313-1450 www.upto.gov

## 

Bib Data Sheet

**CONFIRMATION NO. 8277** 

SERIAL NUMBER 11/098,385	FILING OR 371(c) DATE 04/05/2005 RULE	CLASS 348	GRO	UP AR1 2621	ſ UNIT	D	ATTORNEY OCKET NO. 03(215811 US)
PPLICANTS  Peter L. Venetianer, McLean, VA; Alan J. Lipton, Herndon, VA; Andrew J. Chosak, Arlington, VA; Matthew F. Frazier, Arlington, VA; Niels Haering, Reston, VA; Gary W. Myers, Ashburn, VA; Weihong Yin, Herndon, VA; Zhong Zhang, Herndon, VA;							
** CONTINUING DATA *****************************  This application is a CIP of 11/057,154 02/15/2005  which is a CIP of 09/987,707 11/15/2001 ABN  which is a CIP of 09/694,712 10/24/2000 PAT 6,954,498  *** FOREIGN APPLICATIONS ************************************							
IF REQUIRED, FORE ** 04/27/2005	EIGN FILING LICENSE	GRANTED ** SMALL	ENTITY	**			
Foreign Priority claimed 35 USC 119 (a-d) condition met Verified and Acknowledged Exa	Allowance	STATE OR COUNTRY VA	DRA	ETS WING	TOT CLAI 26	IMS	INDEPENDENT CLAIMS 2
ADDRESS 74712							
<b>TITLE</b> VIDEO SURVEILLAN	CE SYSTEM EMPLOY	ING VIDEO PRIMITIV	ES				
FILING FEE RECEIVED 1116  FEES: Authority has been given in Paper to charge/credit DEPOSIT ACCOUNT No for following:				☐ All Fees ☐ 1.16 Fees (Filing) ☐ 1.17 Fees (Processing Ext. of time) ☐ 1.18 Fees (Issue) ☐ Other			
				Credit			

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

#### NOTICE OF ALLOWANCE AND FEE(S) DUE

74712 7590 08/31/2010 MUIR PATENT CONSULTING, PLLC

9913 Georgetown Pike, Suite 200 P.O. Box 1213 GREAT FALLS, VA 22066

EXAMINER					
VO, TUNG T					
ART UNIT	PAPER NUMBER				
2621					

DATE MAILED: 08/31/2010

١	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
	11/098,385	04/05/2005	Peter L. Venetianer	OV-103(215811 US)	8277

TITLE OF INVENTION: VIDEO SURVEILLANCE SYSTEM EMPLOYING VIDEO PRIMITIVES

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$755	\$300	\$0	\$1055	11/30/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

Page 1 of 3

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

#### PART B - FEE(S) TRANSMITTAL

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

Complete and send this form, together with applicable fee(s), to: Mail

Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
(571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee address; and/or (b) indi

maintenance fee notificat	tions.							
CURRENT CORRESPONDE	p	Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, may be its own certificate of mailing or transmission.						
74712 7590 08/31/2010 MUIR PATENT CONSULTING, PLLC 9913 Georgetown Pike, Suite 200				·				
				Cer hereby certify that th	tificate of M is Fee(s) Tra	<b>failing or Transn</b> ansmittal is being	nission deposited with the United	
				tates Postal Service v	vith sufficier	it postage for first	deposited with the United t class mail in an envelope above, or being facsimilate indicated below.	
P.O. Box 1213	,		a tr	ansmitted to the Mail	TO (571) 27	E FEE address a 3-2885, on the da	above, or being facsimile	
GREAT FALLS	, VA 22066				()		(Depositor's name)	
							(Signature)	
			L				(Date)	
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTO	OR	ATTORNEY	OCKET NO.	CONFIRMATION NO.	
11/098,385	04/05/2005		Peter L. Venetianer		OV-103(	(215811 US)	8277	
TITLE OF INVENTIONS	: VIDEO SURVEILLAI	NCE SYSTEM EMPLOY	'ING VIDEO PRIMITIV	ÆS				
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DU	E PREV. PAID ISSU	E FEE TO	TAL FEE(S) DUE	DATE DUE	
nonprovisional	YES	\$755	\$300	<b>\$</b> 0		\$1055	11/30/2010	
EXAM	INER	ART UNIT	CLASS-SUBCLASS					
VO, TU		2621	348-143000					
<ol> <li>Change of corresponde CFR 1.363).</li> </ol>	ence address or indicatio	n of "Fee Address" (37	1 0	e patent front page, lis				
	ondence address (or Cha 3/122) attached.	inge of Correspondence	(1) the names of up or agents OR, altern	to 3 registered pater atively,	t attorneys	1		
			(2) the name of a sir	ngle firm (having as a or agent) and the nam	member a	2		
"Fee Address" indi PTO/SB/47; Rev 03-0 Number is required.	ication (or "Fee Address 2 or more recent) attack	" Indication form ned. Use of a Customer	2 registered attorney of 2 registered patent a listed, no name will	ttorneys or agents. If	es of up to no name is	3		
3. ASSIGNEE NAME A	ND RESIDENCE DATA	A TO BE PRINTED ON	THE PATENT (print or	type)				
			*	• •	ee is identif	ied below, the do	ocument has been filed fo	
		pletion of this form is NO						
(A) NAME OF ASSIC	GNEE		(B) RESIDENCE: (CI	TY and STATE OR C	COUNTRY)			
Please check the appropri	iate assignee category or	categories (will not be pr	rinted on the patent):	☐ Individual ☐ Co	orporation or	other private gro	up entity 📮 Governmen	
4a. The following fee(s) a	are submitted:	41	b. Payment of Fee(s): (P	lease first reapply a	ny previousl	y paid issue fee s	shown above)	
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_	o small entity discount p	permitted)	Payment by credit					
Advance Order - #	of Copies		The Director is here overpayment, to De	eby authorized to char posit Account Number	rge the requir er	red fee(s), any def (enclose an	ficiency, or credit any n extra copy of this form).	
5. Change in Entity Stat								
11	s SMALL ENTITY statu		☐ b. Applicant is no l	-				
NOTE: The Issue Fee and interest as shown by the r	d Publication Fee (if req records of the United Sta	uired) will not be accepte ites Patent and Trademark	d from anyone other that Office.	n the applicant; a regi	stered attorn	ey or agent; or the	e assignee or other party in	
Authorized Signature				Data				
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Alexandria, Virginia 223	13-1450.						by the USPTO to process g gathering, preparing, and ne you require to complet tutment of Commerce, P.O. for Patents, P.O. Box 1450	
onuer ine raperwork Rec	auction Act of 1995, no	persons are required to re	spond to a collection of	imormation unless it	uispiays a va	na ONIB control	пишрег.	

Axis Exhibit 1002, Page 57 of 406

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE



#### UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/098,385	04/05/2005	Peter L. Venetianer	OV-103(215811 US)	8277
74712 7	590 08/31/2010		EXAM	IINER
MUIR PATENT	CONSULTING, PL	VO, TUNG T		
9913 Georgetown	Pike, Suite 200		ART UNIT	PAPER NUMBER
P.O. Box 1213 GREAT FALLS,	VA 22066		2621 DATE MAIL ED: 08/31/201	0

#### **Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)**

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 1103 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 1103 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)
	11/098,385	VENETIANER ET AL.
Notice of Allowability	Examiner	Art Unit
	Tung Vo	2621
The MAILING DATE of this communication appeal All claims being allowable, PROSECUTION ON THE MERITS IS therewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT ROOF the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this ap or other appropriate communication IGHTS. This application is subject to a and MPEP 1308.	plication. If not included will be mailed in due course. <b>THIS</b>
2. X The allowed claim(s) is/are 27-29,31-35,37-39,41-45,47-5	<u>1 and 53</u> .	
<ul> <li>3. ☐ Acknowledgment is made of a claim for foreign priority until a) ☐ All b) ☐ Some* c) ☐ None of the:</li> <li>1. ☐ Certified copies of the priority documents have</li> <li>2. ☐ Certified copies of the priority documents have</li> <li>3. ☐ Copies of the certified copies of the priority do International Bureau (PCT Rule 17.2(a)).</li> <li>* Certified copies not received:</li> </ul>	e been received. e been received in Application No	
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		complying with the requirements
4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give		
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") mus  (a) ☐ including changes required by the Notice of Draftspers  1) ☐ hereto or 2) ☐ to Paper No./Mail Date  (b) ☐ including changes required by the attached Examiner's Paper No./Mail Date  Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in the sheet of the sheet sheet in the deponsance of the sheet	son's Patent Drawing Review (PTO- s Amendment / Comment or in the C .84(c)) should be written on the drawin he header according to 37 CFR 1.121( sit of BIOLOGICAL MATERIAL r	Office action of  ngs in the front (not the back) of d).  nust be submitted. Note the
Attachment(s)  1. ☐ Notice of References Cited (PTO-892)  2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  3. ☑ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 06/03/2010  4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material  /Tung Vo/ Primary Examiner, Art Unit 2621	5. Notice of Informal F 6. Interview Summary Paper No./Mail Da 7. Examiner's Amendr 8. Examiner's Stateme 9. Other	(PTO-413), te

U.S. Patent and Trademark Office PTOL-37 (Rev. 08-06)

Notice of Allowability

Part of Paper No./Mail Date 20100811

Application/Control Number: 11/098,385 Page 2

Art Unit: 2621

#### **DETAILED ACTION**

#### Allowable Subject Matter

1. Claims 27-29, 31-35, 37-39, 41-45, 47-51, and 53 are allowed.

2. The following is an examiner's statement of reasons for allowance: the prior art of records does not disclose a video system comprising: a first processor which analyzes a video to determine attributes of objects detected in the video, the first processor being in communication with a first communications link to transfer the determined attributes over the communications link; and a second processor, separate from the first processor, in communication with the first communications link to receive the determined attributes transferred from the first processor over the first communications link, which determines a first event that is not one of the determined attributes by analyzing a combination of the received determined attributes and which provides, in response to a determination of the first event, at least one of an alert to a user, information for a report, and an instruction for taking an action, wherein the first processor determines attributes independent of a selection of the first event by the second processor, and wherein the second processor determines the first event without reprocessing the video analyzed by the first processor.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Application/Control Number: 11/098,385 Page 3

Art Unit: 2621

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung Vo whose telephone number is 571-272-7340. The examiner can normally be reached on Monday-Wednesday, Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on 571-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tung Vo/ Primary Examiner, Art Unit 2621

Issue Classification	Application/Control No. 11098385	Applicant(s)/Patent Under Reexamination VENETIANER ET AL.
	1100000	
	Examiner	Art Unit
	Tung Vo	2621

		ORIGI	NAL			INTERNATIONAL CLASSIFICATION				ON				
	CLASS		:	SUBCLASS					С	LAIMED		N	ON-	CLAIMED
348			143			Н	0	4	N	7 / 18 (2006.01.01)				
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	☐ Claims renumbered in the same order as presented by applicant								СР	'A [	] T.D.	[	R.1.	47	
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	1		17	6	33	19	49								
	2		18	7	34	20	50								
	3		19	8	35	21	51								
	4		20		36		52								
	5		21	9	37	22	53								
	6		22	10	38										
	7		23	11	39										
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	15	4	31	17	47										
	16	5	32	18	48										

NONE		Total Clain	ns Allowed:
(Assistant Examiner)	(Date)	2:	2
/Tung Vo/ Primary Examiner.Art Unit 2621	08/11/2010	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	1

U.S. Patent and Trademark Office Part of Paper No. 20100811

# Search Notes Application/Control No. Applicant(s)/Patent Under Reexamination VENETIANER ET AL. Examiner Tung Vo Applicant(s)/Patent Under Reexamination VENETIANER ET AL. 2621

	SEARCHED							
Class	Subclass	Date	Examiner					
348	143, 148, 150, 149, 166, 169, 170	3/31/2009	TV					
382	103, 115	3/31/2009	TV					
375	240.02, 240.08	3/31/2009	TV					
h04n	7/18	8/11/2010	TV					

SEARCH NOTES		
Search Notes	Date	Examiner
EAST	3/31/2009	TV
INVENTOR SEARCH	8/11/2010	TV
INTERFERENCE SEARCH	8/11/2010	TV
CLAIM SEARCH	8/11/2010	TV

	INTERFERENC	CE SEARCH	
Class	Subclass	Date	Examiner
375	240.18	3/5/2010	TV

U.S. Patent and Trademark Office Part of Paper No.: 20100811

#### **EAST Search History**

#### **EAST Search History (Prior Art)**

Ref#	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	8	(video same attributes same objects same event same detect\$4).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/08/11 08:27
L2	93717	alan.in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/08/11 08:36
L3	925	lipton.in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/08/11 08:36
L4	411495	thomas.in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/08/11 08:36
L5	220	strat.in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/08/11 08:36
L6	12	2 and 3 and 4 and 5	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/08/11 08:36

L7	95374	object with video	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/08/11 08:37
L8	353	primative	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/08/11 08:37
L9	9	7 and 8	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/08/11 08:37
L10	0	vanetianer.in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/08/11 08:37
L11	332894	peter.in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/08/11 08:37
L12	128	venetianer.in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/08/11 08:38
L13	332894	peter.in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/08/11 08:38
L14	70	12 and 13	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/08/11 08:38

#### **EAST Search History (Interference)**

Ref#	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L15	28	(video same attributes same objects same event same detect\$4)	USPAT; UPAD	AND	ON	2010/08/11 08:39
L16	14	venetianer.in.	USPAT; UPAD	AND	ON	2010/08/11 08:39
L17	120201	peter.in.	USPAT; UPAD	AND	ON	2010/08/11 08:39
L18	12	16 and 17	USPAT; UPAD	AND	ON	2010/08/11 08:39

8/11/2010 8:41:22 AM

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IDS Form PTO/SB/08: Substitute for form 1449A/PTO				Complete if Known		
				Application Number	11/098,385	
l INFO	DRMATION D	ISCLOSU	IRE	Filing Date	April 5, 2005	
STATEMENT BY APPLICANT				First Named Inventor	Peter L. Venetianer	
				Art Unit	2621	
(Use as many sheets as necessary)				Examiner Name	Tung Vo	
Sheet	1	of	1	Attorney Docket Number	OV-103	

	U.S. PATENTS AND PUBLISHED U.S. PATENT APPLICATIONS					
Examiner	Cite	Document Number	Issue or	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where	
Initials	No."	Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY		Relevant Passages or Relevant Figures Appear	
	1	US-2003/0043160 A1	03-06-2003	Elfving, et al.		
	2	US-2003/0085992 A1	05-08-2003	Arpa, et al.		

Note: Submission of copies of U.S. Patents and published U.S. Patent Applications is not required.

	FOREIGN PATENT DOCUMENTS						
Examiner Initials	Cite No. ¹	Foreign Patent Document  Country Code ³ Number ⁴ Kind Code ⁵ ( <i>If known</i> )	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Translation ⁶	
	1	WO-2004/006184 A2	01-15-2004	Talmon Gad, et al.			
	2	WO-03/044727 A1	05-30-2003	Diamondback Vision Inc.			
	3	EP-0967584 A2	12-29-1999	Texas Instruments Inc.			

	NONPATENT LITERATURE DOCUMENTS				
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Translation ⁶		

Examiner	/Tuna Vo/ (08/24/2010)	Date	00/04/0010
Signature	/Tung Vo/ (08/24/2010)	Considered	08/24/2010

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /T.V./

Receipt date: 06/03/2010 11098385 - GAU: 2621

#### PTO Notes regarding this form:

¹ Applicant's unique citation designation number (optional).

³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3).

⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible.

⁶ Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO:** Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /T.V./

² See Kinds Codes of USPTO Patent Documents at <u>www.uspto.gov</u> or MPEP 901.04.

⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

OK TO ENTER: /T.V./ (08/24/2010)

Application Serial No. 11/098,385 Amendment of July 29, 2010 Customer No. 74,712 Attorney Docket No. OV-103

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of: Venetianer et al. Attorney Docket: OV-103

Serial Number: 11/098,385 Group Art Unit: 2621

Filed: April 5, 2005 Examiner: Tung Vo

Confirmation Number: 8277

Title: VIDEO SURVEILLANCE SYSTEM EMPLOYING VIDEO

**PRIMITIVES** 

#### AMENDMENT AND INTERVIEW SUMMARY

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313

Dear Sir:

This is a response to the Office Action of March 22, 2010. A two month extension of time is filed concurrently with this response. Prior to examination on the merits and calculation of relevant fees, please enter the following amendment.

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of: Venetianer et al. Attorney Docket: OV-103

Serial Number: 11/098,385 Group Art Unit: 2621

Filed: April 5, 2005 Examiner: Tung Vo

Confirmation Number: 8277

Title: VIDEO SURVEILLANCE SYSTEM EMPLOYING VIDEO

**PRIMITIVES** 

#### AMENDMENT AND INTERVIEW SUMMARY

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313

Dear Sir:

This is a response to the Office Action of March 22, 2010. A two month extension of time is filed concurrently with this response. Prior to examination on the merits and calculation of relevant fees, please enter the following amendment.

#### **Amendments to the Claims:**

This listing of claims will replace all prior versions and listings of claims in the application:

#### **Listing of Claims:**

Claims 1-26 (Cancelled).

27. (Currently Amended) A video system comprising:

a first processor which analyzes a video to determine attributes of objects detected in the video, the first processor being in communication with a first communications link to transfer the determined attributes over the communications link; and

a second processor, separate from the first processor, in communication with the first communications link to receive the determined attributes transferred from the first processor over the first communications link, which determines a first event that is not one of the determined attributes by analyzing a combination of the received determined attributes and which provides, in response to a determination of the first event, at least one of an alert to a user, information for a report, and an instruction for taking an action,

wherein the first processor determines attributes independent of a selection of the first event by the second processor, and

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wherein the second processor determines the first event without reprocessing the video analyzed by the first processor.

- 28. (Previously Presented) The video system of claim 27, wherein the first communications link comprises a network.
- 29. (Previously Presented) The video system of claim 27, wherein the second processor determines the first event by analyzing only the attributes transferred by the communications link.
  - 30. (Cancelled).
- 31. (Previously Presented) The video system of claim 27, wherein the second processor analyzes the attributes to detect the first event in real time.
- 32. (Previously Presented) The video system of claim 27, further comprising: a third processor, separate from the first processor and second processor, in communication with the first processor over a second communications link, the third processor configured to determine a second event that is not one of the determined attributes by analyzing a combination of the attributes transferred by the second communications link,

wherein the second processor determines the first event independent from the determination of the second event by the third processor and the third processor

determines the second event independent from the determination of the first event by the second processor.

33. (Currently Amended) A video system, comprising:

an input in communication with a communications channel;

a processor configured to receive from the input a stream of detected attributes received over the communications channel, the attributes being attributes of one or more objects detected in a video, the processor configured to determine an event that is not one of the detected attributes by analyzing a combination of the received attributes and configured to provide, upon a determination of the event, at least one of an alert to a user, information for a report and an instruction for taking an action,

wherein the attributes received over the communications channel are independent of the event to be determined by the processor, and

wherein the processor is configured to determine the event without reprocessing the video.

- 34. (Previously Presented) The video system of claim 33, wherein the communications channel comprises a network.
- 35. (Previously Presented) The video system of claim 33, wherein the processor is operable to determine an event by analyzing only attributes of the received stream of attributes.

36. (Cancelled).

37. (Currently Amended) A method of detecting an event from a video, comprising:

receiving a stream of detected attributes over a communications channel, the detected attributes representing attributes of an object <u>previously</u> detected in [[a]] <u>the</u> video <u>at a remote location</u>;

performing an analysis of a combination of the detected attributes to detect an event that is not one of the detected attributes without reprocessing the video,

upon detecting the event, providing at least one of an alert to a user, information for a report and an instruction for taking an action,

wherein the detected attributes received in the stream of attributes are independent of a selection of the event to be detected.

- 38. (Previously Presented) The method of claim 37, wherein the communications channel comprises a network.
- 39. (Previously Presented) The method of claim 37, wherein the analysis performed to detect an event determines an event by analyzing only attributes received in the stream of detected attributes.

40. (Cancelled).

41. (Currently Amended) A method comprising:

analyzing a video to detect an object;

creating a stream of attributes at a first location by determining attributes of the detected object by analyzing the video;

transmitting the stream of attributes to a second location removed from the first location for subsequent analysis,

wherein the stream of attributes are transmitted to the second location over a communications channel, and

wherein the stream of attributes is sufficient to allow the subsequent analysis to detect an event of the video to provide at least one of an alert to a user, information for a report and an instruction for taking an action, the event not being one of the determined attributes.

wherein the stream of attributes is sufficient to allow detection of the event that is not one of the determined attributes without reprocessing the video of the first location.

- 42. (Previously Presented) The method of claim 41, further comprising: obtaining the video with a video capture apparatus.
- 43. (Previously Presented) The method of claim 41, wherein the communications channel comprises a network.

- 44. (Previously Presented) The method of claim 41, wherein the attributes of the stream of attributes are created independently of the subsequent analysis.
- 45. (Previously Presented) The method of claim 41, wherein the stream of attributes is sufficient to allow detection of an event that is not one of the determined attributes by analyzing a combination of the attributes.
  - 46. (Cancelled).
- 47. (Previously Presented) The method of claim 41, wherein the stream of attributes is transmitted over a communications channel without detection of an event at the first location.
  - 48. (Currently Amended) A video device, comprising:

a processor <u>at a first location</u> which analyzes a video to detect an object and to determine attributes of the object detected in the video;

an output configured to transmit the attributes determined by the processor over a communications link,

wherein the output is configured to transmit the attributes to a second location removed from the processor for a subsequent analysis of a combination of the attributes at the second location,

wherein the processor determines attributes independently of a subsequent analysis of a combination of attributes to determine an event that is not one of the determined attributes, and

wherein the attributes are sufficient to allow detection of an event to provide at least one of an alert to a user, information for a report and an instruction for taking an action, the event not being that is not one of the determined attributes and being determinable by analyzing the combination of the attributes.

wherein the attributes are sufficient to allow detection of an event without reprocessing the video of the first location.

- 49. (Previously Presented) The video device of claim 48, further comprising: a video capture apparatus to provide the video to the processor.
- 50. (Previously Presented) The video device of claim 48, wherein the output transmits a stream of the detected attributes over the communications link.
- 51. (Previously Presented) The video device of claim 50, wherein the communications link comprises a network.
  - 52. (Cancelled).

53. (Previously Presented) The video device of claim 48, wherein the attributes are transmitted over the communications channel without detection of an event by the processor.

## REMARKS

With this amendment, claims 30, 36, 40, 46 and 52 have been cancelled and independent claims 27, 33, 37, 41 and 48 are amended. Claims 27-29, 31-35, 37-39, 41-45, 47-51 and 53 are pending.

The Applicant thanks Examiner Vo for his time during the personal interview of July 22, 2010. During the interview, the Applicant's highlighted the differences of the invention and the prior art, including the use of a first and second processor of claim 27, where the second processor is separate from the first processor and determines an event by analyzing attributes determined by the first processor. In contrast, to determine an event, the prior art relies on processing a video by the processor performing the event determination. While other independent claims do not require both the first and second processors, similar differences are reflected in their recitations as discussed with more specificity below. Details of the interview are further reflected in the comments below.

Claims 27-53 are rejected under 35 U.S.C. § 102(e) as being anticipated by <u>Brown</u> et al. This rejection is respectfully traversed.

With respect to claim 27, the Examiner points to Figure 1 of Brown et al. as teaching a first processor 104 and a second processor 108. The Examiner highlights Figure 9, steps 950-970 as showing the feature of determining an event that is not one of the determined attributes by analyzing a combination of the received determined attributes.

Brown et al. shows in Figure 1 a network of data processing systems including a server 104 coupled to video input devices 150-154. The server 104 may incorporate a

viewable video index video analysis system. See col. 6, lines 4-18, and col. 7, starting at line 56. The viewable video index may be distributed to a client device that may be used by a user to monitor the video capture areas. See col. 8, lines 59-62. The viewable video index may be used to generate a video representation and a timeline representation with event markers. (see Fig. 7 and col. 13, lines 53-64)

As noted above, the Examiner highlights steps 950-970 of Figure 9 as evidence of a second processor (108) determining a first event. The Examiner is respectfully requested to reconsider this position. In particular, as discussed at col. 15, lines 34-48, step 950 relates to generating a representation of the video data by superimposing the moving object images on the background image (step 950), generating a timeline representation that includes event markers (step 960) and updating various information of the moving objects as the representation steps through the time sequence indicated by the tracking information file or in response to the selection of an event marker (step 970). However, steps 950-970 of Brown et al. do not determine an event.

In contrast, Figure 8 does include a step for determining an event. As stated at col. 15, lines 3-5, "video data is analyzed to determine the occurrence of events and a sequence of events is generated (step 850)." However, as recognized by the Examiner, Figure 8 (including the determination of events in step 850) relates to actions of server 104 (identified as the first processor by the Examiner). However, claim 27 recites that the *second* processor "determines a first event ..." Thus, the event determination of step 850 does not meet the recitations of claim 27.

Further, claim 27 recites that the "second processor determines the first event without reprocessing the video analyzed by the first processor." However, to

determine an event, <u>Brown et al.</u> processes a video by the processor performing the event determination. See col. 15, lines 3-5, lines 63-66, col. 13 lines 52-61 of <u>Brown et al.</u>, e.g. For this additional reason, the Examiner is respectfully requested to reconsider and withdraw the rejection with respect to claim 27.

With respect to claim 33, claim 33 recites "a processor configured to receive ... a stream of detected attributes received over the communications channel, ... the processor configured to determine an event that is not one of the detected attributes ... and wherein the processor is configured to determine the event without reprocessing the video."

Claim 37 recites "receiving a stream of detected attributes over a communications channel, the detected attributes representing attributes of an object previously detected in the video at a remote location; performing an analysis of a combination of the detected attributes to detect an event that is not one of the detected attributes without reprocessing the video ..."

Claim 41 recites "transmitting the stream of attributes to a second location removed from the first location for subsequent analysis ... wherein the stream of attributes is sufficient to allow detection of the event that is not one of the determined attributes without reprocessing the video of the first location."

Claim 48 recites "a processor at a first location which analyzes a video to detect an object and to determine attributes of the object detected in the video ... wherein the attributes are sufficient to allow detection of an event without reprocessing the video of the first location."

Customer No. 74,712 Attorney Docket No. OV-103

Brown et al. has been discussed above. Brown et al. fails to teach the recitations of independent claims 33, 37, 41 and 48. Thus, the Examiner is respectfully requested to reconsider and withdraw the rejection of these claims.

Claims 28, 29, 31, 32, 34, 35, 38, 39, 42-45, 47, 49-51 and 53 depend from one of claims 27, 33, 37, 41 and 48, discussed above and are allowable at least for this reason.

It is believed that this application is in condition for allowance. Favorable consideration and prompt allowance are respectfully requested. A two month extension of time is filed concurrently with this amendment. However, in the event any fees are required in connection with this paper, please charge Deposit Account No. 50-4574. Any overpayment may be credited to Deposit Account No. 50-4574.

Respectfully submitted,

/Patrick D. Muir/ Reg. #37403

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Electronic Patent Application Fee Transmittal								
Application Number:	110	098385						
Filing Date:	05-	-Apr-2005						
Title of Invention:	Video surveillance system employing video primitives							
First Named Inventor/Applicant Name:	Peter L. Venetianer							
Filer:	Patrick Daniel Muir							
Attorney Docket Number: OV-103(215811 US)								
Filed as Large Entity								
Utility under 35 USC 111(a) Filing Fees								
Description		Fee Code	Quantity	Amount	Sub-Total in USD(\$)			
Basic Filing:								
Pages:								
Claims:								
Miscellaneous-Filing:								
Petition:								
Patent-Appeals-and-Interference:								
Post-Allowance-and-Post-Issuance:								
Extension-of-Time:								
Extension - 2 months with \$0 paid		1252	1	490	490			

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Miscellaneous:				
	Total in USD (\$)			490

Electronic Ack	Electronic Acknowledgement Receipt					
EFS ID:	8114269					
Application Number:	11098385					
International Application Number:						
Confirmation Number:	8277					
Title of Invention:	Video surveillance system employing video primitives					
First Named Inventor/Applicant Name:	Peter L. Venetianer					
Customer Number:	74712					
Filer:	Patrick Daniel Muir					
Filer Authorized By:						
Attorney Docket Number:	OV-103(215811 US)					
Receipt Date:	29-JUL-2010					
Filing Date:	05-APR-2005					
Time Stamp:	11:58:04					
Application Type:	Utility under 35 USC 111(a)					

# **Payment information:**

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	\$490
RAM confirmation Number	11050
Deposit Account	504574
Authorized User	MUIR,PATRICK D.

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## File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)			
1		11098385_amd_OV_103.pdf	102297	yes	13			
		Troseses_ama_ev_res.par	496bed477a2120166ab3fb0d4bcb8b6527 62a403	,	13			
	Multip	oart Description/PDF files in	zip description					
	Document Description Start End							
	Amendment A	1	1					
	Claims	2	9					
	Applicant Arguments/Remarks	Made in an Amendment	10 13		13			
Warnings:								
Information:								
2	Fee Worksheet (PTO-875)	fee-info.pdf	30184	no	2			
	·	·	f8de00131b8951b7c6711281a66a986aa96 768dc		l			
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#### New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

#### National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

#### New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PTO/SB/06 (07-06)
Approved for use through 1/31/2007. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875					Α	Application or Docket Number 11/098,385 Filing Date 04/05/2005			To be Mailed		
	AF	PPLICATION A	AS FILE (Column 1		(Column 2)		SMALL	ENTITY 🛛	OR		HER THAN ALL ENTITY
	FOR NUMBER FILED NUMBER EXTRA  BASIC FEE N/A N/A			RATE (\$)	FEE (\$)		RATE (\$)	FEE (\$)			
	BASIC FEE (37 CFR 1.16(a), (b), or (c)) N/A N/A			N/A		1	N/A				
	SEARCH FEE (37 CFR 1.16(k), (i), (i)		N/A		N/A		N/A			N/A	
	EXAMINATION FE (37 CFR 1.16(o), (p),		N/A		N/A		N/A			N/A	
	TAL CLAIMS CFR 1.16(i))		min	nus 20 = *		]	x \$ =		OR	x \$ =	
IND	EPENDENT CLAIM CFR 1.16(h))	is	mi	inus 3 = *			x \$ =		1	x \$ =	
If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).											
	MULTIPLE DEPEN	IDENT CLAIM PR	ESENT (3	7 CFR 1.16(j))		]			]		
* If 1	the difference in colu	umn 1 is less than	zero, ente	r "0" in column 2.			TOTAL		]	TOTAL	
APPLICATION AS AMENDED – PART II  (Column 1) (Column 2) (Column 3)					SMAL	L ENTITY	OR		ER THAN ALL ENTITY		
AMENDMENT		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		RATE (\$)	ADDITIONAL FEE (\$)		RATE (\$)	ADDITIONAL FEE (\$)
ΜŽ	Total (37 CFR 1.16(i))	*	Minus	**	=	]	x \$ =		OR	x \$ =	
뷞	Independent (37 CFR 1.16(h))	*	Minus	***	=	]	x \$ =		OR	x \$ =	
Ψ,	Application Si	ize Fee (37 CFR 1	.16(s))			]					
	FIRST PRESEN	NTATION OF MULTIF	LE DEPEN	DENT CLAIM (37 CFF	R 1.16(j))				OR		
							TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	
ᆫ		(Column 1)		(Column 2)	(Column 3)						
	07/29/2010	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		RATE (\$)	ADDITIONAL FEE (\$)		RATE (\$)	ADDITIONAL FEE (\$)
	Total (37 CFR 1.16(i))	* 22	Minus	** 27	= 0		X \$26 =	0	OR	x \$ =	
ENDMENT	Independent (37 CFR 1.16(h))	* 5	Minus	*** 3	= 2	]	X \$110 =	220	OR	x \$ =	
	Application Si	ize Fee (37 CFR 1	.16(s))			]					
AM	FIRST PRESEN	NTATION OF MULTIF	LE DEPEN	DENT CLAIM (37 CFF	R 1.16(j))				OR		
							TOTAL ADD'L FEE	220	OR	TOTAL ADD'L FEE	
** If *** I	the entry in column the "Highest Numbe If the "Highest Numb • "Highest Number P	er Previously Paid oer Previously Paid	For" IN TH I For" IN T	HIS SPACE is less HIS SPACE is less	than 20, enter "20's than 3, enter "3".		/THERE	nstrument Ex ESA LINDSAY	(1	er:	

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Document code: WFEE

United States Patent and Trademark Office Sales Receipt for Accounting Date: 08/05/2010

TLINDSAY SALE #00000001 Mailroom Dt: 07/29/2010 504574 11098385

01 FC: 2201 220.00 DA

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Viginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/098,385	04/05/2005	Peter L. Venetianer	OV-103(215811 US)	8277
	7590 07/27/201 T CONSULTING, PLI		EXAM	IINER
9913 Georgetov	wn Pike, Suite 200		VO, T	UNG T
P.O. Box 1213 GREAT FALL	S. VA 22066		ART UNIT	PAPER NUMBER
	-,	2621		
			MAIL DATE	DELIVERY MODE
			07/27/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Interview Summary	11/098,385	VENETIANER ET AL.
mervion cummary	Examiner	Art Unit
	Tung Vo	2621
All participants (applicant, applicant's representative, PTO	personnel):	
(1) <u>Tung Vo</u> .	(3) Patrick D. Muir.	
(2) <u>Peter Venetianer</u> .	(4)	
Date of Interview: 22 July 2010.		
Type: a)☐ Telephonic b)☐ Video Conference c)☑ Personal [copy given to: 1)☐ applicant 2	²)⊡ applicant's representative	]
Exhibit shown or demonstration conducted: d) Yes If Yes, brief description:	e) No.	
Claim(s) discussed: 27 and 30.		
Identification of prior art discussed: Prior art of record.		
Agreement with respect to the claims f)⊠ was reached. g	)∏ was not reached. h)∏ N	//A.
Substance of Interview including description of the general reached, or any other comments: <u>Amendments to claim 27 the detected event</u> .		
(A fuller description, if necessary, and a copy of the amend allowable, if available, must be attached. Also, where no callowable is available, a summary thereof must be attached	opy of the amendments that w	
THE FORMAL WRITTEN REPLY TO THE LAST OFFICE A INTERVIEW. (See MPEP Section 713.04). If a reply to the GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER INTERVIEW DATE, OR THE MAILING DATE OF THIS INT FILE A STATEMENT OF THE SUBSTANCE OF THE INTERQUIREMENTS on reverse side or on attached sheet.	last Office action has already OF ONE MONTH OR THIRTY ERVIEW SUMMARY FORM,	been filed, APPLICANT IS DAYS FROM THIS WHICHEVER IS LATER, TO
/Tung Vo/ Primary Examiner, Art Unit 2621		

#### **Summary of Record of Interview Requirements**

#### Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

# Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

#### 37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by
  attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does
  not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview

- A complete and proper recordation of the substance of any interview should include at least the following applicable items:
- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,
  - (The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

#### **Examiner to Check for Accuracy**

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

IDS Form PTO/SB/08: Substitute for form 1449A/PTO				Co	mplete if Known			
				Application Number	11/098,385			
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Filing Date	April 5, 2005			
				First Named Inventor	Peter L. Venetianer			
31/	STATEMENT DI APPLICANT			Art Unit	2621			
(Use as many sheets as necessary)				Examiner Name	Tung Vo			
Sheet	1	of	1	Attorney Docket Number	OV-103			

	U.S. PATENTS AND PUBLISHED U.S. PATENT APPLICATIONS							
Examiner	Cite	Document Number	Issue or	Name of Patentee or	Pages, Columns, Lines, Where			
Initials	No.¹	Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Applicant of Cited Document	Relevant Passages or Relevant Figures Appear			
	1	US-2003/0043160 A1	03-06-2003	Elfving, et al.				
	2	US-2003/0085992 A1	05-08-2003	Arpa, et al.				

Note: Submission of copies of U.S. Patents and published U.S. Patent Applications is not required.

	FOREIGN PATENT DOCUMENTS									
Examiner Initials	Cite No. ¹	Foreign Patent Document  Country Code ³ Number ⁴ Kind Code ⁵ ( <i>if known</i> )	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Translation ⁶				
	1	WO-2004/006184 A2	01-15-2004	Talmon Gad, et al.						
	2	WO-03/044727 A1	05-30-2003	Diamondback Vision Inc.						
	3	EP-0967584 A2	12-29-1999	Texas Instruments Inc.						

	NONPATENT LITERATURE DOCUMENTS						
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Translation ⁶				

Examiner	Date	
Signature	Considered	

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

# PTO Notes regarding this form:

¹ Applicant's unique citation designation number (optional).

³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3).

⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible.

⁶ Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO:** Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

² See Kinds Codes of USPTO Patent Documents at <u>www.uspto.gov</u> or MPEP 901.04.

⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

Electronic Patent Application Fee Transmittal						
Application Number:	11	11098385				
Filing Date:	05	05-Apr-2005				
Title of Invention:	Video surveillance system employing video primitives					
First Named Inventor/Applicant Name:	Peter L. Venetianer					
Filer:	Bra	adley E. Edelman				
Attorney Docket Number:	ov	'-103(215811 US)				
Filed as Large Entity						
Utility under 35 USC 111(a) Filing Fees						
Description		Fee Code	Quantity	Amount	Sub-Total in USD(\$)	
Basic Filing:						
Pages:						
Claims:						
Miscellaneous-Filing:						
Petition:						
Patent-Appeals-and-Interference:						
Post-Allowance-and-Post-Issuance:						
Extension-of-Time:						

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Miscellaneous:				
Submission- Information Disclosure Stmt	1806	1	180	180
	180			

Electronic Acknowledgement Receipt				
EFS ID:	7740376			
Application Number:	11098385			
International Application Number:				
Confirmation Number:	8277			
Title of Invention:	Video surveillance system employing video primitives			
First Named Inventor/Applicant Name:	Peter L. Venetianer			
Customer Number:	74712			
Filer:	Bradley E. Edelman			
Filer Authorized By:				
Attorney Docket Number:	OV-103(215811 US)			
Receipt Date:	03-JUN-2010			
Filing Date:	05-APR-2005			
Time Stamp:	15:57:29			
Application Type:	Utility under 35 USC 111(a)			

# **Payment information:**

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$180
RAM confirmation Number	2418
Deposit Account	504574
Authorized User	

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

Charge any Additional Fees required under 37 C.F.R. Section 1.16 (National application filing, search, and examination fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.17 (Patent application and reexamination processing fees)

File Listing	j:				
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		01/ 400 106 :	63966		2
1	Transmittal Letter	OV_103_IDS_transmittal.pdf	f8043a4c762757d198c76882552f14aa0d26 e7e6	no	
Warnings:	<u>'</u>		<u>'</u>		
Information:					
2	Information Disclosure Statement (IDS)	OV 103 IDS = 45	88178		2
2	Filed (SB/08)	OV_103_IDS.pdf	02d4149919a5c01be945e7559cd0b9e88e2 9861c	no	
Warnings:	·				
Information:					
This is not an US	SPTO supplied IDS fillable form				
			2191858		33
3	Foreign Reference	EP0967584A2.pdf	c826943c2b33a1c655727020b494a62a48e 8a157	no	
Warnings:	<u>.</u>		<u> </u>		
Information:					
4	Foreign Reference	WO03044727A1.pdf	2244009	no	36
·			4218d4c1c435e8fb867cc0052f156ec0c8be 4f85		
Warnings:	<u>.</u>		<u>.                                      </u>		
Information:					
5	Foreign Reference	WO2004006184A2.pdf	3482192	no	32
,	r oreign Neierence	WO2004000104A2.pui	7ba406b3eb762ebf221e1be959631adf784 d3962	110	
Warnings:	<u> </u>		·		
Information:					
_	5 W L L (DTO 075)	6 in-6	29975	200	2
6	Fee Worksheet (PTO-875) fee-info.pdf		93704a714cd82e1978de52f77dcb6d798cc 89588	no	2
Warnings:	<u>'</u>				
Information:					
		Total Files Size (in bytes)	: 81	00178	

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

#### New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

## National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

#### New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of: Peter L. Venetianer Attorney Docket No.: OV-103

Serial No.: 11/098,385 Group Art Unit: 2621

Filed: April 5, 2005 Examiner: Tung Vo

Confirmation No.: 8277

Title: VIDEO SURVEILLANCE SYSTEM EMPLOYING VIDEO PRIMITIVES

## INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. 1.97(d)

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313

Dear Sir:

Pursuant to 37 C.F.R. 1.56 and 1.97(d), Applicant brings to the attention of the Examiner the listed documents on the attached SB/08 Form. Copies of the listed foreign patent documents are submitted herewith.

Each item of information contained in this information disclosure statement was first cited in a communication from a foreign patent office in counterpart foreign application No. EP 06 74 9276 not more than three months prior to the filing of this information disclosure statement. The fee as required under 37 C.F.R. 1.97(d) is being submitted electronically herewith.

1

Application Serial No. 11/098,385 Customer No. 74,712
Information Disclosure Statement of June 3, 2010 Attorney Docket No. OV-103

Applicant respectfully requests that the Examiner consider the listed documents and

indicate that they were considered by making appropriate notations on the attached form.

This submission does not represent that a search has been made or that no better art

exists and does not constitute an admission that each or all of the listed documents are

material or constitute "prior art". If the Examiner applies any of the documents as prior art

against any claim in the application and Applicant determines that the cited documents do

not constitute "prior art" under United States law, Applicant reserves the right to present to

the U.S. Patent and Trademark Office the relevant facts and law regarding the appropriate

status of such documents.

Applicant further reserves the right to take appropriate action to establish the

patentability of the disclosed invention over the listed documents, should one or more of the

documents be applied against the claims of the present application.

In the event any fees are required in connection with this paper, please charge the

Deposit Account No. 50-4574.

Respectfully submitted,

/Bradley Edelman/, Reg. No. 57,648

Bradley Edelman

Registration No. 57,648

Tel: (703) 757-7880

9913 Georgetown Pike, Suite 200 Great Falls, VA 22066

MUIR PATENT CONSULTING, PLLC.

Fax: (703) 757-7447

2

Electronic Acknowledgement Receipt				
EFS ID:	7741042			
Application Number:	11098385			
International Application Number:				
Confirmation Number:	8277			
Title of Invention:	Video surveillance system employing video primitives			
First Named Inventor/Applicant Name:	Peter L. Venetianer			
Customer Number:	74712			
Filer:	Bradley E. Edelman			
Filer Authorized By:				
Attorney Docket Number:	OV-103(215811 US)			
Receipt Date:	03-JUN-2010			
Filing Date:	05-APR-2005			
Time Stamp:	16:31:31			
Application Type:	Utility under 35 USC 111(a)			

# Payment information:

Submitted with Payment			no				
File Listin	g:						
Document Number	Document Description		File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)	
1	Transmittal Letter Se	Sea	earch Report_20100510_0674	190148	no	5	
	Transmittal Letter		9276.pdf	f4691dbd01f0bf44afcb231294d8d102729e 8a5f		J	
Warnings:							
Information:							

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

#### New Applications Under 35 U.S.C. 111

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#### National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

#### New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Viginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/098,385	04/05/2005	Peter L. Venetianer	OV-103(215811 US)	8277
	7590 03/22/201 Γ CONSULTING, PLI		EXAM	IINER
758 WALKER			VO, TI	UNG T
SUITE C GREAT FALL	S, VA 22066		ART UNIT	PAPER NUMBER
			2621	
			MAIL DATE	DELIVERY MODE
			03/22/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)			
Office Action Summers	11/098,385	VENETIANER ET AL.			
Office Action Summary	Examiner	Art Unit			
	Tung Vo	2621			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>03</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).					
Status					
1)⊠ Responsive to communication(s) filed on 22 De	ecember 2009.				
<u> </u>	action is non-final.				
3) Since this application is in condition for allowan		secution as to the merits is			
closed in accordance with the practice under E.					
Disposition of Claims					
4) Claim(s) 27-53 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration.  5) Claim(s) is/are allowed.  6) Claim(s) 27-53 is/are rejected.  7) Claim(s) is/are objected to.  8) Claim(s) are subject to restriction and/or election requirement.					
Application Papers					
9) ☐ The specification is objected to by the Examiner.  10) ☑ The drawing(s) filed on 05 April 2005 is/are: a) ☑ accepted or b) ☐ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.					
Attachment(s)    Notice of References Cited (PTO-892)   Notice of Draftsperson's Patent Drawing Review (PTO-948)   Information Disclosure Statement(s) (PTO/SB/08)   Paper No(s)/Mail Date 09/30/2009.	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other:	te			

U.S. Patent and Trademark Office PTOL-326 (Rev. 08-06)

Office Action Summary

Part of Paper No./Mail Date 20100305

Application/Control Number: 11/098,385

Art Unit: 2621

#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 27-53 are rejected under 35 U.S.C. 102(e) as being anticipated by Brown et al. (US 7,447,331).

Re claim 27, Brown discloses a video system (fig. 1) comprising:

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a first processor (104 of fig. 1) which analyzes a video to determine attributes of objects detected in the video (figs. 4 and 8), the first processor being in communication with a first communications link (102 of fig. 1) to transfer the determined attributes (880 of fig. 8) over the communications link; and

a second processor (108 of fig. 1, fig. 9), separate from the first processor, in communication (102 of fig. 1) with the first communications link to receive the determined attributes transferred from the first processor over the first communications link (910 of fig. 9), which determines a first event (950-970 of fig. 9) that is not one of the determined attributes by analyzing a combination of the received determined attributes (970 of fig. 9) wherein the first processor determines attributes (e.g. 850 and 860 of fig. 8) independent of a selection of the first event by the second processor.

Re claims 28, Brown further discloses wherein the first communications link comprises a network (102 of fig. 1).

Re claim 29, Brown further discloses wherein the second processor determines the first event by analyzing only the attributes transferred by the communications link (102 of fig. 1, see also fig. 9).

Re claim 30, Brown further discloses wherein the second processor determines the first event without reprocessing the video (fig. 9).

Re claim 31, Brown further discloses wherein the second processor analyzes the attributes to detect the first event in real time (e.g. cameras 150-154 of fig. 1 are real time).

Re claim 32, Brown further discloses a third processor (e.g. 112 of fig. 1), separate from the first processor and second processor, in communication with the first processor over a second

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communications link (102 and 106 of fig. 1), the third processor (112 of fig. 1) configured to determine a second event that is not one of the determined attributes by analyzing a combination of the attributes transferred by the second communications link (fig. 9), wherein the second processor (108 of fig. 1) determines the first event independent from the determination of the second event by the third processor and the third processor (112 of fig. 1) determines the second event independent from the determination of the first event by the second processor (fig. 9).

Re claim 33, Brown further discloses a video system (fig. 1), comprising: an input in communication with a communications channel (102 and 108 of fig. 1); a processor (108 of fig. 1) configured to receive from the input a stream of detected attributes (fig. 8, the viewable video index includes the stream of detected attributes) received over the communications channel (102 of fig. 1), the attributes being attributes of one or more objects detected in a video (Note Brown discloses that The viewable video index contains a visual representation of moving objects in the video data, a visual representation of the background of the video capture area, i.e. the scene, a representation of the object trajectory, a representation of the object attributes, and a representation of detected events), the processor (108 of fig. 1) configured to determine an event (the moving objects are updated by the step 970 of figure 9) that is not one of the detected attributes by analyzing a combination of the received attributes (moving objects are combined based on the viewable video index), wherein the attributes received over the communications channel are independent of the event to be determined by the processor (fig. 9).

Re claim 34, Brown further discloses wherein the communications channel comprises a network (102 of fig. 1).

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Re claim 35, Brown further discloses wherein the processor (108 of fig. 1) is operable to determine an event (moving objects are updated, step 970 of fig. 9) by analyzing only attributes (using the viewable video index that comprises a representation of the object attributes) of the received stream of attributes.

Re claim 36, Brown further discloses wherein the processor (using the viewable video index that comprises a representation of the object attributes) is operable to determine an event without reprocessing the video (fig. 9).

Re claim 37, Brown further discloses a method of detecting an event from a video (fig. 1), comprising: receiving a stream of detected attributes over a communications channel (108 and 102 of fig. 1), the detected attributes representing attributes of an object detected in a video (fig. 8, note the viewable video index comprises a representation of the object attributes);

performing an analysis of a combination of the detected attributes to detect an event (fig. 9, step 970 performs combine moving objects) that is not one of the detected attributes, wherein the detected attributes received in the stream of attributes are independent of a selection of the event to be detected (fig. 9).

Re claim 38, Brown further discloses wherein the communications channel comprises a network (102 of fig. 1).

Re claim 39, Brown further discloses wherein the analysis performed to detect an event determines an event by analyzing only attributes received in the stream of detected attributes (the viewable video index is used for detecting moving objects, 970 of fig. 9).

Re claim 40, Brown further discloses wherein the analysis performed to detect an event determines an event without reprocessing the video (108 of fig. 1, and fig. 9).

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Re claim 41, Brown further discloses a method (fig. 8 and 9) comprising: analyzing a video to detect an object (810-850 of fig. 8); creating a stream of attributes at a first location (104 of fig. 1) by determining attributes of the detected object by analyzing the video (860 of fig. 8); transmitting (880 of fig. 1) the stream of attributes to a second location (108 of fig. 1) removed from the first location for subsequent analysis, wherein the stream of attributes are transmitted to the second location over a communications channel (102 of fig. 1), and wherein the stream of attributes is sufficient to allow the subsequent analysis to detect an event of the video, the event not being one of the determined attributes (fig. 9).

Re claim 42, Brown further discloses obtaining the video with a video capture apparatus (152, 154, and 156).

Re claim 43, Brown further discloses wherein the communications channel comprises a network (102 of fig. 1).

Re claim 44, Brown further discloses wherein the attributes of the stream of attributes are created independently of the subsequent analysis (fig. 9).

Re claim 45, Brown further discloses wherein the stream of attributes is sufficient to allow detection of an event that is not one of the determined attributes by analyzing a combination of the attributes (fig. 9, step 970).

Re claim 46, Brown further discloses wherein the stream of attributes is sufficient to allow detection of an event that is not one of the determined attributes without reprocessing the video (950-970 of fig. 9).

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Re claim 47, Brown further discloses wherein the stream of attributes is transmitted over a communications channel (102 of fig. 1) without detection of an event at the first location (104 of fig. 1, see also fig. 8).

Re claim 48, Brown further discloses a video device (fig. 1), comprising: a processor (104 of fig. 1) which analyzes a video to detect an object and to determine attributes of the object detected in the video (fig. 8); an output (880 of fig. 8) configured to transmit the attributes determined by the processor over a communications link (102 of fig. 1), wherein the output is configured to transmit the attributes to a second location (880 of fig. 8, note transmitting the viewable video index to the client device, 108 of fig. 1) removed from the processor (104 of fig. 1) for a subsequent analysis of a combination of the attributes at the second location (108 of fig. 8, see also fig. 9), wherein the processor (108 of fig. 1) determines attributes independently of a subsequent analysis of a combination of attributes to determine an event (fig. 9, step 970 performs the event detection, e.g. moving objects are updated using the viewable video index) that is not one of the determined attributes, and wherein the attributes are sufficient to allow detection of an event that is not one of the determined attributes by analyzing the combination of the attributes (fig. 9).

Re claim 49, Brown further discloses further comprising: a video capture apparatus to provide the video to the processor (150, 152, and 154 of fig. 1, video camera).

Re claim 50, Brown further discloses wherein the output transmits a stream of the detected attributes over the communications link (102 of fig. 1).

Re claim 51, Brown further discloses wherein the communications link comprises a network (102 of fig. 1).

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Re claim 52, Brown further discloses wherein the attributes are sufficient to allow detection of an event that is not one of the determined attributes without reprocessing the video (108 of fig. 1).

Re claim 53, Brown further discloses wherein the attributes are transmitted over the communications channel without detection of an event by the processor (108 of fig. 1, fig. 9).

### Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

### **Contact Information**

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung Vo whose telephone number is 571-272-7340. The examiner can normally be reached on Monday-Wednesday, Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on 571-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tung Vo/ Primary Examiner, Art Unit 2621

#### Applicant(s)/Patent Under Application/Control No. Reexamination 11/098,385 VENETIANER ET AL. Notice of References Cited Examiner Art Unit Page 1 of 1 2621 Tung Vo **U.S. PATENT DOCUMENTS** Document Number Date Classification Country Code-Number-Kind Code MM-YYYY US-5,850,352 A 12-1998 Moezzi et al. 345/419 Α US-5,912,980 A Hunke, H. Martin 382/103 06-1999 В US-6,025,877 A 02-2000 Chang et al. 375/240.01 С US-6,097,429 A 08-2000 Seeley et al. 348/154 D US-6,360,234 B2 03-2002 715/201 Е Jain et al. 382/224 US-6,721,454 B1 04-2004 Qian et al. F US-7,447,331 B2 11-2008 Brown et al. 382/103 G US-7,660,439 B1 02-2010 382/107 Н Lu et al. US-1 US-US-Κ US-US-М FOREIGN PATENT DOCUMENTS Document Number Country Code-Number-Kind Code Date MM-YYYY Name Classification Country Ν 0 Р Q R s Т NON-PATENT DOCUMENTS Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages) U W

A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).) Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

U.S. Patent and Trademark Office PTO-892 (Rev. 01-2001)

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**Notice of References Cited** 

Part of Paper No. 20100305

Receipt date: 09/30/2009 11098385 - GAU: 2621

PTO/SB/08b (04-09)

Approved for use through 05/31/2009. OMB 0651-0031

U.S. Patent and Trad emark Office; U.S. DEPARTMENT OF COMMERCE

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Subs	titute for form 1449/P	то		Complete if Known			
				Application Number	11/098,385-Conf. #8277		
IN	FORMATI	ON DISC	LOSURE	Filing Date	April 5, 2005		
SI	TATEMEN'	T BY AP	PLICANT	First Named Inventor	Péter L. Venetianer		
				Art Unit	2621		
	(Use as many sheets as necess ary)			Examiner Name	Tung T. Vo		
Sheet	1	of	1	Attorney Docket Number	37112-215811		

	U.S. PATENT DOCUMENTS									
Examiner	Cite	Document Number	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where					
Initials*	No.1	Number-Kind Code ² ( if known)	MM-DD-YYYY	Applicant of Cited Document	Relevant Passages or Relevant Figures Appear					
	AA	US-6,552,826	04-22-2003	Adler et al.						
	AB	US-6,123,123	09-26-2000	Carder, et al.						
	AC	US-20040113933	06-17-2004	Guler						
	AD	US-7,167,519	01-23-2007	Comaniciu et al.						
	AE	US-7,436,887	10-14-2008	Yeredor et al.						

	FOREIGN PATENT DOCUMENTS										
Examiner Initials*	Cite No.1	Foreign Patent Document  Country Code ³ -Number ⁴ -Kind Code ⁵ (# known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Línes, Where Relevant Passages Or Relevant Figures Appear						
	ВА	EP-0893923 A1	01-27-1999	Texas Instruments France							

Examiner Initials	Cite No.1	Include name of the auth or (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journ al, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²

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Cianatura	/Tung Vo/ (03/16/2010)	Considered	02/16/2010
Signature	/ rung vo/ (00/10/2010)	Considered	03/10/2010

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ** CITE NO: Those document(s) which are marked with an double asterisk (**) next to the Cite No. are not supplied because they were previously cited by or submitted to the Office in a prior application relied upon in this application for an earlier filing date under 35 U.S.C. 120.

#1044719V1

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /T.V./

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

# **EAST Search History**

# EAST Search History (Prior Art)

Ref#	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	3409	attributes same object\$1 same video	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/03/05 18:43
_2	9252	event same detect\$4 same video	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	NO N	2010/03/05 18:43
L3	7477	extract\$4 same object\$4 same video	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	00 00	2010/03/05 18:43
L4	113	1 and 2 and 3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/03/05 18:43
S1	1	("5109414").PN.	USPAT; USOCR	OR	OFF	2006/04/12 13:46
S2	5	probabilit\$4 same averag \$4 same yuv same (encod \$4 or compress\$4 or cod \$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/03/15 16:09
S3	3	probabilit\$4 same index\$4 same yuv same (encod\$4 or compress\$4 or cod\$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/03/15 16:08
<b>S</b> 4	114	index\$4 same yuv same (encod\$4 or compress\$4 or cod\$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/03/15 16:08
S5	8	probabilit\$4 same yuv same (encod\$4 or compress\$4 or cod\$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/03/15 16:09

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S6	95	averag\$4 same yuv same (encod\$4 or compress\$4 or cod\$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/03/15 16:09
S7	23	probabilit\$4 same yuv	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/03/15 16:09
S8	211212	probabilit\$4	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/03/15 16:09
S9	1	S4 and S6 and S8	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/03/15 16:09
S10	33	S6 and S8	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/03/15 16:09
S11	11326	screw same (machin\$4 or device\$4) same table\$4	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/04/12 14:21
S12	6263	camera\$4 same detect\$4 same edge\$4	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/04/12 14:22
S13	19	S11 and S12	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/04/12 13:51
S14	2212	(encod\$4 or compress\$4 or coding) same different same DCT	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/04/12 13:52
S15	68808	"375"/\$6	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/04/12 13:52

S16	902	S14 and S15	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/04/12 13:52
S17	827	(encod\$4 or compress\$4 or coding) same different same DCT same video	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/04/12 13:53
S18	430	S15 and S17	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/04/12 13:52
S19	70	(encod\$4 or compress\$4 or coding) same different same (DCT with compar \$6)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/04/12 14:08
S20	19	(encod\$4 or compress\$4 or coding) same different same (DCT\$1 with adjust \$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/04/12 14:09
S21	70	screw same inspect\$4 same reject\$6	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/04/12 14:23
S22	751	camera\$4 same detect\$4 same screw\$4	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/04/12 14:24
S23	2	S21 and S22	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/04/12 14:22
S24	6718	screw same inspect\$4	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/04/12 14:23
S25	50	S22 and S24	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/04/12 14:23

S26	16	camera\$4 same detect\$4 same screw\$4 same	US-PGPUB;	AND	ON	2006/04/12 14:25
		passing same through	USPAT; EPO; JPO; DERWENT; IBM_TDB			14.20
S27	41	camera\$4 same detect\$4 same screw\$4 same compar\$6	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/04/12 14:28
S28	76	camera\$4 same (determin \$4 or detect\$4) same screw \$4 same thread	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/04/12 14:30
S30	28	splic\$6 same control\$6 same (decod\$4 or decompress\$4) same (re- cod\$4 or re-encod\$4 or re- compress\$4 or (re adj (cod \$4 or compress\$4 or encod \$4)))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/20 07:49
S31	4	(("5982436") or ("6137834") or ("6025878") or ("5602592")).PN.	USPAT; USOCR	OR	OFF	2006/06/20 07:38
S32	1	(splic\$6 and control\$6 and (decod\$4 or decompress \$4) and (re-cod\$4 or re-encod\$4 or re-encod\$4 or (re adj (cod\$4 or compress\$4 or encod\$4))) and determin\$6 and amount and bit\$6).clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/20 09:28
S33	1	yoshimari.in.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/20 07:45
S34	0	hiromi with yoshimari	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/20 07:45
S35	0	hiromi and yoshimari	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/20 07:45
S36	0	hiromi with yohinari	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/20 07:46

S37	0	yohinari	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/20 07:45
S38	10216	yoshinari	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/20 07:45
S39	34847	hiromi	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/20 07:46
S40	37	S38 same S39	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/20 07:48
S41	424	seamless\$4 same splic\$6	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/20 07:48
S42	62	splic\$6 same (decod\$4 or decompress\$4) same (re-cod\$4 or re-encod\$4 or re-compress\$4 or (re adj (cod \$4 or compress\$4 or encod \$4)))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/20 09:28
S43	24	S41 and S42	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/20 09:27
S44	237	splic\$6 same (decoded or decompressed)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/20 09:28
S45	82	splic\$6 same (re-cod\$4 or re-encod\$4 or re-compress \$4 or (re adj (cod\$4 or compress\$4 or encod\$4)))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/20 09:28
S46	161815	(determin\$6 or calculat\$4) same (encoded or coded or compressed)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/20 09:32

S47	34	S44 and S45 and S46	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/20 10:10
S48	2	(("20050125119") or ("20050271184")).PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/06/20 10:10
S49	2	("3294342").PN.	USPAT; USOCR	OR	OFF	2006/06/22 17:57
S50	106	highlight\$6 same I same video same (picture or frame or image)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/22 18:00
S51	18238	scene same chang\$6	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/22 17:58
S52	24	S50 and S51	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/22 17:58
S53	21180	highlight\$6 same (picture or frame or image)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/22 18:00
S54	2932	highlight\$6 same video same (picture or frame or image)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/22 18:00
S55	50	S51 same S54	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/22 18:00
S56	6	(decompress or decode\$4) same (scene with change) same (multiple or plurality) same display\$4 same (lcd or devices or units)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2008/10/06 17:17
S57	28	detect\$4 same (scene with change) same (multiple or plurality) same (display\$4 with (monitors or crt or devices or units))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2008/10/06 17:27

S58	192	detect\$4 same (scene with change) same (display\$4	US-PGPUB; USPAT; EPO;	AND	ON	2008/10/06 17:31
		with (monitors or devices or units))	JPO; DERWENT; IBM_TDB			
S59	2	security same (scene with change) same (display\$4 with (monitors or devices or units))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2008/10/06 17:41
S60	568	(scene with change) same (display\$4 with (monitors or devices or units))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2008/10/06 17:42
S61	83	(scene with change) same (display\$4 with (monitors or devices or units)) same (plurality or multiple)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2008/10/06 17:42
S62	85	("5101364"   "5107343"   "5109482"   "5179449"   "5189630"   "5191645"   "5206929"   "5237648"   "5321396"   "5388197"   "5404316").PN. OR ("5537528").URPN.	US-PGPUB; USPAT; USOCR	AND	N 0	2008/10/06 17:57
S63	77	"5537528"	US-PGPUB; USPAT; USOCR	AND	ON	2008/10/07 06:51
S64	101558	television same receiv\$4	US-PGPUB; USPAT; USOCR	AND	ON	2008/10/07 06:59
S65	5586	detect\$4 same scene same change	US-PGPUB; USPAT; USOCR	AND	ON	2008/10/07 06:59
S66	10165	(pip or (picture in picture)) same first same second same (display\$4 or monitors or lcds)	US-PGPUB; USPAT; USOCR	AND	ON	2008/10/07 07:00
S67	2264	S64 and S66	US-PGPUB; USPAT; USOCR	AND	ON	2008/10/07 07:00
S68	129	S64 and S65 and S66	US-PGPUB; USPAT; USOCR	AND	ON	2008/10/07 07:00
S69	15921	television same receiv\$4 same (decod\$4 or decompress\$4)	US-PGPUB; USPAT; USOCR	AND	ON	2008/10/07 07:01
S70	94	S69 and S65 and S66	US-PGPUB; USPAT; USOCR	AND	ON	2008/10/07 07:01
S71	402	detect\$4 same scene same change same (decod\$4 or decompress\$4)	US-PGPUB; USPAT; USOCR	AND	ON	2008/10/07 07:05
S72	373019	first same second same (display\$4 or monitors or lods)	US-PGPUB; USPAT; USOCR	AND	ON	2008/10/07 07:05

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S73	123	S71 and S72	US-PGPUB; USPAT; USOCR	AND	ON	2008/10/07 07:05
S74	17	S71 same S72	US-PGPUB; USPAT; USOCR	AND	ON	2008/10/07 07:05
S75	19	"6204887"	US-PGPUB; USPAT; USOCR	AND	ON	2008/10/07 07:07
S76	12	complexity same current same decoded same picture same encoded	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/11/10 08:22
S77	43	(estimat\$4 or determin\$4) same complexity same current same (decoded with (pictures or frames or images))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/11/10 08:25
S78	102	(transcod\$4 or (re adj (encod\$4 or compress \$4))) same complexity same current (pictures or frames or images)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND		2009/11/10 08:26
S79	4	S77 and S78	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	0 <b>N</b>	2009/11/10 08:26
S80	27	(estimat\$4 or determin\$4) same complexity same (current with decoded with (pictures or frames or images))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND		2009/11/10 08:30
S81	53	(transcod\$4 or (re adj (encod\$4 or compress \$4))) same complexity same (current with (picture or frame or image))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON Hillian	2009/11/10 08:30
S82	2	S80 and S81	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/11/10 08:30

S83	23	(transcod\$4 or (re adj (encod\$4 or compress \$4))) same complexity same (complexity with current with (picture or frame or image))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/11/10 08:32
S84	10	"6915018"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	N 00	2009/11/10 09:08
S85	704	look same ahead same complex\$6	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/11/10 09:11
S86	52	look same ahead same complex\$6 same estimat\$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/11/10 09:11
S87	0	JVT same weight same foctor same offset	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/12/16 15:42
S88	3	JVT same weight same factor same offset	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/12/16 15:43
S89	1319	weight same factor same offset	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/12/16 15:43
S90	3	JVT same weight same factor	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/12/16 15:43
S91	244	motion same (compensat \$4 or predict\$4) same weight same factor	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/12/17 06:06
S92	1627	motion same (compensat \$4 or predict\$4) same luminance same ((color with differences) or chrominance)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/12/17 06:06

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S93	3187	motion same (compensat \$4 or predict\$4) same offset	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM TDB	AND	ON	2009/12/17 06:06
S94	25	S91 and S92 and S93	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/12/17 06:07
S95	24859	adding same (multipli\$4 or multiply\$4) same (offset or value or (predetermined with number) or number)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/12/17 06:13
S96	0	S91 and S92 and S95	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/12/17 06:13
S97	9	S91 and S95	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/12/17 06:14
S98	40952	adding same (multipli\$4 or multiply\$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/12/17 06:14
S99	1	S91 and S92 and S98	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/12/17 06:14
S100	230076	weight\$4 same factor	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/12/17 06:15
S101	50	S92 and S98 and S100	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/12/17 06:15
S102	2	("6415056").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/12/17 07:39
S103	4	("5592228").PN. OR ("6415056").URPN.	US-PGPUB; USPAT; USOCR	AND	ON	2009/12/17 09:27

S104	7	"6415056"	US-PGPUB; USPAT; USOCR	AND	ON	2009/12/17 09:32
S105	1	"11879403"	US-PGPUB; USPAT; USOCR	AND	ON	2009/12/17 13:19
S106	12	select\$4 same quanti\$4 same scale same (re adj (encod\$4 or compress\$4))	US-PGPUB; USPAT; USOCR	AND	ON	2009/12/17 14:41
S107	12	select\$4 same quanti\$4 same scale same (re adj (encod\$4 or compress\$4))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	N N	2009/12/17 14:41
S108	99	select\$4 same quanti\$4 same (re adj (encod\$4 or compress\$4))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	N 0 0	2009/12/17 14:42
S109	2	"20060117356"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/03/05 11:23
S110	13	(("6546135") or ("6408293") or ("6721454") or ("7308443")).PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/03/05 11:24
S111	2	"20020159627"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	N	2010/03/05 11:33
S112	2	"20020157116"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	N O O	2010/03/05 11:33
S113	3	"20020112171"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	NON	2010/03/05 11:33

S114	3	"20020048369"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/03/05 11:34
S115	2	"20020045988"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	0N	2010/03/05 11:34
S116	2	"20010012379"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/03/05 11:34
S117	115	attribute\$4 same event same rule\$4 same remot \$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/03/05 11:56
S118	0	attribute\$4 same event same rule\$4 same remot \$4 ame video	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND		2010/03/05 11:57
S119	5	attribute\$4 same event same detect\$4 ame video	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/03/05 11:57
S120	258	attribute\$4 same event same detect\$4 same video	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/03/05 11:58
S121	406	remot\$4 same (processor or computer) same event same detect\$4 same video	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/03/05 11:59
S122	32	S120 and S121	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/03/05 11:59

S123	77	attributes same object\$1 same event same detect\$4 same video		AND	ON	2010/03/05 12:01
S124	5	"11098385"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/03/05 12:12

## **EAST Search History (Interference)**

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### 3/5/2010 6:48:16 PM

 $\textbf{C:} \ \, \textbf{Documents} \ \, \textbf{EAST} \ \, \textbf{Workspaces} \ \, \textbf{Default EAST Workspace} \ \, \textbf{(Flat Panel).wsp} \\$ 

	Application/Control No.	Applicant(s)/Patent Under Reexamination
Index of Claims	11098385	VENETIANER ET AL.
	Examiner	Art Unit
	Tung Vo	2621

✓	Rejected	-	Cancelled	N	Non-Elected	Α	Appeal
=	Allowed	÷	Restricted	I	Interference	0	Objected

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Final	Original	03/05/2010							
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	33	<b>√</b>							
	34	<b>√</b>							
•	35	✓							
	36	<b>√</b>							

U.S. Patent and Trademark Office

Part of Paper No.: 20100305

	Application/Control No.	Applicant(s)/Patent Under Reexamination
Index of Claims	11098385	VENETIANER ET AL.
	Examiner	Art Unit
	Tung Vo	2621

<b>✓</b>	Rejected	-	Cancelled	N	Non-Elected	Α	Appeal
=	Allowed	÷	Restricted	I	Interference	0	Objected

Claims	renumbered	in the same order	as presented by	applicant		☐ CPA	☐ T.C	D. 🗆	R.1.47	
CL	AIM	DATE								
Final	Original	03/05/2010								
	37	✓								
	38	<b>✓</b>								
	39	✓								
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	41	✓								
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	53	<b>√</b>								

# Search Notes Application/Control No. Applicant(s)/Patent Under Reexamination VENETIANER ET AL. Examiner Tung Vo Applicant(s)/Patent Under Reexamination VENETIANER ET AL.

SEARCHED						
Class	Subclass	Date	Examiner			
348	143, 148, 150, 149, 166, 169, 170	3/31/2009	TV			
382	103, 115	3/31/2009	TV			
375	240.02, 240.08	3/31/2009	TV			

SEARCH NOTES						
Search Notes	Date	Examiner				
EAST	3/31/2009	TV				

INTERFERENCE SEARCH						
Class		Subclass	Date	Examiner		
375	240.18		3/5/2010	TV		

U.S. Patent and Trademark Office Part of Paper No.: 20100305

Application Serial No. 11/098,385 Amendment of December 22, 2009

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of: Venetianer et al. Attorney Docket: OV-103

11/098,385 Serial Number: Group Art Unit: 2621

Filed: April 5, 2005 Examiner: Tung Vo

Confirmation Number: 8277

Title: VIDEO SURVEILLANCE SYSTEM **EMPLOYING** VIDEO

**PRIMITIVES** 

### AMENDMENT AND INTERVIEW SUMMARY

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313

Dear Sir:

This is a response to the Office Action of August 20, 2009. A one month extension of time is filed concurrently with this response. Prior to examination on the merits and calculation of relevant fees, please enter the following amendment.

# **Amendments to the Claims:**

This listing of claims will replace all prior versions and listings of claims in the application:

### **Listing of Claims:**

Claims 1-26 (Cancelled).

27. (New) A video system comprising:

a first processor which analyzes a video to determine attributes of objects detected in the video, the first processor being in communication with a first communications link to transfer the determined attributes over the communications link; and

a second processor, separate from the first processor, in communication with the first communications link to receive the determined attributes transferred from the first processor over the first communications link, which determines a first event that is not one of the determined attributes by analyzing a combination of the received determined attributes

wherein the first processor determines attributes independent of a selection of the first event by the second processor.

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- 28. (New) The video system of claim 27, wherein the first communications link comprises a network.
- 29. (New) The video system of claim 27, wherein the second processor determines the first event by analyzing only the attributes transferred by the communications link.
- 30. (New) The video system of claim 27, wherein the second processor determines the first event without reprocessing the video.
- 31. (New) The video system of claim 27, wherein the second processor analyzes the attributes to detect the first event in real time.
  - 32. (New) The video system of claim 27, further comprising:

a third processor, separate from the first processor and second processor, in communication with the first processor over a second communications link, the third processor configured to determine a second event that is not one of the determined attributes by analyzing a combination of the attributes transferred by the second communications link,

wherein the second processor determines the first event independent from the determination of the second event by the third processor and the third processor determines the second event independent from the determination of the first event by the second processor.

33. (New) A video system, comprising:

an input in communication with a communications channel;

a processor configured to receive from the input a stream of detected attributes received over the communications channel, the attributes being attributes of one or more objects detected in a video, the processor configured to determine an event that is not one of the detected attributes by analyzing a combination of the received attributes,

wherein the attributes received over the communications channel are independent of the event to be determined by the processor.

- 34. (New) The video system of claim 33, wherein the communications channel comprises a network.
- 35. (New) The video system of claim 33, wherein the processor is operable to determine an event by analyzing only attributes of the received stream of attributes.
- 36. (New) The video system of claim 33, wherein the processor is operable to determine an event without reprocessing the video.
- 37. (New) A method of detecting an event from a video, comprising: receiving a stream of detected attributes over a communications channel, the detected attributes representing attributes of an object detected in a video;

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performing an analysis of a combination of the detected attributes to detect an event that is not one of the detected attributes,

wherein the detected attributes received in the stream of attributes are independent of a selection of the event to be detected.

38. (New) The method of claim 37, wherein the communications channel comprises a network.

39. (New) The method of claim 37, wherein the analysis performed to detect an event determines an event by analyzing only attributes received in the stream of detected attributes.

40. (New) The method of claim 37, wherein the analysis performed to detect an event determines an event without reprocessing the video.

41. (New) A method comprising:

analyzing a video to detect an object;

creating a stream of attributes at a first location by determining attributes of the detected object by analyzing the video;

transmitting the stream of attributes to a second location removed from the first location for subsequent analysis,

wherein the stream of attributes are transmitted to the second location over a communications channel, and

wherein the stream of attributes is sufficient to allow the subsequent analysis to detect an event of the video, the event not being one of the determined attributes.

- 42. (New) The method of claim 41, further comprising: obtaining the video with a video capture apparatus.
- 43. (New) The method of claim 41, wherein the communications channel comprises a network.
- 44. (New) The method of claim 41, wherein the attributes of the stream of attributes are created independently of the subsequent analysis.
- 45. (New) The method of claim 41, wherein the stream of attributes is sufficient to allow detection of an event that is not one of the determined attributes by analyzing a combination of the attributes.
- 46. (New) The method of claim 41, wherein the stream of attributes is sufficient to allow detection of an event that is not one of the determined attributes without reprocessing the video.
- 47. (New) The method of claim 41, wherein the stream of attributes is transmitted over a communications channel without detection of an event at the first location.

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48. (New) A video device, comprising:

a processor which analyzes a video to detect an object and to determine attributes of the object detected in the video;

an output configured to transmit the attributes determined by the processor over a communications link,

wherein the output is configured to transmit the attributes to a second location removed from the processor for a subsequent analysis of a combination of the attributes at the second location,

wherein the processor determines attributes independently of a subsequent analysis of a combination of attributes to determine an event that is not one of the determined attributes, and

wherein the attributes are sufficient to allow detection of an event that is not one of the determined attributes by analyzing the combination of the attributes.

- 49. (New) The video device of claim 48, further comprising: a video capture apparatus to provide the video to the processor.
- 50. (New) The video device of claim 48, wherein the output transmits a stream of the detected attributes over the communications link.
- 51. (New) The video device of claim 50, wherein the communications link comprises a network.

- 52. (New) The video device of claim 48, wherein the attributes are sufficient to allow detection of an event that is not one of the determined attributes without reprocessing the video.
- 53. (New) The video device of claim 48, wherein the attributes are transmitted over the communications channel without detection of an event by the processor.

### **REMARKS**

With this amendment, claims 1-26 have been cancelled and claims 27-53 have been added. Claims 27, 33, 37, 41 and 48 are independent claims and the remaining claims depend from one of these claims (directly or indirectly). Support for these new claims can be found throughout the disclosure, including without limitation, for example with Figures 23, 24 and 25 and the corresponding description starting at paragraph [0087]. No new matter has been added.

The Applicant thanks Examiner Vo for his time during the personal interview of November 24, 2009. During the interview, the Applicant discussed draft claims presented for the Examiner's consideration to help expedite allowance of this application. Applicant discussed distinguishing features of the invention, and how those features were attempted to be captured by the draft claim language.

Claims 1, 25 and 26 are rejected under 35 U.S.C. §101. The rejection of these claims is moot in view of their cancellation.

Claims 1-8 and 18-21 are rejected under 35 U.S.C. §102(e) as being anticipated by Srinivasa et al. (U.S. Patent No. 7,227,893). Claims 9-17, 25 and 26 are rejected under 35 U.S.C. §103(a) being unpatentable over Srinivasa et al. in view of Elazar et al. (U.S. Patent Pub. No. US 2004/0161133). Claims 22-24 are rejected under 35 U.S.C. §103(a) as being unpatentable over Srinivasa in view of Hsu et al. (U.S. Patent No. 7,197,072). These rejections are moot in view of the cancellation of claims 1-26. In addition, it is respectfully asserted that similar rejections applied to new claims

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27-53 would be improper. For example, none of the prior art teaches or suggests:

a first processor which analyzes a video to determine attributes of objects detected in the video ... [and]

a second processor, separate from the first processor, in communication with the first communications link to receive the determined attributes transferred from the first processor over the first communications link, which determines a first event that is not one of the determined attributes by analyzing a combination of the received determined attributes

as recited by new claim 27.

In the latest Office Action, the Examiner highlighted Figure 1 of Elazar et al. as suggesting an event inference unit located remotely to detect at least one event based on a video primitive. Elazar et al. teaches a video transfer component 22 which transfers video information (a sampled video stream) to a computing and storage device 24 (which could be an external computing platform such as a PC, UNIX workstation or mainframe computer). See paragraph [0028]. A video analysis unit 26 receives the video input. An event database 42 stores event data and alarm data generated by a video analysis unit 26. See paragraph [0029].

Even if it were obvious to modify the teachings of Elazar et al. to provide first and second processors (which the Applicants to not admit), Elazar would still fail to suggest the recitations of claim 27, requiring both a first processor which analyzes a video to determine attributes of objects detected in the video and a second processor to be separate from the first processor and in communication with the first communications link to receive the determined attributes transferred from the first processor over the first communications link, and which determines an event that is not one of the determined attributes.

The recitations of the other independent claims are not taught or suggested by the prior art. For example, claim 37 recites:

receiving a stream of detected attributes over a communications channel, the detected attributes representing attributes of an object detected in a video; performing an analysis of a combination of the detected attributes to detect an event that is not one of the detected attributes,

wherein the detected attributes received in the stream of attributes are independent of a selection of the event to be detected.

Elazar et al. does not teach or suggest such recitations, instead teaching a video analysis unit 26 which generates event data based on receiving video.

Similarly, the prior art also fails to teach or suggest the recitations of independent claims 33, 41, and 48. Other claims added in this amendment depend from one of independent claims 27, 33, 37, 41 and 48 and are allowable at least for this reason. However, it is emphasized that the prior art also fails to teach many of the additional features set forth therein.

It is believed that this application is in condition for allowance. Favorable consideration and prompt allowance are respectfully requested. A one month extension of time is filed concurrently with this amendment. However, in the event any fees are required in connection with this paper, please charge the Deposit Account No. 50-4574.

Respectfully submitted,

/Patrick D. Muir/ Reg. #37403

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Electronic Patent Application Fee Transmittal						
Application Number:	11	11098385				
Filing Date:	05	05-Apr-2005				
Title of Invention:	Video surveillance system employing video primitives					
First Named Inventor/Applicant Name:	Peter L. Venetianer					
Filer:	Patrick Daniel Muir					
Attorney Docket Number:	Attorney Docket Number: OV-103(215811 US)					
Filed as Small Entity						
Utility under 35 USC 111(a) Filing Fees						
Description		Fee Code	Quantity	Amount	Sub-Total in USD(\$)	
Basic Filing:						
Pages:						
Claims:						
Claims in excess of 20		2202	1	26	26	
Independent claims in excess of 3		2201	2	110	220	
Miscellaneous-Filing:						
Petition:						
Patent-Appeals-and-Interference:						
Post-Allowance-and-Post-Issuance:						

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)		
Extension-of-Time:						
Extension - 1 month with \$0 paid	2251	1	65	65		
Miscellaneous:						
	Total in USD (\$)					

Electronic Ack	Electronic Acknowledgement Receipt					
EFS ID:	6695117					
Application Number:	11098385					
International Application Number:						
Confirmation Number:	8277					
Title of Invention:	Video surveillance system employing video primitives					
First Named Inventor/Applicant Name:	Peter L. Venetianer					
Customer Number:	74712					
Filer:	Patrick Daniel Muir					
Filer Authorized By:						
Attorney Docket Number:	OV-103(215811 US)					
Receipt Date:	22-DEC-2009					
Filing Date:	05-APR-2005					
Time Stamp:	19:33:01					
Application Type:	Utility under 35 USC 111(a)					

# **Payment information:**

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$311
RAM confirmation Number	6723
Deposit Account	504574
Authorized User	

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

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# File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		11098385_amd_OV_103.pdf	89857	yes	12
·			223e5bd4e635d8eee2d47be18dce2425b0 c6e31b	,cJ	
	Multip	oart Description/PDF files in	zip description		
	Document De	scription	Start	E	nd
	Amendment/Req. Reconsiderat	1		1	
	Claims	2	8		
	Amendment/Req. Reconsiderat	ion-After Non-Final Reject	9		12
Warnings:					
Information:					
2	Fee Worksheet (PTO-875)	fee-info.pdf	33216	no	2
	, ,	·	b3bdc1610656015db33f79e37e794d72e68 e03ff		
Warnings:					
Information:					
		Total Files Size (in bytes)	12	23073	

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#### New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

#### National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

#### New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PTO/SB/06 (07-06)
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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875						P		Docket Number 18,385		ing Date 05/2005	To be Mailed
APPLICATION AS FILED – PART I (Column 1) (Column 2)							SMALL	ENTITY 🛛	OR		HER THAN
	FOR	N	JMBER FIL	ILED NUMBER EXTRA		Г	RATE (\$)	FEE (\$)		RATE (\$)	FEE (\$)
	BASIC FEE (37 CFR 1.16(a), (b),	or (c))	N/A N/A		1	N/A			N/A		
	SEARCH FEE (37 CFR 1.16(k), (i), (i)		N/A			1	N/A			N/A	
	EXAMINATION FE (37 CFR 1.16(o), (p),	E	N/A		N/A		N/A			N/A	
	ΓAL CLAIMS CFR 1.16(i))		mir	nus 20 = *		1	x \$ =		OR	x \$ =	
IND	EPENDENT CLAIM CFR 1.16(h))	IS	m	inus 3 = *		1	x \$ =			x \$ =	
(37 CFR 1.16(h))   If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).											
	MULTIPLE DEPEN	IDENT CLAIM PR	ESENT (3	7 CFR 1.16(j))							
* If	the difference in colu	umn 1 is less than	zero, ente	r "0" in column 2.			TOTAL			TOTAL	
	APP	(Column 1)	AMEND	DED - PART II (Column 2)	(Column 3)		SMAL	L ENTITY	OR		ER THAN ALL ENTITY
AMENDMENT	12/22/2009	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		RATE (\$)	ADDITIONAL FEE (\$)		RATE (\$)	ADDITIONAL FEE (\$)
ME	Total (37 CFR 1.16(i))	* 27	Minus	** 26	=		x \$ =		OR	x \$ =	
Ä	Independent (37 CFR 1.16(h))	* 3	Minus	***2	=		x \$ =		OR	x \$ =	
ΑMI	Application Si	ize Fee (37 CFR 1	.16(s))								
	FIRST PRESEN	NTATION OF MULTIF	LE DEPEN	DENT CLAIM (37 CF	R 1.16(j))				OR		
							TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	
		(Column 1)		(Column 2)	(Column 3)		'			•	
		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		RATE (\$)	ADDITIONAL FEE (\$)		RATE (\$)	ADDITIONAL FEE (\$)
	Total (37 CFR 1.16(i))	*	Minus	**	=	1	x \$ =		OR	x \$ =	
ENDMENT	Independent (37 CFR 1.16(h))	*	Minus	***	=	]	x \$ =		OR	x \$ =	
	Application Si	ize Fee (37 CFR 1	.16(s))								
AM	FIRST PRESEN	NTATION OF MULTIF	LE DEPEN	DENT CLAIM (37 CF	R 1.16(j))				OR		
							TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	
** If	the entry in column the "Highest Numbo f the "Highest Numb · "Highest Number P	er Previously Paid oer Previously Paid	For" IN TH For" IN T	HIS SPACE is less HIS SPACE is less	than 20, enter "20's than 3, enter "3".		/JACQI	nstrument Ex JELINE M. WI	EIR/	er:	

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



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APPLICATION NUMBER FILING OR 371(C) DATE FIRST NAMED APPLICANT ATTY. DOCKET NO./TITLE 11/098,385

04/05/2005 Peter L. Venetianer OV-103(215811 US) **CONFIRMATION NO. 8277** 

74712 MUIR PATENT CONSULTING, PLLC 758 WALKER RD SUITE C GREAT FALLS, VA 22066



Date Mailed: 12/02/2009

## NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 11/20/2009.

The Power of Attorney in this application is accepted. Correspondence in this application will be mailed to the above address as provided by 37 CFR 1.33.

/snguyen/			

Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101



26694

**VENABLE LLP** 

P.O. BOX 34385

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APPLICATION NUMBER FILING OR 371(C) DATE FIRST NAMED APPLICANT

ATTY. DOCKET NO./TITLE 37112-215811

11/098,385

WASHINGTON, DC 20043-9998

04/05/2005

Peter L. Venetianer

**CONFIRMATION NO. 8277 POWER OF ATTORNEY NOTICE** 

*OC00000038986506*

Date Mailed: 12/02/2009

## NOTICE REGARDING CHANGE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 11/20/2009.

• The Power of Attorney to you in this application has been revoked by the assignee who has intervened as provided by 37 CFR 3.71. Future correspondence will be mailed to the new address of record(37 CFR 1.33).

/snguyen/

Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
11/098,385	04/05/2005	Peter L. Venetianer	eter L. Venetianer OV-103(215811 US)		
	7590 12/02/200 Γ CONSULTING, PLI	EXAMINER			
758 WALKER	,	VO, TUNG T			
SUITE C GREAT FALL	S, VA 22066	ART UNIT	PAPER NUMBER		
		2621			
			MAIL DATE	DELIVERY MODE	
			12/02/2009	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)	
Interview Summary	11/098,385	VENETIANER E	T AL.
merview dummary	Examiner	Art Unit	
	Tung Vo	2621	
All participants (applicant, applicant's representative, PTO	personnel):		
(1) <u>Tung Vo</u> .	(3) <u>Patrick Muir</u> .		
(2) <u>Peter Venetianer</u> .	(4)		
Date of Interview: 24 November 2009.			
Type: a)☐ Telephonic b)☐ Video Conference c)⊠ Personal [copy given to: 1)⊠ applicant 2	²)⊠ applicant's representative	·]	
Exhibit shown or demonstration conducted: d) Yes If Yes, brief description:	e)∏ No.		
Claim(s) discussed: <u>27-70</u> .			
Identification of prior art discussed:			
Agreement with respect to the claims f)☐ was reached. g	)∏ was not reached. h)⊠ N	I/A.	
Substance of Interview including description of the general reached, or any other comments: <i>The applicant discussed</i> (A fuller description, if necessary, and a copy of the amend allowable, if available, must be attached. Also, where no callowable is available, a summary thereof must be attached. THE FORMAL WRITTEN REPLY TO THE LAST OFFICE A INTERVIEW. (See MPEP Section 713.04). If a reply to the GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERLE A STATEMENT OF THE SUBSTANCE OF THE INTERPUTE OF THE INTERPUTE OF THE SUBSTANCE OF THE INTERPUTE OF THE SUBSTANCE OF THE INTERPUTE OF THE INTERPUTE OF THE SUBSTANCE OF THE INTERPUTE OF THE INTERPUTE OF THE SUBSTANCE OF THE INTERPUTE OF THE	newly added claims 27-70 (se ments which the examiner ago opy of the amendments that w d.) CTION MUST INCLUDE THE last Office action has already OF ONE MONTH OR THIRTY ERVIEW SUMMARY FORM,	reed would render the could render the c	rewith). er the claims claims claims  OF THE LICANT IS
/Tung Vo/ Primary Examiner, Art Unit 2621			

#### **Summary of Record of Interview Requirements**

#### Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

# Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

#### 37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by
  attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does
  not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview

- A complete and proper recordation of the substance of any interview should include at least the following applicable items:
- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,
  - (The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

#### **Examiner to Check for Accuracy**

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

U.S. Application Serial No. 12/569,116 (continuation of 09/987,707) **DRAFT CLAIM SET – NOT FOR ENTRY** 

Attny Docket No.: OV-101, Customer No. 74,712

detecting a plurality of attributes of each of the detected first and second objects by analyzing the video, each attribute representing a characteristic of the respective detected object;

after detecting the plurality of attributes, identifying an event that is not one of the detected attributes by analyzing, of the detected plurality of attributes, only a selected first set of detected attributes of the first object and only a selected second set of detected attributes of the second object.

- 67. (New) The method of claim 66, wherein the first and second sets are different.
- 68. (New) The method of claim 66, wherein the first set is a subset of the detected plurality of attributes.
- 69. (New) The method of claim 68, wherein the second set is a subset of the detected plurality of attributes.
- 70. (New) The method of claim 66, further comprising identifying an event comprising an interaction of the first and second objects.

Claims 1-26 (Cancelled).

27. (New) A video system comprising:

a first processor which analyzes a video to determine attributes of objects detected in the video:

a communications link to transfer the attributes determined by the first processor; and

a second processor, separate from the first processor, in communication with the communications link, which determines an event that is not one of the determined attributes by analyzing a combination of the attributes transferred by the communications link

- 28. (New) The video system of claim 27, wherein the communications link comprises a network.
- 29. (New) The video system of claim 27, wherein the second processor determines an event by analyzing only the attributes transferred by the communications link.
- 30. (New) The video system of claim 27, wherein the second processor determines an event without reprocessing the video.
- 31. (New) The video system of claim 27, wherein the second processor analyzes the attributes to detect an event in real time.
  - 32. (New) The video system of claim 27,

wherein the first processor determines attributes independent of what event is determined by the second processor.

33. (New) A video system, comprising: an input;

a processor configured to receive from the input a stream of detected attributes of one or more objects detected in a video, the processor configured to determine an event that is not one of the detected attributes by analyzing a combination of the received attributes.

- 34. (New) The video system of claim 33, wherein the processor is connected so as to receive the stream of detected attributes over a communication channel.
- 35. (New) The video system of claim 34, wherein the communications channel comprises a network.
  - 36. (New) The video system of claim 33,

wherein the processor is operable to determine a selected one of plural events, and

wherein the attributes received in the stream of attributes are independent of the event determined by the processor.

- 37. (New) The video system of claim 33, wherein the processor is operable to determine an event by analyzing only attributes of the received stream of attributes.
- 38. (New) The video system of claim 33, wherein the processor is operable to determine an event without reprocessing the video.
- 39. (New) A method of detecting an event from a video, comprising: receiving a stream of detected attributes, the detected attributes representing attributes of an object detected in a video;

performing an analysis of a combination of the detected attributes to detect an event that is not one of the detected attributes.

- 40. (New) The method of claim 39, wherein the stream of detected attributes is received over a communication channel.
- 41. (New) The method of claim 40, wherein the communications channel comprises a network.
- 42. (New) The method of claim 39, further comprising: wherein the detected attributes received in the stream of attributes are independent of the selection of the event.
- 43. (New) The method of claim 39, wherein the analysis performed to detect an event determines an event by analyzing only attributes received in the stream of detected attributes.
- 44. (New) The method of claim 39, wherein the analysis performed to detect an event determines an event without reprocessing the video.
  - 45. (New) A video system comprising:

a first processor which analyzes a video to determine attributes of objects detected in the video;

one or more communications links to transfer the attributes determined by the first processor; and

a second processor, separate from the first processor, in communication with the one or more communications links, which determines a first event that is not one of the determined attributes by analyzing a combination of the attributes transferred by the one or more communications links.

a third processor, separate from the first processor and second processor, in communication with the one or more communications links, which determines a second event that is not one of the determined attributes by analyzing a combination of the attributes transferred by the one or more communications links,

wherein the second processor determines the first event independent from the determination of the second event by the third processor and the third processor determines the second event independent from the determination of the first event by the second processor.

46. (New) A method comprising: analyzing a video to detect an object;

creating a stream of attributes by determining attributes of the detected object by further analyzing the video;

transmitting the stream of attributes for subsequent analysis.

47. (New) The method of claim 46, further comprising: obtaining the video with a video capture apparatus,

wherein the creating of the stream of attributes is at a first location and the transmitting of the stream of attributes includes transmitting the stream of attributes to a second location removed from the first location for subsequent analysis at the second location.

48. (New) The method of claim 46, further comprising:

performing a first analysis of the stream of attributes at the first location,
performing a second analysis of the stream of attributes at the second
location.

49. (New) The method of claim 48, wherein the first analysis and the second analysis are independent analyses.

4

- 50. (New) The method of claim 48, wherein the first analysis and the second analysis are different analyses.
- 51. (New) The method of claim 46, wherein the stream of detected attributes is transmitted over a communication channel.
- 52. (New) The method of claim 51, wherein the communications channel comprises a network.
- 53. (New) The method of claim 46, wherein the attributes of the stream of attributes are created independently of the subsequent analysis.
- 54. (New) The method of claim 46, wherein the stream of attributes is sufficient to allow the subsequent analysis to detect an event of the video, the event not being one of the determined attributes.
- 55. (New) The method of claim 46, wherein the stream of attributes is sufficient to allow detection of an event that is not one of the determined attributes by analyzing a combination of the attributes.
- 56. (New) The method of claim 46, wherein the stream of attributes is sufficient to allow detection of an event that is not one of the determined attributes without reprocessing the video.
- 57. (New) The method of claim 46, wherein the stream of attributes is transmitted over a communications channel without detection of an event at the location of the transmission of the attributes.

# 58. (New) A device comprising:

a video content analysis engine, connected to a source of a video to analyze the video to detect an object and generate parameters associated with the object;

an output to output the parameters to an inference engine separate from the device.

wherein the inference engine is capable of analyzing the parameters to detect an event associated with the video, the event not being one of the detected parameters,

wherein the device does not include an inference engine.

# 59. (New) A video system, comprising:

a video content analysis engine, connected to a source of a video to analyze the video to detect an object and generate parameters associated with the object;

a first communications channel, connected to the video content analysis engine, to transmit the parameters generated by the video content analysis engine;

a first event inference engine, connected to the communications channel to receive the parameters transmitted by the communications channel and to analyze the parameters to infer an event occurrence associated with the video, the event occurrence to be inferred not being one of the generated parameters.

# 60. (New) The video system of claim 59, further comprising:

a second communications channel, connected to the video content analysis engine, to transmit the parameters generated by the video content analysis engine;

a second event inference engine, connected to the communications channel to receive the parameters transmitted by the second communications channel and to analyze the parameters to infer a second event occurrence associated with the video, the second event occurrence to be inferred not being one of the generated parameters.

- 61. (New) The video system of claim 60, wherein the inference of the event occurrence to be inferred by the first event inference engine is independent from the inference of the event occurrence to be inferred by the second event inference engine.
  - 62. (New) A video device, comprising:

a processor which analyzes a video to detect an object and to determine attributes of the object detected in the video;

an output which transmits the attributes determined by the processor over a communications link.

- 63. (New) The video device of claim 62, further comprising: a video capture apparatus to provide the video to the processor.
- 64. (New) The video device of claim 63, wherein the output transmits a stream of the attributes to a second location removed from the processor for a subsequent analysis of a combination of the attributes at the second location.
- 65. (New) The video device of claim 63, wherein the output transmits a stream of the detected attributes over the communications link.
- 66. (New) The video device of claim 65, wherein the communications link comprises a network.
  - 67. (New) The video device of claim 63,

wherein the processor determines attributes independently of a subsequent analysis of a combination of attributes to determine an event that is not one of the determined attributes.

68. (New) The video device of claim 62, wherein the attributes are sufficient to allow detection of an event that is not one of the determined attributes by analyzing a combination of the attributes.

Office Express, Inc.

- 69. (New) The video device of claim 62, wherein the attributes are sufficient to allow detection of an event that is not one of the determined attributes without reprocessing the video.
- 70. (New) The video device of claim 62, wherein the attributes are transmitted over a communications channel without detection of an event by the processor.

Customer No. 74,712 Attorney Docket No. OV-103(215811 US) (703) 757-7880

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of: Peter Venetianer

Attorney Docket:

OV-103

Serial Number:

11/098,385

Group Art Unit: 2621

Filed:

April 5, 2005

Examiner: Vo, Tung T.

Confirmation Number: 8277

Title:

VIDEO SURVEILLANCE SYSTEM EMPLOYING VIDEO

**PRIMITIVES** 

# REVOCATION AND SUBSTITUTION OF POWER OF ATTORNEY AND CHANGE OF ADDRESS

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313

Dear Sirs:

The undersigned hereby revokes all previous powers and appoints the practitioners associated with Customer Number 74,712 including attorney Patrick D. Muir, Registration No. 37,403, to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith.

I request the Patent and Trademark Office to direct all correspondence and telephone calls relative to this application to Customer No. 74,712, Muir Patent Consulting, PLLC, 758 Walker Road, Suite C, Great Falls, VA 22066, (703) 757-7880.

The undersigned is empowered with full Power of Attorney on behalf of the assignee ObjectVideo, Inc. whose interest in the present application is empowered by the Assignments recorded on Reel 011489 Frame 0630, Reel 012471 Frame 0512, Reel 014743 Frame 0573 and Reel 016299 Frame 0066.

Respectfully submitted and executed this 20th day of November, 2009.

Christopher Capuano

Vice President, Corporate Dévelopment &

Licensing Programs

ObjectVideo, Inc.

11600 Sunrise Valley Dr, Suite 290

Reston, VA 20191

COMMONWEALTH OF VIRGINIA: COUNTY OF FAIRFAX: to-wit:

The foregoing was subscribed and sworn/td before me, by Christopher Capuano, this 20th day of November 2009, in Fairfax County, Virginia.

Notary Public

Penelope Arine Cupina Commonwealth of Virginia Notary Public Commission No. 118376 My Commission Expires 10/31/2012

Electronic Ack	Electronic Acknowledgement Receipt						
EFS ID:	6496905						
Application Number:	11098385						
International Application Number:							
Confirmation Number:	8277						
Title of Invention:	Video surveillance system employing video primitives						
First Named Inventor/Applicant Name:	Peter L. Venetianer						
Customer Number:	26694						
Filer:	Patrick Daniel Muir/Melissa McGinn						
Filer Authorized By:	Patrick Daniel Muir						
Attorney Docket Number:	37112-215811						
Receipt Date:	20-NOV-2009						
Filing Date:	05-APR-2005						
Time Stamp:	15:01:51						
Application Type:	Utility under 35 USC 111(a)						

# Payment information:

Submitted with Payment			no						
File Listing:									
Document Number	Document Description		File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)			
1	Power of Attorney		PoA OV103 215811.pdf	354023	no	2			
'	1 ower of Attorney		10A_0V103_213011.pdf	2e4b66e38be01a11047581c66c7ed9d2223 c5bec					
Warnings:									
Information:									

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

#### New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

### National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

#### New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PTO/SB/08b (04-09)

Approved for use through 05/31/2009. OMB 0651-0031

U.S. Patent and Trad emark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Sub	Substitute for form 1449/PTO			Complete if Known			
				Application Number	11/098,385-Conf. #8277		
l IN	<b>IFORMATIC</b>	ON DI	SCLOSURE	Filing Date	April 5, 2005		
s	STATEMENT BY APPLICANT			First Named Inventor	Péter L. Venetianer		
				Art Unit	2621		
	(Use as many	sh eets as	necess ary)	Examiner Name	Tung T. Vo		
Sheet	1	of	1	Attorney Docket Number	37112-215811		

	U.S. PATENT DOCUMENTS								
Examiner Cite Initials* No. ¹	0.11-	Document Number	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where				
	Number-Kind Code ² ( if known)	MM-DD-YYYY	Applicant of Cited Document	Relevant Passages or Relevant Figures Appear					
	AA	US-6,552,826	04-22-2003	Adler et al.					
	AB	US-6,123,123	09-26-2000	Carder, et al.					
	AC	US-20040113933	06-17-2004	Guler					
	AD	US-7,167,519	01-23-2007	Comaniciu et al.					
	AE	US-7,436,887	10-14-2008	Yeredor et al.					

	FOREIGN PATENT DOCUMENTS									
Examiner Initials*	Cite No.1	Foreign Patent Document  Country Code ³ -Number ⁴ -Kind Code ⁵ (# known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Línes, Where Relevant Passages Or Relevant Figures Appear					
	ВА	EP-0893923 A1	01-27-1999	Texas Instruments France						

NON PATENT LITERATURE DOCUMENTS						
Examiner Initials Cite No.1 Include name of the auth or (in CAPITAL LETTERS), title of the article (when appropriate), ti the item (book, magazine, journ al, serial, symposium, catalog, etc.), date, page(s), volume-number(s), publisher, city and/or country where published.						
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Examiner		Date	· ·
Signature	1	Considered	
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^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. **CITE NO: Those document(s) which are marked with an double asterisk (**) next to the Cite No. are not supplied because they were previously cited by or submitted to the Office in a prior application relied upon in this application for an earlier filling date under 35 U.S.C. 120.

#1044719V1

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

Electronic Patent Application Fee Transmittal					
Application Number:	11098385				
Filing Date:	05-	05-Apr-2005			
Title of Invention:	Video surveillance system employing video primitives				
First Named Inventor/Applicant Name:	Peter L. Venetianer				
Filer:	Kyle D. Pataja/Tracie Xhema				
Attorney Docket Number:	37	112-215811			
Filed as Large Entity					
Utility under 35 USC 111(a) Filing Fees					
Description		Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:					
Pages:					
Claims:					
Miscellaneous-Filing:					
Petition:					
Patent-Appeals-and-Interference:					
Post-Allowance-and-Post-Issuance:					
Extension-of-Time:					

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)		
Miscellaneous:						
Submission- Information Disclosure Stmt 1806 1 180				180		
Total in USD (\$) 180						

Electronic Acknowledgement Receipt				
EFS ID:	6178145			
Application Number:	11098385			
International Application Number:				
Confirmation Number:	8277			
Title of Invention:	Video surveillance system employing video primitives			
First Named Inventor/Applicant Name:	Peter L. Venetianer			
Customer Number:	26694			
Filer:	Kyle D. Pataja/Tracie Xhema			
Filer Authorized By:	Kyle D. Pataja			
Attorney Docket Number:	37112-215811			
Receipt Date:	30-SEP-2009			
Filing Date:	05-APR-2005			
Time Stamp:	16:51:10			
Application Type:	Utility under 35 USC 111(a)			
Payment information:				
Submitted with Payment	yes			
Payment Type	Deposit Account			
Payment was successfully received in RAM \$180				
RAM confirmation Number	6363			
Deposit Account	220261			
Authorized User				
File Listing:	•			

File Name

**Document** 

Number

**Document Description** 

Pages (if appl.)

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Part /.zip

File Size(Bytes)/ Message Digest

1		215811_IDS.pdf	225302	yes	4		
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This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

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#### New International Application Filed with the USPTO as a Receiving Office

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#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Venetianer et al.

Art Unit: 2621

Application No: 11/098,385

Examiner: Tung T. Vo

Confirmation No: 8277

Filed: April 5, 2005

Atty. Docket No: 37112-215811

Customer No:

For: VIDEO SURVEILLANCE SYSTEM

26694 PATENT TRADEMARK OFFICE

# TWELFTH INFORMATION DISCLOSURE STATEMENT (IDS)

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Madam:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is filed more than three months after the U.S. filing date, OR more than three months after the date of entry of the national stage of a PCT application, AND after the mailing date of the first Office Action on the merits, whichever occurs first, but before the mailing date of a Final Office Action or Notice of Allowance (37 CFR 1.97(c)).

In accordance with 37 CFR 1.98(a)(2)(ii), Applicant has not submitted copies of U.S. patents and U.S. patent applications. Applicant submits herewith copies of foreign patents and nonpatent literature in accordance with 37 CFR 1.98(a)(2).

Application No.: 11/098,385 Docket No.: 37112-215811

Applicants submit herewith a copy of a July 14, 2009 Office Action issued in connection with related U.S. Application No. 11/057,154 as well as an English translation of a March 13, 2009 Office Action issued in connection with related Singapore Patent Application No. 200716595-4.

U.S. Patent Documents AA and AB were cited in related U.S. Application No. 09/987,707; U.S. Patent Documents AC-AE were cited in the attached Office Action issued July 14, 2009 for related U.S. Application No. 11/057,154, all other documents from this Office Action have been previously cited and/or submitted in the present application; and Foreign Patent Document BA was cited in the attached Office Action issued March 13, 2009 in related Singapore Patent Application No. 200716595-4, all other documents from this Office Action have been previously cited and/or submitted in the present application.

In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing of this Information — Disclosure Statement shall not be construed to be an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

The Examiner is advised that the following co-pending applications contain subject matter that may be related to the present application. By bringing these applications to the Examiner's attention, Applicants do not waive the confidentiality provisions of 35 U.S.C. § 122.

Application Number	Filing Date	Art Unit
09/694,712	October 24, 2000	NA / (now U.S.
		Patent No.
		6,954,498)
09/987,707	November 15, 2001	2621
11/057,154	February 15, 2005	2621
11/167,218	June 28, 2005	2621
11/300,581	December 15, 2005	2621
11/828,842	July 26, 2007	2421

Application No.: 11/098,385 Docket No.: 37112-215811

It is submitted that the Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed references.

Please charge our Deposit Account No. 22-0261 in the amount of \$180.00 covering the fee set forth in 37 CFR 1.17(p). The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 22-0261, under Order No. 37112-215811.

Dated: Septech 30,2009

Respectfully submitted,

Michael A. Sartori, Ph.D. Registration No.: 41,289

VENABLE LLP P.O. Box 34385

Washington, DC 20043-9998

(202) 344-4000

(202) 344-8300 (Fax)

Attorney/Agent For Applicant

#1044718v1

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
11/098,385	11/098,385 04/05/2005 Peter L. Ven		37112-215811	8277	
²⁶⁶⁹⁴ VENABLE LLI	7590 08/20/200 <b>P</b>	9	EXAM	INER	
P.O. BOX 3438	-	VO, TUNG T			
WASHINGTON, DC 20043-9998			ART UNIT	PAPER NUMBER	
			2621		
			MAIL DATE	DELIVERY MODE	
			08/20/2009	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

		Anna Pan Cam Na	Ann Property			
Office Action Summary		Application No.	Applicant(s)			
		11/098,385	VENETIANER ET AL.			
		Examiner	Art Unit			
		Tung Vo	2621			
Ti Period for R	he MAILING DATE of this communication appe eply	ears on the cover sheet with the c	orrespondence address			
WHICHE - Extension: after SIX ( - If NO peric - Failure to Any reply	TENED STATUTORY PERIOD FOR REPLY VER IS LONGER, FROM THE MAILING DA s of time may be available under the provisions of 37 CFR 1.136 (6) MONTHS from the mailing date of this communication. od for reply is specified above, the maximum statutory period wireply within the set or extended period for reply will, by statute, or received by the Office later than three months after the mailing of tent term adjustment. See 37 CFR 1.704(b).	TE OF THIS COMMUNICATION 6(a). In no event, however, may a reply be tim Il apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	lely filed the mailing date of this communication.  (35 U.S.C. § 133).			
Status						
1) <u></u> Re	sponsive to communication(s) filed on					
2a) <u> </u>	is action is <b>FINAL</b> . 2b)⊠ This a	action is non-final.				
<i>,</i> —	nce this application is in condition for allowand	·				
clo	sed in accordance with the practice under Ex	k parte Quayle, 1935 C.D. 11, 45	3 O.G. 213.			
Disposition	of Claims					
4a) 5)□ Cla 6)⊠ Cla 7)□ Cla	aim(s) <u>1-26</u> is/are pending in the application.  Of the above claim(s) is/are withdraw aim(s) is/are allowed.  aim(s) <u>1-26</u> is/are rejected.  aim(s) is/are objected to.  aim(s) are subject to restriction and/or					
Application	Papers					
10)⊠ The App Rep	e specification is objected to by the Examiner of drawing(s) filed on <u>05 April 2005</u> is/are: a) objection to the deplacement drawing sheet(s) including the correction of the deplacement drawing sheet (s) including the correction of the deplacement drawing sheet (s) including the correction of the deplacement drawing sheet (s) including the correction of the deplacement drawing sheet (s) including the correction of the deplacement drawing sheet (s) including the correction of the deplacement drawing sheet (s) including the correction of the deplacement drawing sheet (s) including the correction of the deplacement drawing sheet (s) including the correction of the deplacement drawing sheet (s) including the correction of the deplacement drawing sheet (s) including the correction of the deplacement drawing sheet (s) including the correction of the deplacement drawing sheet (s) including the correction of the deplacement drawing sheet (s) including the deplacement drawing sheet (s)	☑ accepted or b)☐ objected to be rawing(s) be held in abeyance. See on is required if the drawing(s) is obj	ected to. See 37 CFR 1.121(d).			
Priority unde	er 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)						
	References Cited (PTO-892)	4) Interview Summary				
3) Information	Paper No(s)/Mail Date					

U.S. Patent and Trademark Office PTOL-326 (Rev. 08-06)

Office Action Summary

Part of Paper No./Mail Date 20090330

Application/Control Number: 11/098,385 Page 2

Art Unit: 2621

#### **DETAILED ACTION**

#### Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and

requirements of this title.

1. Claim 1 is rejected under 35 U.S.C. 101 as not falling within one of the four statutory

categories of invention. Supreme Court precedent¹ and recent Federal Circuit decisions² indicate

that a statutory "process" under 35 U.S.C. 101 must (1) be tied to another statutory category

(such as a particular apparatus), or (2) transform underlying subject matter (such as an article or

material) to a different state or thing. While the instant claim recites a series of steps or acts to

be performed, the claim neither transforms underlying subject matter nor is positively tied to

another statutory category that accomplishes the claimed method steps, and therefore does not

qualify as a statutory process. For example there is no device recited within the claims to

accomplish an inventive step(s) of the method.

2. Claims 25-26 are rejected under 35 U.S.C. 101 because "a computer readable medium"

as recited in claims 25 and 26 is a carrier wave, in transmitting and receiving e-mail (signal), or

in accessing a network (signal).

Diamond v. Diehr, 450 U.S. 175, 184 (1981); Parker v. Flook, 437 U.S. 584, 588 n.9 (1978); Gottschalk v. Benson, 409 U.S. 63, 70 (1972); Cochrane v. Deener, 94 U.S. 780, 787-88 (1876).

² In re Bilski, 88 USPQ2d 1385 (Fed. Cir. 2008).

Application/Control Number: 11/098,385 Page 3

Art Unit: 2621

# Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-8 and 18-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Srinivasa et al. (US 7,227,893).

Re claims 1, Srinivasa discloses a video processing apparatus (fig. 1) comprising:
a video content analysis module (12 and 14 of fig. 1) to analyze an input video sequence
(18 of fig. 1) and to derive at least one video primitive (e.g. Intruder Classifier, 16 of fig. 1); and

Application/Control Number: 11/098,385

Art Unit: 2621

a video encoder (e.g. MPEG4 Object-Based Compression, 32 of fig. 1) to receive said input video sequence (VOP is a video object plane as a video sequence) and to output compressed video.

Re claim 2, Srinivasa further discloses a storage module (30 of fig. 1, note the website server data coupled to said video content analysis module to store at least one of the group consisting of a video primitive (Smart Labels of fig. 1) and at least one video frame (not the output of the system is stored in the server, 30 of fig. 1).

Re claim 3, Srinivasa further discloses a communications module (e.g. 34 of fig. 1) coupled to said video content analysis module (e.g. 12-14 of fig. 1) and to said video encoder (32 of fig. 1) to facilitate communication of at least one of the group consisting of said compressed video (compressed video stored in server, 30 of fig. 1) and at least one video primitive (Video Objects with Smart Labels of fig. 1).

Re claim 4 Srinivasa further discloses an event inference module (16 and 20 of fig. 1) coupled to said video content analysis module to detect at least one event (e.g. intruder event).

Re claim 5, Srinivasa further discloses wherein said event inference module is further to generate at least one alert (20 of fig. 1, intruder, YES).

Re claim 6, Scrinivasa further discloses a communications module (30 of fig. 1) coupled to said video encoder (32 of fig. 1) and to said event inference module (16 of fig. 1) to facilitate communication of at least one of the group consisting of said compressed video (col. 14, lines 47-64, note the output of the system can be stored, e.g., in a video database/server for use, e.g., for notifying users when suspicious activity has been detected to have occurred and supplying

Page 4

Application/Control Number: 11/098,385

Art Unit: 2621

Page 5

the user, e.g., with streaming video of the activity) and at least one alert (notifying users when suspicious activity has been detected to have occurred, e.g. 34 of fig. 1).

Re claim 7, Scrinivasa further discloses a communications module (30 of fig. 1) coupled to said video encoder and to said event inference module to facilitate communication of said compressed video (compressed video stream will be transmitted to the user, col. 14, lines 60-64).

Re claim 8, Scrinivasa further discloses a communications module (30 of fig. 1) coupled to said event inference module to receive at least one event rule (col. 16, lines 38-46) and to provide the at least one event rule to said event inference module (16 and 20 of fig. 1, col. 27, lines 20-27).

Re claim 18, Srinivasa further discloses a method of video processing (fig. 1) comprising: detecting whether or not there are one or more activities in a video sequence (e.g. 12-16 and 20 of fig. 1); encoding a video sequence to obtain encoded video (32 of fig. 1); and transmitting said encoded video (30 of fig. 1, transmitting the compressed video to sever); wherein at least one of the group consisting of said encoding and said transmitting depends upon at least one result of said detecting (e.g. VOP, Intruder, Yes of fig. 1).

Re claim 19, Srinivasa further discloses wherein said detecting comprises: analyzing said video sequence to obtain at least one of the group consisting of a video primitive and a detected video event (e.g. 14, 16, and 20 of fig. 1).

Re claim 20, Srinivasa further discloses wherein said transmitting is performed only if said detecting determines that at least one activity is present in said video sequence (VOP, Intruder, Yes, encoding VOP, 32 of fig. 1).

Art Unit: 2621

Re claim 21, Srinivasa further discloses wherein said encoding is performed only if said detecting determines that at least one activity is present in said video sequence (e.g. VOP is encoded, 32 of fig. 1).

#### Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 9-17 and 26 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scrinivasa et al. (US 7,227,893) in view of Elazar et al. (US 2004/0161133).

Re claims 9-17, Scrinivasa further teaches the remote user (e.g. Cell Phone) enables to view the video steam and an alert unit (34 of fig. 1) located remotely from said apparatus and coupled to receive at least one of the group consisting of compressed video and an alert, and Rule-based processing modules (col. 9, lines 7-10) use the motion information to locate objects in scene, color information to extract the true boundaries, and segmentation result of previous frame to track the object.

It is noted that Scrinivasa does not particularly teaches an event inference unit located remotely from said apparatus and coupled to said apparatus, the event inference unit to detect at least one event based on said at least one video primitive generated by said apparatus; a rules management tool located remotely from said apparatus and coupled to said event inference module to provide at least one event rule to said event inference module; a storage module

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located remotely from said apparatus and coupled to receive at least one of the group consisting of compressed video, a video primitive, and an alert; at least two of the apparatuses, said at least one video primitive of each of said apparatuses being combined into a single video primitive stream; and at least two event inference units located remotely from said apparatuses, each of said event inference units coupled to said apparatuses to receive said single video primitive stream, each of the event inference units to detect at least one event based on said single video primitive stream; herein each of said at least two event inference units is adapted to detect a different type of event as specified in claims 9, 11-13, 15-17.

Elazar teaches the cameras (e.g. 12-18 of fig. 1) could be connected to a plurality of computing and storage devices (e.g. 24 of fig. 1; [0030]), wherein units and components of the system (fig. 1) could be installed in distinct device distributed very wide area networks such as Internet, and the plurality of computing and storage devices (24 of fig. 1) are external devices ([0028], note The device 24 could be an external computing platform, such as a personal computer (PC), a UNIX workstation or a mainframe computer having appropriate processing and storage units or a dedicated hardware such as a DSP based platform), this fairly suggests that the plurality of computing and storage devices (24 of fig. 1) are located at the remote location.

Elazar further teaches the computing and storage device at remote location connected to Internet ([0030]) comprises an event inference unit (26 of fig. 1) located remotely from said apparatus and coupled to said apparatus, the event inference unit to detect at least one event based on said at least one video primitive generated by said apparatus; a rules management tool (36 and 46 of fig. 1) located remotely from said apparatus and coupled to said event inference module to provide at least one event rule to said event inference module ([0046], note in order to

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recognize patterns of unpredictable behavior a set of pre-defined rules could be implemented. These rules assist the system in capturing unpredictable behavior patterns taking place within the scenes monitored by the system); a storage module (e.g. 40 and 42 of fig. 1) located remotely from said apparatus and coupled to receive at least one of the group consisting of compressed video, a video primitive, and an alert; at least two of the apparatuses (the cameras and computing and storage device are combined to make obvious at least two apparatuses as suggested by Elazar, [0030] and fig. 1 of Srinivasa), said at least one video primitive of each of said apparatuses being combined into a single video primitive stream; and at least two event inference units (e.g. 26 of fig. 1) located remotely from said apparatuses, each of said event inference units coupled to said apparatuses to receive said single video primitive stream, each of the event inference units to detect at least one event based on said single video primitive stream (e.g. fig. 3A); wherein each of said at least two event inference units is adapted to detect a different type of event (figs. 3A and 4A).

Taking the teachings of Srinivasa and Elazar as a whole, it would have been obvious to one of ordinary skill in the art to modify the teachings of Elazar into the system of Scrinivasa to provide the system that could prevent life-threatening situations.

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Re claims 25 and 26, Elazar further discloses the suitable execution of sets of computer instructions embedded within a specifically developed computer program [0033] to implement the method.

6. Claims 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scrinivasa et al. (US 7,227,893) in view of Hsu et al. (US 7,197,072).

Re claim 22, Srinivasa does not particularly teach wherein a parameter of said encoding is adjusted based upon at least one result of said detecting; a parameter of said transmitting is adjusted based upon at least one result of said detecting; wherein, based upon at least one result of said detecting, at least one of the group consisting of the following is adjusted: bit-rate for said encoding; frame-rate for said encoding; bit-rate for said transmitting; frame-rate for said transmitting; resolution for said encoding; and resolution for said transmitting as claimed.

Hsu teaches wherein a parameter of said encoding is adjusted based upon at least one result of said detecting (Bit Allocation and Rate Control for encoder, figs. 6A and 6B); a parameter of said transmitting is adjusted based upon at least one result of said detecting (fig. 7); wherein, based upon at least one result of said detecting, at least one of the group consisting of the following is adjusted: bit-rate for said encoding (e.g. fig. 7); frame-rate for said encoding (figs. 6A and 6B); bit-rate for said transmitting; frame-rate for said transmitting; resolution for said encoding; and resolution for said transmitting (e.g. figs. 6A, 6B, and 7).

Taking the teachings of Srinivasa and Hsu as a whole, it would have been obvious to one of ordinary skill in the art to modify the teachings of Hsu into Srinivasa to advantageously improve picture quality in a video encoder.

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Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

Chang et al. (US 6,025,877) discloses scalable transmission method of visual objects

segmented by content-base.

Contract Information

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Tung Vo whose telephone number is 571-272-7340. The

examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Mehrdad Dastouri can be reached on 571-272-7418. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

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system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

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like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tung Vo/

Primary Examiner, Art Unit 2621

#### Applicant(s)/Patent Under Application/Control No. Reexamination 11/098,385 VENETIANER ET AL. Notice of References Cited Examiner Art Unit Page 1 of 1 2621 Tung Vo **U.S. PATENT DOCUMENTS** Document Number Date Classification Country Code-Number-Kind Code MM-YYYY * US-5,912,980 A 06-1999 Hunke, H. Martin 382/103 Α * US-6,025,877 A 02-2000 Chang et al. 375/240.01 В US-6,097,429 A 08-2000 Seeley et al. 348/154 С US-6,360,234 B2 03-2002 Jain et al. 715/201 D US-2003/0231769 A1 Bolle et al. 380/210 Е 12-2003 US-2004/0161133 A1 08-2004 Elazar et al. 382/115 F US-2006/0279630 A1 12-2006 Aggarwal et al. 348/143 G Н US-7,197,072 B1 03-2007 Hsu et al. 375/240.02 US-7,227,893 B1 06-2007 375/240.08 Srinivasa et al. 1 * US-7,356,830 B1 04-2008 Dimitrova, Nevenka 725/51 US-7,447,331 B2 382/103 Κ 11-2008 Brown et al. US-US-М FOREIGN PATENT DOCUMENTS Document Number Country Code-Number-Kind Code Date MM-YYYY Name Classification Country Ν 0 Р Q R s Т **NON-PATENT DOCUMENTS** Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages) U

A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).) Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

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PTO-892 (Rev. 01-2001) Notice of References Cited

Part of Paper No. 20090330

	Application/Control No.	Applicant(s)/Patent Under Reexamination
Index of Claims	11098385	VENETIANER ET AL.
	Examiner	Art Unit
	Tung Vo	2621

<b>✓</b>	Rejected	-	Cancelled	N	ı	Non-Elected	Α	Appeal
=	Allowed	÷	Restricted	I		Interference	0	Objected

☐ Claims	renumbered	in the same order a	as presented by	applicant		□ СРА	□ т.с	D. 🗆	R.1.47
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	23	<b>√</b>							
	24	✓							
	25	✓							
	26	<b>√</b>							

U.S. Patent and Trademark Office Part of Paper No.: 20090330

# Application/Control No. Search Notes 11098385 Examiner Tung Vo Applicant(s)/Patent Under Reexamination VENETIANER ET AL. Art Unit 2621

	SEARCHED						
Class	Subclass	Date	Examiner				
348	143, 148, 150, 149, 166, 169, 170	3/31/2009	TV				
382	103, 115	3/31/2009	TV				
375	240.02, 240.08	3/31/2009	TV				

SEARCH NOTES		
Search Notes	Date	Examiner
EAST	3/31/2009	TV

	INTERFERENCE SEA	RCH	
Class	Subclass	Date	Examiner

U.S. Patent and Trademark Office Part of Paper No.: 20090330

# **EAST Search History**

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L8	563	diep.xp.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/02/23 08:28

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L9	382	nhon.xp.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/02/23 08:28
L10	3	7 and 8 and 9	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/02/23 08:28
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L13	110	11 and 12	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/02/23 08:38
L14	1919049	(detect\$4 or determin\$4 or predetermine\$4 or monitored \$4) same (region\$4 or area \$1 or zone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/02/23 08:43
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L17	48536	(operator or user or dient) same (predetermin\$4 or defin\$4 or determin\$4) same rule	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/02/23 08:51

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L22	53	21 and @ad<="20050215"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/02/23 08:52
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# **EAST Search History**

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L6	2335	video same (segment\$4 or extract\$4 or track \$4) same object \$1 same (encod \$4 or compress \$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/03/12 05:49

	681	video same (occur \$4 or event or activit\$4 or intruder or suspect or theft or buglary) same (alarm or alert\$4 or trigger or notification) same remote same (user or client or operator)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/03/12 05:50
L8	5117	video same (occur \$4 or event or activit\$4 or intruder or suspect or theft or buglary or alarm or alert\$4 or trigger or notification) same remote same (user or client or operator)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/03/12 05:51
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		operator)				
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L17	18	video same (segment\$4 or extract\$4) same track\$4 same object\$1 same (encod\$4 or compress\$4) same (surveillance or monitoring or security)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/03/12 06:07

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L7	3	"20050169367"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/03/30 14:37

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L9	29911	(extract\$4 or segment\$4 or divid \$4) same (VO or (video with object) or vop)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/03/31 11:23
L10	10	6 and 8 and 9	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/03/31 11:24
L11	766	8 and 9	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/03/31 11:24
L12	97211	(remot\$4 or surveillan\$4 or traffic\$4 or monitoring or security) same camera	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/03/31 11:25
L13	41	11 and 12	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/03/31 11:25
L14	1076	(extract\$4 or segment\$4 or divid \$4) same (VO or (video with object) or vop) same MPEG \$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/03/31 11:28
L15	1076	9 and 14	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/03/31 11:28

L16	97255	(remot\$4 or surveillan\$4 or traffic\$4 or monitoring or security) same camera\$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/03/31 11:28
L17	89	15 and 16	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/03/31 11:29
L18	6259	((control\$4 or adjust\$4 or allocat \$4) with rate) same (encod\$4 or compress\$4) same video	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/03/31 11:33
L19	596	12 and 18	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/03/31 11:33
L20	41	9 and 19	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/03/31 11:34
L23	10	(("6025877") or ("6360234") or ("7447331") or ("6097429") or ("5912980")).PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/03/31 12:49

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Receipt date: 02/03/2009 11098385 - GAU: 2621

PTO/SB/08b (12-08)
Approved for use through 01/31/2009. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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Sui	ostitute for form 1449/PTO			Complete if Known			
				Application Number	11/098,385-Conf. #8277		
11	NFORMATION	I DI	SCLOSURE	Filing Date	April 5, 2005		
l s	TATEMENT E	3Y /	APPLICANT	First Named Inventor	Péter L. Venetianer		
				Art Unit	2621		
	(Use as many she	ets as	necess ary)	Examiner Name	M. Dastouri		
Sheet	1	of	1	Attorney Docket Number	37112-215811		

	U.S. PATENT DOCUMENTS								
Examiner City Document Number Publication Date Name of Patentee or Relevant Peace									
Examiner Initials*	Cite No.1	Number-Kind Code ² ( if known)	MM-DD-YYYY	Applicant of Cited Document	Relevant Passages or Relevant Figures Appear				
	AA	US-20060232673	10-19-2006	Lipton et al.					
	AB	US-20070002141	01-04-2007	Lipton et al.					
	AC	US-2007/0127774	06-07-2007	Zhang et al.					
	AD	US-20070052803	03-08-2007	Chosak et al.					

	FOREIGN PATENT DOCUMENTS										
Examiner Initials*	Cite No.1	Foreign Patent Document  Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶					
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NON PATENT LITERATURE DOCUMENTS								
Examiner Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journ al, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²					
	CA	International Search Report for International Application No. PCT/US08/09073, dated November 3, 2008.						
	СВ	Written Opinion for International Patent Application No. PCT/US08/09073, dated November 3, 2008.						

Examiner	/Tuna \/a/ (02/21/2000)	Date	03/31/2000
Signature	/Tung Vo/ (03/31/2009)	Considered	00/01/2000

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. * CITE NO.: Those application(s) which are marked with an single asterisk (*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(iii)) because that application was filled after June 30, 2003 or is available in the IFW. * Applicant's unique citation designation number (optional). * See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. * Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). * For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. * Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. * Applicant is to place a check mark here if English language Translation is attached. * #1012430v1

eiphdate: 02/04/2008

11098385 - GAU: 2621

Used in Lieu of PTO/SB/08A/B (Based on PTO 10-07 version)

Sut	estitute for form 1449/PTO			Complete if Known			
				Application Number	11/098,385 - Conf. #8277		
11	NFORMATION	l DI	SCLOSURE	Filing Date	April 5, 2005		
S	TATEMENT I	3Y /	APPLICANT	First Named Inventor	Peter Venetianer		
				Art Unit	2621		
(Use as many she ets as necess ary)				Examiner Name	Mehrdad Dastouri		
Sheet	1	of	1	Attorney Docket Number	37112-215811		

			U.S. PA	TENT DOCUMENTS	
Examiner	Cita	Document Number	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where
Examiner Initials*	Cite No. ¹	Number-Kind Code ² ( if known)	MM-DD-YYYY	Applicant of Cited Document	Relevant Passages or Relevant Figures Appear
	A1	6,424,370	07-23-2002	Courtney	

		FOREIC	ON PATENT	OCUMENTS		
Examiner Initials*	Cite No. ¹	Foreign Patent Document  Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T⁵

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. * CITE NO.: Those application(s) which are marked with an single asterisk (*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(iii)) because that application was filed after June 30, 2003 or is available in the IFW. 'Applicant's unique citation designation number (optional). * See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. * The Theorem The Theorem Theorem

NON PATENT LITERATURE DOCUMENTS					
Examiner Initials	Cite No.1	Include name of the author ( in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²		
	C1	International Search Report issued for PCT Application No. PCT/US06/25196, mailed on January 16, 2008.			
	C2	Written Opinion issued for PCT Application No. PCT/US06/25196, mailed on January 16, 2008.			
	C3	Shio et al., "Segmentation of People in Motion", IEEE 1991, p. 325-332.			

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

DC2/928874

Examiner	/Tuna Vo/ (03/31/2009)	Date	03/31/2009
Signature	riding for (dolo il Eddo)	Considered	00/01/2000

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

11098385 - GAU: 2621

Receipt date:

date: 03/14/2008

Used in Lieu of PTO/SB/08A/B (Based on PTO 10-07 version)

Complete if Known Substitute for form 1449/PTO 11/098,385 - Conf. #8277 Application Number INFORMATION DISCLOSURE April 5, 2005 Filing Date Peter Venetianer STATEMENT BY APPLICANT First Named Inventor 2621 Art Unit (Use as many sheets as necessary) Mehrdad Dastouri Examiner Name 37112-215811 Sheet of 1 Attorney Docket Number

			U.S. PA	TENT DOCUMENTS	
Examiner Initials*	Cite No.1	Document Number  Number-Kind Code ² ( if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	A1	2002/0191851 A1	12-19-2002	Keinan	
	A2	6,707,852 B1	03-16-2004	Wang	

	FOREIGN PATENT DOCUMENTS						
Examiner	Cite	Foreign Patent Document	Publication	Name of Patentee or	Pages, Columns, Lines,		
Initiats*	No.1			Date Applicant of Cited Descript		Name of Patentee or Applicant of Cited Document Or Relevant Passages Or Relevant Figures Appear To as Instruments France Insung Electronics Co.,	
	B1	EP 0893823 A1	01-27-1999	Texas Instruments France			
	B2	EP 1333682 A1	08-06-2003	Samsung Electronics Co., Ltd.			
	B3	EP 0293189 B1	07-13-1994	Sony Corporation			
	B4	WO 1994/003014 A1	02-03-1994	Koz et al.		П	
	B5	JP 09-247654 A	09-19-1997	Fujitsu General Ltd.		Х	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 509. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. *CITE NO.. Those application(s) which are marked with an single asterisk (*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(iii)) because that application was filed after June 30, 2003 or is available in the IFW. *Applicant's unique citation designation number (optional). *2 see Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gpg.vo/mpep-901.04">www.uspto.gpg.vo/mpep-901.04</a>. **Better Office that issued the document, by the two-letter code (WIPO Standard ST.3). *For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. *Skind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. *Gapplicant is to place a check mark here if English language Translation is attached.

	NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No.1	Include name of the author ( in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journ al, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²	
	C1	International Search Report issued in PCT Application No. PCT/US2006/012556, mailed on February 12, 2008.		
	C2	Written Opinion issued in PCT Application No. PCT/US2006/012556, mailed on February 12, 2008.		

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

DC2/935126

Examiner	/Tuna Vo/ (03/31/2009)	Date	03/31/2009
Signature	77 4119 407 (0070 172000)	Considered	

¹Applicant's unique citation designation number (optional). 2Applicant is to place a check mark here if English language Translation is attached.

11098385 - GAU: 2621

Receipt date: 04/11/2008

Used in Lieu of PTO/SB/08A/B (Based on PTO 10-07 version)

Sut	estitute for form 1449/PTO			Complete if Known		
				Application Number	11/098,385 - Conf. #8277	
11	NFORMATION	I DI	SCLOSURE	Filing Date	April 5, 2005	
STATEMENT BY APPLICANT				First Named Inventor	Peter Venetianer	
	INFORMATION DISCLOSURE STATEMENT BY APPLICANT  (Use as many she ets as necess ary)		Art Unit	2621		
	(Use as many she	ets as	necess ary)	Examiner Name	Mehrdad Dastouri	
Sheet	1	of	1	Attorney Docket Number	37112-215811	

			U.S. PA	TENT DOCUMENTS	
Examiner Initials*	Cite No.1	Document Number  Number-Kind Code ² ( if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	A1	6,211,907	04-03-2001	Scaman et al.	
					1

		FOREI	GN PATENT I	DOCUMENTS		
Examiner Initials*	Cite	Foreign Patent Document	Publication	Name of Patentee or	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	
	No.1	Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)	Date MM-DD-YYYY	Applicant of Cited Document		l Le
	B1	WO 01/62005	08-23-2001	Wilson		
						Г

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. * CITE NO.: Those application(s) which are marked with an single asterisk (*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(iii)) because that application was filed after June 30, 2003 or is available in the IFW. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or mPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Skind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁸ Applicant is to place a check mark here if English language Translation is attached.

	NON PATENT LITERATURE DOCUMENTS	
Cite No.1	Include name of the author ( in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journ al, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
C1	Notification for IL App. No. 161777 issued February 21, 2008 and English translation thereof	
	No.1	Cite No.1 Include name of the author ( in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

DC2/944359

Examiner	TT 1/100/04/00000	Date	03/31/2009
Signature	/Tuna Vo/ (03/31/2009)	Considered	00/01/2000

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

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Used in Lieu of PTO/SB/08A/B (Based on PTO 10-07 version)

Complete if Known Substitute for form 1449/PTO 11/098,385 - Conf. #8277 Application Number INFORMATION DISCLOSURE April 5, 2005 Filing Date STATEMENT BY APPLICANT First Named Inventor Peter Venetianer 2621 Art Unit (Use as many sheets as necessary) Mehrdad Dastouri Examiner Name of 2 37112-215811 Sheet Attorney Docket Number

			U.S. PA	TENT DOCUMENTS	
Examiner	Cite	Document Number	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where Relevant Passages or Relevan
Initials*	No.1	Number-Kind Code ² ( if known)	MM-DD-YYYY	Applicant of Cited Document	Figures Appear
	A1	4,249,207	2/3/1981	Harman et al.	
	A2	4,257,063	3/17/1981	Loughry et al.	
	A3	5,926,210	7/20/1999	Hackett et al.	
	A4	5,963,202	10/5/1999	Polish	
	A5	6,069,653	5/30/2000	Hudson et al.	
	A6	6,297,844	10/2/2001	Schatz et al.	
	A7	6,570,608	May-03	Tsergn	
	A8	6,573,907	6/3/2003	Madrane et al.	
	A9	6,696,945	2/24/2004	Venetianer et al.	
	A10	6,727,938	4/27/2004	Randall	
	A11	6,738,424	5/18/2004	Allmen et al.	1
	A12	6,954,498	10/11/2005	Lipton	
	A13	6,987,883	1/17/2006	Lipton et al.	
	A14	2002/0008758	1/24/2002	Broemmelsiek et al.	
	A15	2002/0082769	6/27/2002	Church et al.	
	A16	2005/0146605	7/7/2005	Lipton et al.	
	A17	2005/0157169	7/21/2005	Brodsky et al.	
	A18	2005/0162515	7/28/2005	Venetianer et al.	
	A19	2005/0168574	8/4/2005	Lipton et al.	
	A20	2007/0013776	1/18/2007	Venetianer et al.	
	A21	2007/0127774	6/7/2007	Zhang et al.	
	A22	2008/0100704A1	5/1/2008	Venetianer et al.	

	FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No.1	Foreign Patent Document  Country Code ³ -Number ⁴ -Kind Code ⁵ ( <i>if known</i> )	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	٦			

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Examiner	/Tuna Vo/ (03/31/2009)	Date	00/04/0000
Signature	7 1 4 1 9 1 0 7 (00 70 1 7 2 0 0 0 7	Considered	03/31/2009

Receipt date: 06/09/2008 11098385 - GAU: 2621

Used in Lieu of PTO/SB/08A/B (Based on PTO 10-07 version)

Substitute for form 1449/PTO				Complete if Known		
				Application Number	11/098,385 - Conf. #8277	
INFORMATION DISCLOSURE				Filing Date	April 5, 2005	
STATEMENT BY APPLICANT			APPLICANT	First Named Inventor	Peter Venetianer	
		. –		Art Unit	2621	
	(Use as many sheets as necessary)			Examiner Name	Mehrdad Dastouri	
Sheet	2	of	2	Attorney Docket Number	37112-215811	

_		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No.1	Include name of the author ( in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journ al, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
	C1	CN Office Action for CN 02822772.7 on October 14, 2005 in English.	
	C2	International Search Report issued for PCT Application No. PCT/US06/45625, mailed on September 24, 2007	
	C3	International Search Report issued for PCT Application No. PCT/US01/32614 on May 6, 2002.	
	C4	International Search Report issued for PCT Application No. PCT/US02/22688 on December 11, 2002.	
	C5	Written Opinion of the International Searching Authority issued for PCT Application No. PCT/US06/45625, mailed on September 24, 2007	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

DC2/958994

Examiner	/Tung Vo/ (03/31/2009)	Date	00/04/0000
Signature	/Tung Vo/ (03/31/2009)	Considered	03/31/2009

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

Receipt date: 06/29/2007

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E)			and Trademar	PTO/SB/21 (09-06 of for use through 03/31/2007. OMB 0651-0031 k Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no pen	sons are required to res	Application		11/098,385 – Conf. #8277
TRANSMITT	AL	Filing Date		April 5, 2005
FORM		First Named	Inventor	Peter Venetianer
•		Art Unit		2621
(to be used for all correspondence afte	r initial filing)	Examiner N	ame	Mehrdad Dastouri
Total Number of Pages in This Submis	sion	Attorney Do	cket Number	37112-215811
EN	ICLOSURES	(Check all	that apply	/)
x Fee Transmittal Form	Drawing(s)			After Allowance Communication to TC
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Amendment/Reply	Petition			Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
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□ 37 CFR 1.52 OF 1.53				
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Firm Name VENABLE LLP				
Signature	MANS			
Printed name Marina V. Zalevsky		0		
Date June 29, 2007			Reg. No.	53,825

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Receipt date: 06/29/2007 11098385 - GAU: 2621

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				First Named Inv	<del></del>	Peter Venetian	er	
	For FY 20	06		Examiner Name		Mehrdad Dasto		
Applicant of	laims small entity status	s. See 37 CFR 1.27	.	Art Unit		2621		
TOTAL AMOUN	OF PAYMENT	(\$) 0.00		Attorney Docket	No.	37112-215811		
METHOD OF F	PAYMENT (check a	II that apply)						
Check	Credit Card	Money Order	None	Other (	please iden	tify):		
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Signature	111/2/11	$\mathcal{M}^{\mathcal{M}}$		legistration No. Attorney/Agent)	53,82	5 Telephone	(202) 34	44-497
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DC1/244936

Receipt date: 06/29/2007 11098385 - GAU: 2621



Docket No.: 37112-215811

(PATENT)

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Venetianer et al.

Application No: 11/098,385 Examiner: Mehrdad Dastouri

Confirmation No: 8277

Filed: April 5, 2005 Atty. Docket No: 37112-215811

Customer No:

Art Unit: 2613

For: VIDEO SURVEILLANCE SYSTEM EMPLOYING VIDEO PRIMATIVES

26694
PATENT TRADEMARK OFFICE

#### **INFORMATION DISCLOSURE STATEMENT (IDS)**

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the reference listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

The present Information Disclosure Statement is being filed before the mailing date of the first Office Action on the merits, and therefore no Statement Under 37 C.F.R. § 1.97(e) or fee under 37 C.F.R. § 1.17(p) is required.

In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as

Receipt date: 06/29/2007 11098385 - GAU: 2621

Application No.: 11/098,385 Docket No.: 37112-215811

defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing of this Information Disclosure Statement shall not be construed to be an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

It is submitted that the Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed references.

We believe that no fees are required with the submission of this IDS. However, the Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 22-0261, under Order No. 37112-215811.

Dated: June 29, 2007

Respectfully submitted,

DC1/244916

Registration No.: 53,825

VENABLE LLP P.O. Box 34385

Washington, DC 20043-9998

(202) 344-4000 (202) 344-8300 (Fax)

Attorney/Agent For Applicant

Receipt date: 06/29/2007 11098385 - GAU: 2621

PTO/SB/08A/B (09-06)
Approved for use through 03/31/2007. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE espond to a collection of information unless it contains a valid OMB control number. Under the Paperwork Reduction Act of 1995, no persons are required to

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet of 1

Complete if Known					
Application Number 11/098,385 - Conf. #8277					
Filing Date	April 5, 2005				
First Named Inventor	Peter Venetianer				
Art Unit	2621				
Examiner Name	Mehrdad Dastouri				
Attomey Docket Number	37112-215811				

	U.S. PATENT DOCUMENTS								
Examiner Initials*			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear				
	AA	US-6,628,835	09-30-2003	Brill et al.					
	AB	US-							

	FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No.1	Foreign Patent Document  Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear				
	BA								
	BB								

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 'Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁸ Applicant is to place a check mark here if English language Translation is attached.

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
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^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Examiner	Tuna Va/ (02/21/2000)	Date	00/01/0000
Signature	/Tung Vo/ (03/31/2009)	Considered	03/31/2009

^{&#}x27;Applicant's unique citation designation number (optional). 'Applicant is to place a check mark here if English language Translation is attached.

11098385 - GAU: 2621

Receipt date 187/01/2005

**(B**E UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Confirmation No: 8277

Peter VENETIANER et al.

Art Unit: 2613

Application No: 11/098,385

Examiner: Not yet assigned

Filed: April 5, 2005

Atty. Docket No: 37112-215811

For: VIDEO SURVEILLANCE SYSTEM

Customer No:

26694 PATENT TRADEMARK OFFICE

EMPLOYING VIDEO PRIMITIVES

#### INFORMATION DISCLOSURE STATEMENT

Mail Stop: Patent Applications
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Sir:

This is an Information Disclosure Statement submitted under 37 C.F.R. § 1.97 within the time specified under 37 C.F.R. § 1.97(b).

In order to comply with applicant's duty of disclosure under 37 C.F.R. § 1.56, the U.S. Patent and Trademark Office is notified of the documents which are listed on the attached Form PTO/SB/08A and which the Examiner may deem relevant to patentability of the claims of the above-identified application. No copies of the listed documents are being submitted as these documents have previously been submitted to the Patent Office and/or made of record in copending Applications No. 09/694,712, 09/987,707 and 11/057,154.

The present Information Disclosure Statement is being filed before the mailing date of the first Office Action on the merits, and therefore no Statement Under 37 C.F.R. § 1.97(e) or fee under 37 C.F.R. § 1.17(p) is required.

In view of the above, no further translation or statement of relevance is required, and as all requirements of 37 C.F.R. § 1.97 and all official guidelines pertaining to Information

Receipt date: 07/01/2005 11098385 - GAU: 2621

Applicants: Peter VENETIANER et al. Application No.: 11/098,385

Disclosure Statements have been complied with, and it is therefore respectfully requested that the Examiner consider the documents and make them of record.

No fee is due for the submission of this Information Disclosure Statement. However, if any additional fees are deemed necessary, please charge any necessary fee or credit any overpayment in connection with this Information Disclosure Statement to Deposit Account No. 22-0261.

Respectfully submitted,

Date: July 1, 2005

Registration No. 44,457 VENABLE LLP P.O. Box 34385

Washington, D.C. 20043-9998

Telephone: (202) 344-4000 Facsimile: (202) 344-8300

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11098385 - GAU: 2621

Receipt date: 07/01/2005 PTO/SB/08A (08-00)
Approved for use through 10/31/2002. OMB 0851-0031
Approved for use through 10/31/2002. O Under the Paperwork Reduction Act of 1995, noticersons are requi Substitute for form 1449A/PTO Complete if Known Application Number 11/098,385 INFORMATION DISCLOSURE Filing Date April 25, 2005 STATEMENT BY APPLICANT First Named Inventor P. VENETIANER et al. Group Art Unit (use as many sheets as necessary) Examiner Name Not Yet Assigned Sheet of 3 Attorney Docket Number 37112-215811

	,			U.S. PATENT DOCUM	MENTS	
Examiner Initials *	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant	Date of Publication of	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Kind Code ² (if known)		of Cited Document	Cited Document MM-DD-YYYY	
	1	6,801,662	Bi	OWECHKO, et al.	10/05/2004	
	2	6,597,800	B1	MURRAY, et al.	7/22/2003	
	3	2003/0051255	A1	BULMAN, et al.	3/13/2003	
	4	6,504,479	Bi	LEMONS, et al.	1/07/2003	
	5	6,411,724	B1	VAITHILINGAM, et al.	6/25/2002	
	6	6,351,265	B1	BULMAN	2/26/2002	
	7	6,351,492	Bl	KIM, Jin-Hun	2/26/2002	
	8	6,326,964	B1	SNYDER, et al.	12/04/2001	
	9	6,310,916	B1	HAN, Seok-Won	10/30/2001	
	10	6,307,885	B1	MOON, et al.	10/23/2001	
	11	6,226,388		QIAN, et al.	05/01/01	
	12	6,201,473		SCHAFFER	03/13/01	
	13	6,177,886		BILLINGTON, et al.	01/23/01	
	14	6,166,744	А	JASZLICS, et al.	12/26/2000	
	15	6,151,413	Α	JANG, Euce-seon	11/21/2000	
	16	6,144,375		JAIN et al.	11/7/2000	
	17	6,097,429		SEELEY, et al.	08/01/00	
	18	6,091,771		SEELEY, et al.	07/18/00	
	19	6,075,560		KATZ	06/13/00	
	20	6,014,461		HENNESSEY et al.	1/11/2000	
	21	5,999,189		KAJIYA, et al.	12/07/99	
	22	5,987,211		ABECASSIS	11/16/99	
	23	5,983,147	A	KRUMM, John	11/09/1999	
	24	5,959,690		TOEBES, VIII, et al.	09/28/99	
	25	5,956,081		KATZ, et al.	09/21/99	
	26	5,886,701		CHAUVIN, et al.	03/23/99	
	27	5,860,086		CRUMP, et al.	01/12/99	
	28	5,801,943		NASBURG	09/01/98	
	29	5,696,503		NASBURG	12/09/97	
	30	5,623,249		CAMIRE	04/22/97	
	31	5,610,653		ABECASSIS	03/11/97	
	32	5,491,511		ODLE	02/13/96	
	33	5,448,315	1	SOOHOO	09/05/95	
	34	3,812,287	1	LEMELSON	05/21/74	

				FOREIG	N PATENT	r DOCU	MENTS			
Examiner Initials*	Cite No.1	Foreign Patent Document			Name of Patentee or Applicant of		Date of Publication of Cited Document		Pages, Columns, Lines, Where Relevant	
		Office ³	Number⁴	Kind Code ⁵ (if known)	Cited Document	MM-DD-YYYY	Passages or Relevant Figures Appear	Тв		
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Examiner Signature		/Tung	y Vo/ (03/	31/2009)		Date Consid	ered		03/31/2009	

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Receipt date: 07/01/2005 Under the Paperwork Reduction All of 1995, no person 1449A/PTO

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Substitute for form 1449A/PTO

# INFORMATION DISCLOSO STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet of

Complete if Known				
Application Number	11/098,385			
Filing Date	April 5, 2005			
First Named Inventor	P. VENETIANER et al.			
Group Art Unit	2613			
Examiner Name	Not Yet Assigned			
Attorney Docket Number	37112-215811			

		OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS								
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.								
	35	H. Fujiyoshi and A. J. Lipton, "Real-time Human Motion Analysis by Image Skeletonization, "Proceedings of IEEE WACV'98, Princeton, NJ, 1998, pp.15-21.								
	36	A. J. Lipton, H. Fujiyoshi and R. S. Patil, "Moving Target Classification and Tracking from Real-time Video," <u>Proceedings of IEEE WACV'98</u> , Princeton, NJ, 1998, pp.8-14.								
	37	A. J. Lipton, "Local Application of Optic Flow to Analyse Rigid Versus Non-Rigid Motion," <u>International Conference on Computer Vision</u> , Corfu, Greece, September 1999.								
	38	R. T. Collins, Y. Tsin, J. R. Miller, and A. J. Lipton "Using a DEM to Determine Geospatial Object Trajectories," CMU-RI-TR-98-19, 1998.								
	39	A. Selinger and L. Wixson, "Classifying Moving Objects as Rigid or Non-Rigid Without Correspondences <u>Proceedings of DARPA Image Understanding Workshop.</u> 1, November 1998, pp. 341-47.								
	40	Jemez Technology Corp., Variant iD Web-Site, www.variantid.com, printed August 25, 2003.								
	41	Alan J. Lipton "Virtual Postman-An Illustrative Example of Virtual Video," International Journal of Robotics and Automation, Vol. 15, No. 1, January 2000, pages 9-16.								
	42	Alan J. Lipton, "Virtual Postman – Real-Time, Interactive Virtual Video," IASTED Conference on Computer Graphics and Imaging (CGIM '99), Palm Springs, October 25-27, 1999.								
	43	Robert T. Collins et al., "A System for Video Surveillance and Monitoring," Technical Report CMU-RI-TR-00-12, Robotics Institute, Carnegie Mellon University, May 2000.								
	44	L. WIXSON ET AL., "Detecting Salient Motion by Accumulating Directionally-Consistent Flow," IEEE, 1999.								
	45	W.E.L. GRIMSON ET AL., "Using Adaptive Tracking to Classify and Monitor Activities in a Site," CVPR, pp. 22-29, June 1998.								
	46	A.J. LIPTON ET Al., "Moving Target Classification and Tracking from Real-time Video," IUW, pp. 129-136, 1998.								
	47	T.J. OLSEN ET AL., "Moving Object Detection and Event Recognition Algorithm for Smart Cameras," IUW, pp. 159-175, May 1997.								
	48	A. J. LIPTON, "Local Application of Optical Flow to Analyse Rigid Versus Non-Rigid Motion," International Conference on Computer Vision Frame Rate Workshop, Corfu, Greece, September 1999.								
	49	F. BARTOLINI ET AL., "Counting people getting in and out of a bus by real-time image-sequence processing," IVC, 12(1):36-41, January 1994.								
	50	M. ROSSI ET AL., "Tracking and counting moving people," ICIP94, pp. 212-216, 1994.								
	51	C.R. WREN ET AL., "Pfinder: Real-time tracking of the human body," Vismod, 1995.								
	52	L. KHOUDOUR ET AL., "Real-Time Pedestrian Counting by Active Linear Cameras," JEI, 5(4):452-459, October 1996.								
	53	S. IOFFE ET AL., "Probabilistic Methods for Finding People," IJCV, 43(1):45-68, June 2001.								
Examiner Signature		/Tung Vo/ (03/31/2009) Date Considered 03/31/2009								

11098385 - GAU: 2621

Receipt date: 07/01/2005 PTO/SB/08A (08-00) Please type a plus sign (+) inside this box Approved for use through 10/31/2002. OMB 0651-0031 U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE prespond to a collection of information unless it contains a valid OMB control number. Under the Paperwork Reduction Act of 199 Substitute for form 1449A/PTO Complete if Known Application Number 11/098,385 INFORMATION DISCLOSURE Filing Date April 5, 2005 STATEMENT BY APPLICANT First Named Inventor P. VENETIANER et al. Group Art Unit (use as many sheets as necessary) **Examiner Name** Not Yet Assigned

Attorney Docket Number

37112-215811

Examiner Initials *	Cite No. Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-iss number(s), publisher, city and/or country where published.						
	54	M. ISARD ET AL., "BraMBL	•	<del></del>			
<u></u>	55	D.M. GAVRILA, "The Visual Analysis of	Human Movement: A Surve	ey," CVIU, 73(1):82-98, January 1999.			
	56	N. HAERING ET AL., "Visual Event De	tection," Video Computing	Series, Editor Mubarak Shah, 2001.			
	57	COLLINS ET AL., "A System for Video Surveille TR-00-12, Robotics Ins	ance and Monitoring: VSA! titute, Carnegie Mellon Uni				
	58	J.P. DEPARIS ET AL., "A Device for Counting I Algorithm	Passengers Making Use of T ns," IEEE, pp. 1629-1634, 1				
	59	C.R. WREN ET AL "Pfinder: Real-Time	Tracking of the Human Boo	ly," PAMI, vol 19, pp. 780-784, 1997.			
	60	M. ALLMEN ET AL., "LongRange Spatiotent IEEE CVPR, Lah	ooral Motion Understanding aaina, Maui, Hawaii, pp. 303				
	61	L. WIXSON, "Detecting Salient Motion by Accum Intell., ve	nulating Directionally Consi ol. 22, pp. 774-781, Aug, 20				
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Examiner Signature		/Tung Vo/ (03/31/2009)	Date Considered	03/31/2009			

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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Sheet

of 3

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Receipt date: 08/13/2007

11098385 - GAU F621

TRANSMITTAL Filing Date April 5, 2005 First Named Inventor Art Unit 2621 Examiner Name Mehrdad Dastouri Attorney Docket Number  Transmittal Form Drawing(s)  Fee Attached  Amendment/Reply  Petition  After Final Petition to Convert to a Provisional Application Affidavits/declaration(s)  Petiton  Application Number 11/098,385 - Conf. #8277  April 5, 2005 Peter Venetianer  April 5, 2005 Peter Venetianer  After Venetianer  After Venetianer  After Venetianer  After Allowance Communication to TC Appeal Communication to Board of Appeals and Interferences  Amendment/Reply Petition Petition to Convert to a Provisional Application Provisional Application Provisional Application  Affidavits/declaration(s)  Extension of Time Request  Terminal Disclaimer  Application Number  April 5, 2005  Peter Venetianer  After Venetianer  April 5, 2005  Peter Venetianer  April 5, 2005  Peter Venetianer  April 5, 2005  Peter Venetianer  After Venetianer  After Allowance Communication to TC (Appeal Communication to Board of Appeals and Interferences  Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)  Provisional Application Provisional Application Status Letter  X Other Enclosure(s) (please Identify below):	. delader that Werenwork Reduction Act of 1995	no persons are required	U.S. Patent and T	PTO/SB/21  oved for use through 03/31/2007. OMB 0651-001 rademark Office; U.S. DEPARTMENT OF COMI information unless it displays a valid OMB control
First Named Inventor Peter Venetianer  Art Unit 2621  Examiner Name Mehrdad Dastouri  Attorney Docket Number 37112-215811   ENCLOSURES (Check all that apply)  Fee Transmittal Form Drawing(s) After Allowance Communication to TC Appeal Com			<del></del>	
Art Unit 2621  Examiner Name Mehrdad Dastouri  Attorney Docket Number 37112-215811   ENCLOSURES (Check all that apply)  Fee Transmittal Form Drawing(s) After Allowance Communication to TC Appeal Communication to TC Appeal Communication to TC Appeal Notice, Brief, Reply Brief)  Amendment/Reply Petition Convert to a Provisional Application Proprietary Information Change of Correspondence Address  Extension of Time Request Provisional Application Status Letter Other Enclosure(s) (please Identify below):  Express Abandonment Request Request Provisional Application CD, Number of CD(s)  Copy of International Search Report in PCT/US06/02700 and Written Opinion  Reply to Missing Parts/ Incomplete Application Report under 37 CFR 1.52 or 1.53	TRANSMITT	AL	Filing Date	April 5, 2005
Art Unit  Examiner Name  Mehrdad Dastouri  Attorney Docket Number  37112-215811   ENCLOSURES (Check all that apply)  Fee Transmittal Form  Drawing(s)  Licensing-related Papers  Appeal Communication to Board of Appeals and Interferences  Amendment/Reply  Petition  After Final  Provisional Application  Aftidavits/declaration(s)  Extension of Time Request  Express Abandonment Request  Express Abandonment Request  Supplemental Information  Supplemental Information  Disclosure Statement and Proyse of Active Refund  CD, Number of CD(s)  Reply to Missing Parts/ Incomplete Application  Reply to Missing Parts under  37 CFR 1.52 or 1.53	FORM		First Named Inventor	Peter Venetianer
Attorney Docket Number   37112-215811			Art Unit	2621
ENCLOSURES (Check all that apply)  Fee Transmittal Form  Drawing(s)  Fee Attached  Licensing-related Papers  Appeal Communication to Board of Appeals and Interferences  Amendment/Reply  After Final  Petition  Petition to Convert to a Provisional Application  Affidavits/declaration(s)  Extension of Time Request  Express Abandonment Request  Express Abandonment Request  Supplemental Information Disclosure Statement and PTO/SB/08A  Certified Copy of Priority Document(s)  Reply to Missing Parts under  37112-215811  After Allowance Communication to TC (Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)  Proprietary Information Disclosioner  X Other Enclosure(s) (please Identify below):  Copy of International Search Report in PCT/US06/02700 and Written Opinion  CD, Number of CD(s)  Remarks  Reply to Missing Parts under  37 CFR 1.52 or 1.53	(to be used for all correspondence affi	er initial filing)	Examiner Name	Mehrdad Dastouri
Fee Transmittal Form    Drawing(s)	(to be dead to division expension as also	, miles image	Attorney Docket Numb	37112-215811
Fee Attached  Licensing-related Papers  Petition  Appeal Communication to Board of Appeals and Interferences  Appeal Communication to Board of Appeals and Interferences  Appeal Communication to TC  (Appeal Notice, Brief, Reply Brief)  Petition  Petition  Petition Convert to a Provisional Application  Power of Attorney, Revocation Change of Correspondence Address  Extension of Time Request  Express Abandonment Request  Express Abandonment Request  Supplemental Information Disclosure Statement and PTO/SB/08A  Certified Copy of Priority Document(s)  Reply to Missing Parts/ Incomplete Application  Reply to Missing Parts under  37 CFR 1.52 or 1.53	Е	NCLOSURES	(Check all that ap	oly)
Fee Attached  Licensing-related Papers  Appeal Communication to Board of Appeals and Interferences  Amendment/Reply  Petition  After Final  Petition to Convert to a Provisional Application  Power of Attorney, Revocation Change of Correspondence Address  Extension of Time Request  Terminal Disclaimer  Express Abandonment Request  Request for Refund  CD, Number of CD(s)  Petition to Convert to a Provisional Application  Provisional Application  Proprietary Information  Status Letter  X Other Enclosure(s) (please Identify below):  Copy of International Search Report in PCT/US06/02700 and Written Opinion  CD, Number of CD(s)  Reply to Missing Parts/ Incomplete Application  Reply to Missing Parts under  37 CFR 1.52 or 1.53	Fee Transmittal Form	Drawing(s)		
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Provisional Application  Affidavits/declaration(s)  Extension of Time Request  Express Abandonment Request  Supplemental Information Disclosure Statement and PTO/SB/08A  Certified Copy of Priority Document(s)  Reply to Missing Parts/ Incomplete Application  Provisional Application  Provisional Application  Provisional Application  Power of Attorney, Revocation Change of Correspondence Address  X Other Enclosure(s) (please Identify below):  Copy of International Search Report in PCT/US06/02700 and Written Opinion  CD, Number of CD(s)  Landscape Table on CD  Reply to Missing Parts/ Incomplete Application  Reply to Missing Parts under 37 CFR 1.52 or 1.53	Amendment/Reply	Petition		Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
Extension of Time Request  Express Abandonment Request  Express Abandonment Request  Copy of International Search Report in PCT/US06/02700 and Written Opinion  Copy of International Search Report in PCT/US06/02700 and Written Opinion  Copy of International Search Report in PCT/US06/02700 and Written Opinion  Copy of International Search Report in PCT/US06/02700 and Written Opinion  Copy of International Search Report in PCT/US06/02700 and Written Opinion  Copy of International Search Report in PCT/US06/02700 and Written Opinion  Copy of International Search Report in PCT/US06/02700 and Written Opinion  Copy of International Search Report in PCT/US06/02700 and Written Opinion  Copy of International Search Report in PCT/US06/02700 and Written Opinion  Copy of International Search Report in PCT/US06/02700 and Written Opinion  Copy of International Search Report in PCT/US06/02700 and Written Opinion  Copy of International Search Report in PCT/US06/02700 and Written Opinion  Copy of International Search Report in PCT/US06/02700 and Written Opinion  Copy of International Search Report in PCT/US06/02700 and Written Opinion  Copy of International Search Report in PCT/US06/02700 and Written Opinion  Copy of International Search Report in PCT/US06/02700 and Written Opinion  Copy of International Search Report in PCT/US06/02700 and Written Opinion  Copy of International Search Report in PCT/US06/02700 and Written Opinion  Copy of International Search Report in PCT/US06/02700 and Written Opinion  Copy of International Search Report in PCT/US06/02700 and Written Opinion  Copy of International Search Report in PCT/US06/02700 and Written Opinion  Copy of International Search Report in PCT/US06/02700 and Written Opinion  Copy of International Search Report in PCT/US06/02700 and Written Opinion  Copy of International Search Report in PCT/US06/02700 and Written Opinion  Copy of International Search Report in PCT/US06/02700 and Written Opinion  Copy of International Search Report in PCT/US06/02700 and Written Opinion  Copy of Int	After Final			Proprietary Information
Express Abandonment Request  Supplemental Information Disclosure Statement and PTO/SB/08A  Certified Copy of Priority Document(s)  Reply to Missing Parts/ Incomplete Application  Reply to Missing Parts under 37 CFR 1.52 or 1.53	Affidavits/declaration(s)			Status Letter
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Receipt date: 08/13/2007 11098385 - GAU: 2621

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ģ	es pursuant to the	Effective on 12/08/2004 Consolidated Appropriati	4. ions Act, 2005 (H.R. 4	(818).	Application Num	ber	11/098,385 - C	onf. #827	7
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10	, - ——	For FY 200			First Named Inve	entor	Peter Venetian		
1		10111200	1		Examiner Name		Mehrdad Dasto	ouri	
	Applicant cla	aims small entity status.	See 37 CFR 1.27		Art Unit		2621		
	OTAL AMOUNT	OF PAYMENT	(\$) 0.00		Attorney Docket I	No.	37112-215811		
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l	Provisional	200	100	0	0	0	0		
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	listings under	37 CFR 1.52(e)), the	application size	fee due	is \$250 (\$125 f	or small	entity) for each ac	Iditional 50	
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	nature	$M \cdot M$			Registration No. (Attorney/Agent)	53,825	Telephone	(202) 344	-4975
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Receipt date: 08/13/2007 11098385 - GAU: 2621

Docket No.: 37112-215811

(PATENT)

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Venetianer et al.

Application No: 11/098,385

Confirmation No: 8277

Filed: April 5, 2005

Art Unit: 2621

Examiner: Mehrdad Dastouri

Atty. Docket No: 37112-215811

Customer No:

26694
PATENT TRADEMARK OFFICE

For: VIDEO SURVEILLANCE SYSTEM EMPLOYING VIDEO PRIMATIVES

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT TO THE INFORMATION DISCLOSURE STATEMENT FILED JUNE 29, 2007

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to International Search Report and Written Opinion in related International Patent Application No. PCT/US06/02700. It is respectfully requested that the information be expressly considered during the prosecution of this application.

The present Supplemental Information Disclosure Statement is being filed before the mailing date of the first Office Action on the merits, and therefore no Statement Under 37 C.F.R. § 1.97(e) or fee under 37 C.F.R. § 1.17(p) is required.

In accordance with 37 CFR 1.97(g), the filing of this Supplemental Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing of this Supplemental Information Disclosure Statement shall not be construed to be an

Receipt date: 08/13/2007 11098385 - GAU: 2621

Application No.: 11/098,385 Docket No.: 37112-215811

admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

We believe that no fees are required with the submission of this Supplemental Information Disclosure Statement. However, the Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 22-0261, under Order No. 37112-215811.

Dated: August <u>1</u>, 2007

Respectfully submitted,

Marina V. Zalevsky

Registration No.: 53,825

VENABLE LLP P.O. Box 34385

Washington, DC 20043-9998

(202) 344-4000 (202) 344-8300 (Fax)

Attorney/Agent For Applicant

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Receipt date: 08/13/2007

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THE PROPERTY.

PTO/SB/08A/B (09-06)

Approved for use through 03/31/2007. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
der the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

ubstitute for form 1449/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1 of

Complete if Known						
Application Number	11/098,385 – Conf. #8277					
Filing Date	April 5, 2005					
First Named Inventor	Peter Venetianer					
Art Unit	2621					
Examiner Name	Mehrdad Dastouri					
Attorney Docket Number	37112-215811					

			U.S. PAT	ENT DOCUMENTS	
Examiner Initials*	Cite No.1	Document Number  Number-Kind Code ² ( if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	AA				
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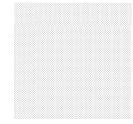
		FOREIC	ON PATENT	DOCUMENTS	
Examiner Initials*	Cite No.1	Foreign Patent Document  Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	ВА				
	BB				

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. \(^1\) Applicant's unique citation designation number (optional). \(^2\) See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. \(^3\) Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). \(^4\) For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. \(^5\) Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. \(^6\) Applicant is to place a check mark here if English language Translation is attached.

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	CA	International Search Report and Written Opinion in PCT/US06/02700  04/13/2007	
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^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

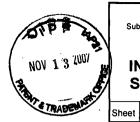
¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.



Examiner	/T \ /- / /00/04/0000\	Date	03/31/2000
Signature	/Tung Vo/ (03/31/2009)	Considered	03/31/2009

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Substit	ute for form 1449/PT	0		Application Number	11/098,385 - Conf. # 8277		
				Filing Date	April 5, 2005		
INF	ORMATIC	ום אנ	SCLOSURE	First Named Inventor	Peter L. Venetianer		
			APPLICANT	Art Unit	2621		
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heet	1	of	1	Attorney Docket Number	37112-215811		

			U.S. PA	TENT DOCUMENTS	
Examiner	Cite	Document Number	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where
Initials*	No.1	Number-Kind Code ² ( if known)	MM-DD-YYYY	Applicant of Cited Document	Relevant Passages or Relevant Figures Appear
	AA	6,987,528	01/17/06	Nagahisa	
	AB	6,741,977	05/25/04	Nagaya	
	AC	6,542,840	04/01/03	Shusaku	
	AD	6,816,184	11/2004	Brill et al.	
	ΑE	7,023,469	04/2006	Olson	
	AF	6,924,801	08/2005	Dorbie	
	AG	6,844,818	01/2005	Grech-Cini	
	AH	2002/0024446	02/2002	Grech-Cini	
	AI	2002/0163521	11/2002	Ellenby et al.	
	AJ	6,088,484	07/2000	Mead	
	AK	2002/0051058	05/2002	Ito et al.	
	AL	6,829,371	12/2004	Nichani et al.	
	AM	6,404,455	06/2002	Ito et al.	
	AN	2003/0053659	03/2003	Pavlidis et al.	
	AO	4,737,847	04/1988	Araki et al.	
	AP	2002/0135483	09/2002	Merheim et al.	
	AQ	5,802,361	09/1998	Wang et al.	
	AR	5,515,453	05/1996	Hennessey et al.	
	AS	4,908,704	03/1990	Fujioka et al.	
	AT	5,872,865	02/1999	Normile et al.	

		FOREI	GN PATENT	DOCUMENTS		
Examiner Initials*	Cite No.1	Foreign Patent Document  Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T°
	ВА	JP 10-048008	2/20/98	Omron		7
	BB	JP 2000-339923	8/12/2000	Mitsubishi		1
	BC	JP 2000-224542	11/08/2000	Hitachi		1
	BD	EP 1024666 A2	8/02/2000	Hitachi		
	BE	JP 2001-175868	6/29/01	NEC Corp		1
	BF	JP 2000-175174	6/23/2000	Mitsubishi		1
	BG	JP 2001-285681	10/12/2001	Matsushita		1
	ВН	EP 1120746 A2	8/01/2001	Matsushita		

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. Deteror Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No.1	Include name of the author ( in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
	CA	JP Office Action issued in PCT/US02/22688, along with an English translation 10/09/200	77
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^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

Examiner		Date	00/04/0000
Signature	<u>/Tung Vo/ (03/31/2009)</u>	Considered	03/31/2009

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Receipt date: 11/20/2008 11098385 - GAU: 2621

Used in Lieu of PTO/SB/08A/B (Based on PTO 10-07 version)

Sub	stitute for form 1449/PTO			Complete if Known			
				Application Number	11/098,385 - Conf. #8277		
IN	<b>IFORMATION</b>	N DI	SCLOSURE	Filing Date	April 5, 2005		
S	TATEMENT I	3Y /	APPLICANT	First Named Inventor	Peter Venetianer		
_				Art Unit	2621		
	(Use as many sh	e ets as	necess ary)	Examiner Name	Mehrdad Dastouri		
Sheet	1	of	1	Attorney Docket Number	37112-215811		

			U.S. PA	TENT DOCUMENTS	
Examiner	Cite	Document Number	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where Relevant Passages or Relevant
Initials*	No.1	Number-Kind Code ² (if known)	MM-DD-YYYY	Applicant of Cited Document	Figures Appear
	A1	5,963,203 A	10-1999	Goldberg et al.	
	A2	6,031,573 A	02-2000	MacCormack et al.	
	А3	2001/0019357 A1	09-2001	Ito et al.	
	A4	2001/0033330 A1	10-2001	Garoutte, Maurice V.	
	A5	2001/0035907 A1	11-2001	Broemmelsiek, Raymond M	
	A6	2002/0008758 A1	01-2002	Broemmelsiek et al.	
	A7	2002/0095490 A1	07-2002	Barker et al.	
	A8	6,525,658 B2	02-2003	Streetman et al.	
	A9	6,570,608 B1	05-2003	Tseng, Christopher	
	A10	6,573,907 B1	06-2003	Madrane, Nabil	
	A11	6,646,676 B1	11-2003	DaGraca et al.	
	A12	6,724,915 B1	04-2004	Toklu et al.	
	A13	2004/0161133 A1	08-2004	Elazar et al.	
	A14	2004/0240542 A1	12-2004	Yeredor et al	
	A15	6,865,580 B1	03-2005	Bush, Eric N.	
	A16	7,023,469 B1	04-2006	Olson, Thomas J.	

	FOREIGN PATENT DOCUMENTS									
Examiner Initials*	Cite No.1	Foreign Patent Document  Country Code ³ -Number ⁴ -Kind Code ⁵ ( <i>if known</i> )	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear					

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. * CITE NO: Those application(s) which are marked with an single asterisk (*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(iii)) because that application was filed after June 30, 2003 or is available in the IFW. * Applicant's unique citation designation number (optional). * See Kind Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. * * Include 1 is sued the document, by the two-letter code (WIPO Standard ST.3). * For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. * Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. * Applicant is to place a check mark here if English language Translation is attached.

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No. ¹	Include name of the author ( in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	<b>T</b> ²

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

DC2/993401

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	Considered	03/31/2009

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

Receipt date:, 11/29/2005

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(to be used for all co	rrespondence after ir	nitial filing)	Group Art Unit		2613		
			Examiner Name		Not yet as	signed	
Total Number of Page	s in This Submission		Attorney Docket No	umber	37112-215	811	
	<u></u>	ENCL	OSURES (check all tha	t apply)	-		
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After Final		Petitior	ı		☐ Proprie	etary Information	
Affidavits/dec	claration(s)	Petition to Convert to a Provisional Application		☐ Status	Letter		
Extension of Time Request		Power of Attorney, Revocation Change of Correspondence Address			Enclosure(s) identify below):		
Express Abandor	nment Request	☐ Terminal Disclaimer ☐ Request for Refund			PT	O/SB/08A with 1 Ref	Terence
Information Discl	osure Statement	CD, Number of CD(s)					
Certified Copy of Document(s)	Priority	Remarks					
Response to Miss		A copy of	copy of JP-10-290449 and the English translation of the Abstract are attached.				
Response to Parts under 3 1.52 or 1.53							
	SIGNA	TURE OF	APPLICANT, ATTOR	RNEY, O	R AGENT		
Firm or Individual name	Venable P.O. Box 34385 Washington, D.C. 20	0043-9998				26694 TRADEMARK OFFICE	
Signature	Mar			Jeffrey W.	Gluck – Reg.	No. 44,457	
Date	November 29, 2005					<del></del>	
	_	CEI	RTIFICATE OF MAIL	ING			-
I hereby certify that this	correspondence is bei	ng deposited v	with the United States Pos	tal Service	as first class	nail in an envelope	
addressed to: Commiss	ioner for Patents, P. O.	Box 1450, A	lexandria, VA 22313-145	0ъ [	on this date:		
Typed or printed name							
Signature					Date		

SEND TO: Commissioner for Patents, P. O. Box 1450, Alexandria, 22313-1450.

11098385 - GAU: 2621



## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Confirmation No: 8277

Peter VENETIANER et al. | Art Unit: 2613

Application No: 11/098,385 Examiner: Not yet assigned

Filed: April 5, 2005 Atty. Docket No: 37112-215811

For: VIDEO SURVEILLANCE SYSTEM | Customer No:

EMPLOYING VIDEO PRIMITIVES 26694

PATENT TRADEMARK OFFI

### INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents P. O. Box 1450 Alexandria, VA 22313-1450

Sir:

This is an Information Disclosure Statement submitted under 37 C.F.R. § 1.97 within the time specified under 37 C.F.R. § 1.97(b).

In order to comply with applicant's duty of disclosure under 37 C.F.R. § 1.56, the U.S. Patent and Trademark Office is notified of the document listed on the attached Form PTO/SB/08A, and which the Examiner may deem relevant to patentability of the claims of the above-identified application. A copy of the cited reference is enclosed, including a translation of the abstract.

The present Information Disclosure Statement is being filed before the mailing date of the first Office Action on the merits, and therefore no Statement Under 37 C.F.R. § 1.97(e) or fee under 37 C.F.R. § 1.17(p) is required.

In view of the above, no further translation or statement of relevance is required, and as all requirements of 37 C.F.R. § 1.97 and all official guidelines pertaining to Information Disclosure Statements have been complied with, and it is therefore respectfully requested that the Examiner consider the documents and make them of record.

Applicants: Peter VENETIANER et al. Application No.: 11/098,385

No fee is due for the submission of this Information Disclosure Statement. However, if any additional fees are deemed necessary, please charge any necessary fee or credit any overpayment in connection with this Information Disclosure Statement to Deposit Account No. 22-0261.

Respectfully submitted,

Date: 11/29/05

Registration No. 44,457 VENABLE LLP P.O. Box 34385

Washington, D.C. 20043-9998

Telephone: (202) 344-4000 Facsimile: (202) 344-8300

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	Substitut	e for form 1449A/PT	0			THAR	Complete if Known	1
						Application Number	11/098,385	
	INFC	RMATION	DIS	CLOSU	RE	Filing Date	April 5, 2005	
	STA	TEMENT B	YA	<b>PPLICAI</b>	TV	First Named Inventor	Peter VENETIANER	
						Group Art Unit	2613	
L		(use as many sh	eets a	s necessary)		Examiner Name	Not Yet Assigned	
(	Sheet	] 1	of	1		Attorney Docket Number	37112-215811	l .

	U.S. PATENT DOCUMENTS									
		U.S. Patent Document			Name of Patentee or Applicant	Date of Publication of	Pages, Columns, Lines, Where Relevant			
Examiner Initials *	Cite No. ¹	Number	Kind Co		of Cited Document	Cited Document MM-DD-YYYY	Passages or Relevant Figures Appear			
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				FOREIGI	N PATENT DOC	JMENTS	3		
Examiner Initials*	Cite No.1	For Office ³	eign Patent Doo	Kind Code ⁵ (if known)	Name of Patentee or Applicant of Cited Document	Cited	Publication of Document DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ₆
	Al	JP	10290449	A	Shimizu Corp.	10-	27-1998		Abst.
Examiner Signature		/Tur	ng Vo/ (03/	31/2009)	Date Consi	fered		03/31/2009	

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

VENABLE

DC2DOCS1/701094

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08b (12-08)
Approved for use through 01/31/2009. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Sut	ostitute for form 1449/PTO				Complete if Known
				Application Number	11/098,385-Conf. #8277
11	NFORMATION	I DI	SCLOSURE	Filing Date	April 5, 2005
l s	TATEMENT B	3Y /	APPLICANT	First Named Inventor	Péter L. Venetianer
				Art Unit	2621
	(Use as many she	ets as	necess ary)	Examiner Name	M. Dastouri
Sheet	1	of	1	Attorney Docket Number	37112-215811

Cite No. ¹	Document Number  Number-Kind Code ² ( if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
ιA	US-20060232673	10-19-2006	Lipton et al.	
νB	US-20070002141	01-04-2007	Lipton et al.	
C	US-2007/0127774	06-07-2007	Zhang et al.	
D	US-20070052803	03-08-2007	Chosak et al.	
	No. ¹ A B C	No. ¹ Number-Kind Code ^{2 (If Known)} A US-20060232673 B US-20070002141 C US-2007/0127774	No.¹ Number-Kind Code² (# Known) MM-DD-YYYYY  A US-20060232673 10-19-2006  B US-20070002141 01-04-2007  C US-2007/0127774 06-07-2007	No.1         Number-Kind Code ^{2 (I Known)} MM-DD-YYYY         Applicant of Cited Document           A         US-20060232673         10-19-2006         Lipton et al.           B         US-20070002141         01-04-2007         Lipton et al.           C         US-2007/0127774         06-07-2007         Zhang et al.

	FOREIGN PATENT DOCUMENTS						
Examiner	Cite	Foreign Patent Document	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where Relevant Passages		
Initials*	No.1	Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)	MM-DD-YYYY	Applicant of Cited Document	Or Relevant Figures Appear	T	

	NON PATENT LITERATURE DOCUMENTS					
Examiner Cite Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journ al, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.						
	CA	International Search Report for International Application No. PCT/US08/09073, dated November 3, 2008.				
	СВ	Written Opinion for International Patent Application No. PCT/US08/09073, dated November 3, 2008.				

-	
Examiner	Date
Signature	Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. * CITE NO.: Those application(s) which are marked with an single asterisk (*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(iii)) because that application was filled after June 30, 2003 or is available in the IFW. * Applicant's unique citation designation number (optional). * See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. * Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). * For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. * Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. * Applicant is to place a check mark here if English language Translation is attached. * #1012430v1

From the INTERNATIONAL SEARCHING AUTHORITY KYLE D. PETAJA VENABLE LLP TION OF TRANSMITTAL OF P.O. BOX 34385 WASHINGTON, DC 20043-9998 THE INTERNATIONAL SEARCH REPORT AND THE WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY, OR THE DECLARATION (PCT Rule 44.1) Date of mailing 03 NOV 2008 (day/month/year) Applicant's or agent's file reference FOR FURTHER ACTION See paragraphs 1 and 4 below 37112-257718 International application No. International filing date (day/month/year) 25 July 2008 (25.07.2008) PCT/US 08/09073 Applicant OBJECTVIDEO, INC. The applicant is hereby notified that the international search report and the written opinion of the International Searching Authority have been established and are transmitted herewith. Filing of amendments and statement under Article 19: The applicant is entitled, if he so wishes, to amend the claims of the international application (see Rule 46): The time limit for filing such amendments is normally two months from the date of transmittal of the When? international search report. Where? Directly to the International Bureau of WIPO, 34 chemin des Colombettes 1211 Geneva 20, Switzerland, Facsimile No.: +41 22 740 14 35 For more detailed instructions, see the notes on the accompanying sheet. The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(a) to that effect and the written opinion of the International Searching Authority are transmitted herewith. With regard to the protest against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that: the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices. no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made. 4. Reminders Shortly after the expiration of 18 months from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in Rules 90bis.1 and 90bis.3, respectively, before the completion of the technical preparations for international publication. The applicant may submit comments on an informal basis on the written opinion of the International Searching Authority to the International Bureau. The International Bureau will send a copy of such comments to all designated Offices unless an international preliminary examination report has been or is to be established. These comments would also be made available to the public but not before the expiration of 30 months from the priority date. Within 19 months from the priority date, but only in respect of some designated Offices, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase until 30 months from the priority date (in some Offices even later); otherwise, the applicant must, within 20 months from the priority date, perform the prescribed acts for entry into the national phase before those designated Offices. In respect of other designated Offices, the time limit of 30 months (or later) will apply even if no demand is filed within 19 See the Annex to Form PCT/IB/301 and, for details about the applicable time limits, Office by Office, see the PCT Applicant's Guide, Volume II, National Chapters and the WIPO Internet site. Name and mailing address of the ISA/US Authorized officer: Mail Stop PCT, Attn: ISA/US Lee W. Young Commissioner for Patents
P.O. Box 1450, Alexandria, Virginia 22313-1450 PCT Helpdesk: 571-272-4300 Facsimile No. 571-273-3201 PCT OSP: 571-272-7774 Form PCT/ISA/220 (January 2004) (See notes on accompanying sheet) Artical 19 2 MONTH REMINDER 1 MONTH REMINDER 2 WEEK REMINDER 3 DAY REMINDER

From the INTERNATIONAL SEARCHING AUTHORITY

To:  KYLE D. PETAJA  VENABLE LLP  P.O. BOX 34385  WASHINGTON, DC 20043-9998	PCT  NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL SEARCH REPORT AND THE WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY, OR THE DECLARATION			
	(PCT Rule 44.1)			
	Date of mailing (day/month/year) 03 NOV 2008			
Applicant's or agent's file reference  FOR FURTHER ACTION See paragraphs 1				
37112-257718	FOR FURTHER ACTION See paragraphs 1 and 4 below			
International application No. PCT/US 08/09073	International filing date (day/month/year) 25 July 2008 (25.07.2008)			
Applicant OBJECTVIDEO, INC.	:			
Authority have been established and are transmitted he Filing of amendments and statement under Article 1	19:			
The applicant is entitled, if he so wishes, to amend the When? The time limit for filing such amendment	claims of the international application (see Rule 46): ents is normally two months from the date of transmittal of the			
international search report.	•			
Where? Directly to the International Bureau of WI 1211 Geneva 20, Switzerland, Facsimile N				
For more detailed instructions, see the notes on the	e accompanying sheet.			
	search report will be established and that the declaration under f the International Searching Authority are transmitted herewith.			
	dditional fee(s) under Rule 40.2, the applicant is notified that:			
	has been transmitted to the International Bureau together with the the protest and the decision thereon to the designated Offices.			
no decision has been made yet on the protest; the	he applicant will be notified as soon as a decision is made.			
Shortly after the expiration of 18 months from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in Rules 90bis.1 and 90bis.3, respectively, before the completion of the technical preparations for international publication.  The applicant may submit comments on an informal basis on the written opinion of the International Searching Authority to the International Bureau. The International Bureau will send a copy of such comments to all designated Offices unless an international preliminary examination report has been or is to be established. These comments would also be made available to				
the public but not before the expiration of 30 months from the priority date.  Within 19 months from the priority date, but only in respect of some designated Offices, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase until 30 months from the priority date (in some Offices even later); otherwise, the applicant must, within 20 months from the priority date, perform the prescribed acts for entry into the national phase before those designated Offices.				
months.	nonths (or later) will apply even if no demand is filed within 19			
See the Annex to Form PCT/IB/301 and, for details about the Guide, Volume II, National Chapters and the WIPO Internet	e applicable time limits, Office by Office, see the PCT Applicant's site.			
Name and mailing address of the ISA/US	Authorized officer:			
Mail Stop PCT, Attn: ISA/US	Lee W. Young			
Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450	PCT Helpdesk: 571-272-4300			
Facsimile No. 571-273-3201	PCT OSP: 571-272-7774			

Facsimile No. 571-273-3201
Form PCT/ISA/220 (January 2004)

(See notes on accompanying sheet)

# **PCT**

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference	FOR FURTHER		see Form PCT/ISA/220		
37112-257718	ACTION	as well	as, where applicable, item 5 below.		
International application No.	International filing date (day/n	ionth/year)	(Earliest) Priority Date (day/month/year)		
PCT/US 08/09073	25 July 2008 (25.07.2008)		26 July 2007 (26.07.2007)		
Applicant OBJECTVIDEO, INC.					
according to Article 18. A copy is being	g transmitted to the International	Bureau.	Authority and is transmitted to the applicant report.		
1. Basis of the report					
a. With regard to the language, the	international search was carried	out on the b	asis of:		
the international appl	ication in the language in which	it was filed.			
a translation of the in a translation furnishe	iternational application into d for the purposes of internation	al search (Ru	which is the language of eles 12.3(a) and 23.1(b)).		
b. This international search r		ig into accou	nt the rectification of an obvious mistake		
c. With regard to any nucleot	ide and/or amino acid sequenc	e disclosed in	the international application, see Box No. I.		
2. Certain claims were found	d unsearchable (see Box No. II)				
3. Unity of invention is lacki	ing (see Box No. III).				
4. With regard to the title,					
the text is approved as subr	nitted by the applicant.				
the text has been establishe	d by this Authority to read as fol	lows:			
5. With regard to the abstract,					
the text is approved as subm	nitted by the applicant.				
			y as it appears in Box No. IV. The applicant the report, submit comments to this Authority.		
6. With regard to the drawings,					
a. the figure of the drawings to be	published with the abstract is Fig	gure No. <u>1</u>			
as suggested by the a	pplicant.				
as selected by this Au	thority, because the applicant fa	iled to sugges	st a figure.		
as selected by this Au	thority, because this figure bette	r characterize	es the invention.		
b. none of the figures is to be	published with the abstract.				

Form PCT/ISA/210 (first sheet) (April 2007)

### INTERNATIONAL SEARCH REPORT

International application No. PCT/US 08/09073

IPC(8) - USPC -	H04N 7/18 (2008.04) 348/143 o International Patent Classification (IPC) or to both i	national classification and IPC	
B. FIEL	DS SEARCHED	April 1990	•
	ocumentation searched (classification system followed by N 7/18 (2008.04) 143	classification symbols)	
	on searched other than minimum documentation to the ex N 7/18 (2008.04) 103, 143	xtent that such documents are included in the	fields searched
PubWest (US creating ever	ta base consulted during the international search (name of SPB, USPT, USOC, EPAB, JPAB), DialogPro, Googles at output trackable object observing person vehicle wat ed mode input default activity type time date calibrate	Scholar; video surveillance sensor processir	ng unit rule detector
C. DOCU	MENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where a	ppropriate, of the relevant passages	Relevant to claim No.
Υ	US 2007/0052803 A1 (Chosak et al.), 08 March 2007 [0054]; [0078]; [0080]	(08.03.2007), para [0041]-[0044]; [0047]-	1-27
Y	US 2007/0127774 A1 (Zhang et al.), 07 June 2007 (07 [0096]; [0112]; [0164]; [0166]; [0171]-[0173]; [0175]	7.06.2007), para [0078]-[0082]; [0092];	1-27
A	US 2007/0002141 A1 (Lipton et al.), 04 January 2007	(04.01.2007), entire document	1-27
A	US 2006/0232673 A1 (Lipton et al.), 19 October 2006	(19.10.2006), entire document	1-27
Further	documents are listed in the continuation of Box C.		
"A" documen	categories of cited documents: nt defining the general state of the art which is not considered particular relevance	"T" later document published after the inter date and not in conflict with the applic the principle or theory underlying the i	ation but cited to understand
filing da		considered novel or cannot be considered	claimed invention cannot be cred to involve an inventive
cited to special r	nt which may throw doubts on priority claim(s) or which is establish the publication date of another citation or other eason (as specified)	"Y" document of particular relevance; the considered to involve an inventive s	tep when the document is
means	nt referring to an oral disclosure, use, exhibition or other	being obvious to a person skilled in the	ocuments, such combination art
	it published prior to the international filing date but later than ity date claimed	"&" document member of the same patent f	amily
	ctual completion of the international search	Date of mailing of the international search	ch report
11 October 2	008 (11.10.2008)	03 NOV 2008	
Mail Stop PCT	ailing address of the ISA/US , Attn: ISA/US, Commissioner for Patents	Authorized officer: Lee W. Young	
	), Alexandria, Virginia 22313-1450 - 571-273-3201	PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774	

Form PCT/ISA/210 (second sheet) (April 2007)

From the INTERNATIONAL SEARCHING AUTH	ORITY			
То:			<b>PCT</b>	
KYLE D. PETAJA VENABLE LLP				
P.O. BOX 34385 WASHINGTON, DC 20043-9998		WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY		
		(PCT Rule 43bis.1)		
l				
		Date of mailing (day/month/year)	03 NOV 2008	
Applicant's or agent's file reference		FOR FURTHER A		
37112-257718	T		See paragraph 2 below	
International application No.	International filing date		Priority date (day/month/year)	
PCT/US 08/09073	25 July 2008 (25.07	<u> </u>	26 July 2007 (26.07.2007)	
International Patent Classification (IPC) of IPC(8) - H04N 7/18 (2008.04) USPC - 348/143	or both national classifica	tion and IPC		
Applicant OBJECTVIDEO, INC.				
This opinion contains indications relations	ating to the following ito:	ne.		
		<b>лы.</b>		
	шоп		•	
Box No. II Priority				
Box No. III Non-establishr	nent of opinion with rega	rd to novelty, inventiv	re step and industrial applicability	
Box No. IV Lack of unity of	of invention			
Box No. V Reasoned state citations and ex	ment under Rule 43 <i>bis</i> .1( xplanations supporting su	a)(i) with regard to nov ich statement	velty, inventive step or industrial applicability;	
Box No. VI Certain docum	ents cited			
Box No. VII Certain defects	in the international appli	ication		
Box No. VIII Certain observe	ations on the internationa	l application		
International Preliminary Examining other than this one to be the IPEA ar	Authority ("IPEA") excend the chosen IPEA has r	pt that this does not ap notified the Internation	be considered to be a written opinion of the oply where the applicant chooses an Authority hal Bureau under Rule 66.1bis(b) that written	
opinions of this International Searchi If this opinion is, as provided above, a written reply together, where appro-	considered to be a written	opinion of the IPEA,	the applicant is invited to submit to the IPEA of 3 months from the date of mailing of Form	
PCT/ISA/220 or before the expiration	n of 22 months from the p			
For further options, see Form PCT/IS	TV 44U.			
3. For further details, see notes to Form	PCT/ISA/220.			
Name and mailing address of the ISA/US	Date of completion of t	his opinion	Authorized officer:	
Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450	22 October 2008 (	22.10.2008)	Lee W. Young	
Facsimile No. 571-273-3201			PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774	
orm PCT/ISA/237 (cover sheet) (April 200	07)	Written		
		2 MONTH REM	•	
		1 MONTH REM		
		2 WEEK REMI	NDER 1/20/09	
		3 DAY REMIN	1 1 2 1 2 (1)	

/ (11)

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/US 08/09073

Box	No. I	Basis of this opinion
1	With r	egard to the language, this opinion has been established on the basis of:
••	X	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.		This opinion has been established taking into account the <b>rectification of an obvious mistake</b> authorized by or notified to this Authority under Rule 91 (Rule 43bis.1(a))
3.		egard to any nucleotide and/or amino acid sequence disclosed in the international application, this opinion has been shed on the basis of:
	a. typ	e of material
		a sequence listing
		table(s) related to the sequence listing
	L C	
	b. for	mat of material on paper
		in electronic form
		•••••••••••••••••••••••••••••••••••
	c. tim	e 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
4.		In addition, in the case that more than one version or copy of a sequence listing and/or table(s) 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.
5.	Additio	onal comments:
		·

Form PCT/ISA/237 (Box No. I) (April 2007)

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US 08/09073

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. Stateme	ent				
Nove	elty (N)	Claims	1-27	YES	
		Claims	None	NO NO	
Inve	ntive step (IS)	Claims	None	YES	
		Claims	1-27	NO NO	
Indu	strial applicability (IA)	Claims	1-27	YES	
	,	Claims	None	NO	

#### Citations and explanations:

Claims 1-27 lack an inventive step under PCT Article 33(3) as being obvious over US 2007/0052803 A1 to Chosak et al. (hereinafter 'Chosak') in view of US 2007/0127774 A1 to Zhang et al. (hereinafter 'Zhang').

Regarding claim 1, Chosak teaches a video surveillance system comprising: a video sensor for receiving a video (see para [0041]); a processing unit for processing the received video (see para [0042]); a rule detector for creating a rule from the processed video (see para [0042]); and output means for outputting information based on the detected event of interest (see para [0043]-[0044]; [0051]-[0051]), but does not specifically teach an event detector for detecting an event of interest based on the rule. Zhang teaches a target detection and tracking system comprising an event detector for detecting an event of interest based on the rule (see para [0078]-[0081]; [0164]; [0166]). It would have been obvious to one of ordinary skill in the art to utilize the system comprising an event detector for detecting an event of interest based on the rule of Zhang and to combine it with the system of Chosak because it would provide configurable event detection and tracking, thereby increasing the robustness and cost-effectiveness of the system.

Regarding claim 2, Chosak in view of Zhang teaches the system of claim 1. Chosak further teaches wherein the processing unit processes the received video to detect at least one trackable object (see para [0047]-[0050]).

Regarding claim 3, Chosak in view of Zhang teaches the system of claim 2. Zhang further teaches wherein the rule detector creates the rule by observing the trackable object (see para [0080]-[0082]; [0092]; [0096]; [0112]).

Regarding claim 4, Chosak in view of Zhang teaches the system of claim 2. Chosak further teaches wherein the trackable object is at least one of: a person; a vehicle; a watercraft in a water scene; a light emitting diode (LED) emitter; an audio emitter; a radio frequency (RF) emitter; an infrared (IR) device; a prescribed configuration pattern; or an object observable by the video sensor (see para [0050]).

Regarding claim 5, Chosak in view of Zhang teaches the system of claim 1. Chosak further teaches wherein the rule detector creates at least one of: a tripwire, an area of interest (AOI), a direction, or a speed (see para [0053]).

Regarding claim 6, Chosak in view of Zhang teaches the system of claim 1. Chosak further teaches wherein the rule detector operates when the system is in a configuration mode (see para [0052]; [0078]; [0080]).

Regarding claim 7, Chosak in view of Zhang teaches the system of claim 6. Chosak further teaches a system further comprising: an input mechanism, wherein the system is placed in the configuration mode with the input mechanism (see para [0052]; [0078]; [0080]).

Regarding claim 8, Chosak in view of Zhang teaches the system of claim 7. Zhang further teaches wherein the input mechanism is a component of the video sensor (see para [0171]-[0173]; [0175]).

Regarding claim 9, Chosak in view of Zhang teaches the system of claim 1. Chosak further teaches wherein the rule detector creates a default rule (see para [0052]-[0053]; [0078]).

Regarding claim 10, Chosak in view of Zhang teaches the system of claim 1. Zhang further teaches wherein the rule detector creates a rule from the processed video and at least one user input (see para [0171]-[0173]; [0175]).

Regarding claim 11, Chosak in view of Zhang teaches the system of claim 10. Chosak further teaches wherein the at least one user input includes at least one of: an activity type, an object type, a time, or a date (see para [0052]-[0053]; [0078]).

Regarding claim 12, Chosak teaches an apparatus for video surveillance configured to perform a method comprising: receiving a video (see para [0041]); processing the received video (see para [0042]); creating a rule from the processed video (see para [0042]); and outputting information based on the detected event of interest (see para [0043]-[0051]-[0054]), but does not specifically teach detecting an event of interest in the video based on the rule. Zhang teaches an apparatus for target detection and tracking comprising detecting an event of interest in the video based on the rule (see para [0078]-[0081]; [0164]; [0166]). It would have been obvious to one of ordinary skill in the art to utilize the apparatus comprising detecting an event of interest in the video based on the rule of Zhang and to combine it with the apparatus of Chosak because it would provide configurable event detection and tracking, thereby increasing the adaptability and cost-effectiveness of the apparatus.

--- continued in Supplemental Box ---

Form PCT/ISA/237 (Box No. V) (April 2007)

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/US 08/09073

#### Supplemental Box

In case the space in any of the preceding boxes is not sufficient. Continuation of:

Box No. V

#### 2. Citations and explanations:

Regarding claim 13, Chosak in view of Zhang teaches the apparatus of claim 12. Chosak further teaches wherein processing the received video includes detecting a trackable object in the received video (see para [0047]-[0050]).

Regarding claim 14, Chosak in view of Zhang teaches the apparatus of claim 13. Zhang further teaches wherein creating a rule comprises: observing the trackable object and creating the rule based on the observation (see para [0080]-[0082]; [0092]; [0096]; [0112]).

Regarding claim 15, Chosak in view of Zhang teaches the apparatus of claim 13. Chosak further teaches wherein tracking the trackable object comprises tracking at least one of: a person; a vehicle; a watercraft in a water scene; a light emitting diode (LED) emitter; an audio emitter; a radio frequency (RF) emitter; an infrared (IR) device; a prescribed configuration pattern; or an object observable by a video sensor (see para [0050]).

Regarding claim 16, Chosak in view of Zhang teaches the apparatus of claim 12. Chosak further teaches wherein creating a rule comprises: creating at least one of a tripwire, an area of interest (AOI), a direction, or a speed (see para [0053]).

Regarding claim 17, Chosak in view of Zhang teaches the apparatus of claim 12. Chosak further teaches wherein the apparatus is configured to be placed in a configuration mode prior to processing the received video and creating the rule (see para [0052]; [0078]; [0080]).

Regarding claim 18, Chosak in view of Zhang teaches the apparatus of claim 12. Chosak further teaches wherein creating a rule comprises creating a default rule (see para [0052]-[0053]; [0078]).

Regarding claim 19, Chosak in view of Zhang teaches the apparatus of claim 12. Zhang further teaches wherein creating a rule comprises creating a rule from the processed video and at least one user input (see para [0171]-[0173]; [0175]).

Regarding claim 20, Chosak in view of Zhang teaches the apparatus of claim 19. Chosak further teaches wherein the at least one user input includes at least one of: an activity type, an object type, a time, or a date (see para [0052]-[0053]; [0078]).

Regarding claim 21, Chosak teaches a method of rule detection in a video surveillance system comprising: receiving a video (see para [0041]); processing the received video (see para [0042]); creating a rule from the processed video (see para [0042]); and outputting information based on the detected event of interest (see para [0043]-[0041]; [0051]-[0054]), but does not specifically teach detecting an event of interest in the video based on the rule. Zhang teaches a method for target detection and tracking comprising detecting an event of interest in the video based on the rule (see para [0078]-[0081]; [0164]; [0166]). It would have been obvious to one of ordinary skill in the art to utilize the method comprising detecting an event of interest in the video based on the rule of Zhang and to combine it with the method of Chosak because it would provide configurable event detection and tracking, thereby increasing the robustness and cost-effectiveness of the method.

Regarding claim 22, Chosak in view of Zhang teaches the method of claim 21. Chosak further teaches a method further comprising: entering a configuration mode prior to processing the received video (see para [0052]; [0078]; [0080]); detecting and observing a trackable object (see para [0047]-[0050]), but does not specifically teach and creating the rule based on the observed trackable object. Zhang further teaches creating the rule based on the observed trackable object (see para [0080]-[0082]; [0092]; [0096]; [0112]).

Regarding claim 23, Chosak in view of Zhang teaches the method of claim 22. Chosak further teaches wherein detecting the trackable object comprises detecting at least one of: a person; a vehicle; a watercraft in a water scene; a light emitting diode (LED) emitter; an audio emitter; a radio frequency (RF) emitter; an infrared (IR) device; a prescribed configuration pattern; or an object observable by a video sensor (see para [0050]).

Regarding claim 24, Chosak in view of Zhang teaches the method of claim 21. Chosak further teaches wherein creating the rule comprises: creating at least one of a tripwire, an area of interest (AOI), a direction, or a speed (see para [0053]).

Regarding claim 25, Chosak in view of Zhang teaches the method of claim 21. Chosak further teaches wherein creating a rule comprises creating a default rule (see para [0052]-[0053]; [0078]).

Regarding claim 26, Chosak in view of Zhang teaches the method of claim 21. Zhang further teaches wherein creating a rule comprises creating a rule from the processed video and at least one user input (see para [0171]-[0173]; [0175]).

Regarding claim 27, Chosak in view of Zhang teaches the method of claim 26. Chosak further teaches wherein the at least one user input includes at least one of: an activity type, an object type, a time, or a date (see para [0052]-[0053]; [0078]).

Claims 1-27 have industrial applicability as defined by PCT Article 33(4) because the subject matter can be made or used in industry.

Form PCT/ISA/237 (Supplemental Box) (April 2007)

Electronic Acl	knowledgement Receipt
EFS ID:	4727084
Application Number:	11098385
International Application Number:	
Confirmation Number:	8277
Title of Invention:	Video surveillance system employing video primitives
First Named Inventor/Applicant Name:	Peter L. Venetianer
Customer Number:	26694
Filer:	Kyle D. Pataja/Tracie Xhema
Filer Authorized By:	Kyle D. Pataja
Attorney Docket Number:	37112-215811
Receipt Date:	03-FEB-2009
Filing Date:	05-APR-2005
Time Stamp:	16:48:28
Application Type:	Utility under 35 USC 111(a)

# Payment information:

Submitted with Payment		no	no			
File Listin	File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)	
1		215811.PDF	158604 67ec09a0ce5b3f9a1b8fc7cf03e9cfb918a59 a7b	yes	3	

	Multipart Description/PDF files in .zip description						
	Document De	scription	Start	E	End		
	Information Disclosure	Statement Letter	1		2		
	Information Disclosure Stater	ment (IDS) Filed (SB/08)	3		3		
Warnings:			1				
Information:							
2	NPL Documents	isr.PDF	301330	no	4		
2			5d1d5314ead7eddc11d50624cd6644e0ef4 e52f5		<b>-</b>		
Warnings:			·				
Information:							
3	NPL Documents	wo.PDF	286958 no		4		
			08eb3c8b5d9048732c3f580e948f3088710 e0daa				
Warnings:			·	-			
Information:							
		Total Files Size (in bytes)	74	6892			

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

### New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

### National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

### New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Venetianer et al.

Art Unit: 2621

Application No: 11/098,385

Examiner: M. Dastouri

Confirmation No: 8277

Filed: April 5, 2005

Atty. Docket No: 37112-215811

Customer No:

For: VIDEO SURVEILLANCE SYSTEM

26694
PATENT TRADEMARK OFFICE

### SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT (IDS)

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Madam:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is filed before the mailing date of a first Office Action on the merits as far as is known to the undersigned (37 CFR 1.97(b)(3)).

In accordance with 37 CFR 1.98(a)(2)(ii), Applicant has not submitted copies of U.S. patents and U.S. patent applications. Applicant submits herewith copies of foreign patents and non-patent literature in accordance with 37 CFR 1.98(a)(2).

Application No.: 11/098,385 Docket No.: 37112-215811

A concise explanation of relevance of the items listed on form PTO/SB/08 is in the form of an English language copy of an International Search Report and Written Opinion (copies of which are attached) from a foreign patent office, issued in a counterpart application, which refers to the relevant portions of the references.

In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing of this Information Disclosure Statement shall not be construed to be an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

It is submitted that the Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed references.

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 22-0261, under Order No. 37112-215811. A duplicate copy of this paper is enclosed.

Dated: February 3, 2009

Respectfully submitted,

Michael A. Sartori, Ph.D.

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Kyle D. Petaja

Registration No.: 60,309

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Washington, DC 20043-9998

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(202) 344-8300 (Fax)

Attorney/Agent For Applicant

#1012428v1

Docket No.: 37112-215811 (PATENT)

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Peter Venetianer et al. Art Unit: 2621

Application No: 11/098,385 Examiner: Mehrdad Dastouri

Confirmation No: 8277

Filed: April 5, 2005 Atty. Docket No: 37112-215811

Customer No:

For: VIDEO SURVEILLANCE SYSTEM EMPLOYING VIDEO PRIMITIVES 26694

# SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT (IDS)

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the documents listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the documents be made of record therein and appear on any patent to issue therefrom

This Information Disclosure Statement is filed before the mailing date of a first Office Action on the merits as far as is known to the undersigned (37 CFR 1.97(b)(3)).

In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing of this Information Disclosure Statement shall not be construed to be an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

Application No.: 11/098,385 Docket No.: 37112-215811

Documents A1-A16 were cited in related US Appl. No. 09/987,707.

It is submitted that the Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed documents.

It is believed that no fees are required with the submission of this IDS. However, the Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 22-0261, under Order No. 37112-215811.

Dated: November 20, 2008 Respectfully submitted,

DC2/993402

By *Lefte l* Kyle **D**. Petaja

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(202) 344-4000 (202) 344-8300 (Fax)

Attorney/Agent For Applicant

Sub	stitute for form 1449/PT	0		Complete if Known		
				Application Number	11/098,385 - Conf. #8277	
IN	NFORMATIC	ON DIS	SCLOSURE	Filing Date	April 5, 2005	
S	STATEMENT BY APPLICANT			First Named Inventor	Peter Venetianer	
				Art Unit	2621	
	(Use as many she ets as necessary)			Examiner Name	Mehrdad Dastouri	
Sheet	1	of	1	Attorney Docket Number	37112-215811	

			U.S. PA	TENT DOCUMENTS	
Examiner Initials*	Cite No.1	Document Number	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where
		Number-Kind Code ² ( if known)	MM-DD-YYYY	Applicant of Cited Document	Relevant Passages or Relevant Figures Appear
	A1	5,963,203 A	10-1999	Goldberg et al.	
	A2	6,031,573 A	02-2000	MacCormack et al.	
	A3	2001/0019357 A1	09-2001	Ito et al.	
	A4	2001/0033330 A1	10-2001	Garoutte, Maurice V.	
	A5			Broemmelsiek, Raymond M	
	A6			Broemmelsiek et al.	
	A7	2002/0095490 A1 07-2002		Barker et al.	
	A8	6,525,658 B2	02-2003	Streetman et al.	
	A9	6,570,608 B1	05-2003	Tseng, Christopher	
	A10	6,573,907 B1	06-2003	Madrane, Nabil	
	A11	6,646,676 B1	11-2003	DaGraca et al.	
	A12	6,724,915 B1	04-2004	Toklu et al.	
	A13	2004/0161133 A1	08-2004	Elazar et al.	
	A14	2004/0240542 A1	12-2004	Yeredor et al	
	A15	6,865,580 B1	03-2005	Bush, Eric N.	
	A16	7,023,469 B1	04-2006	Olson, Thomas J.	

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No.1	Foreign Patent Document  Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. * CITE NO: Those application(s) which are marked with an single asterisk (*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(iii)) because that application was filed after June 30, 2003 or is available in the IFW. * Applicant's unique citation designation number (optional). * See Kind Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. * * Include 1 is sued the document, by the two-letter code (WIPO Standard ST.3). * For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. * Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. * Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS					
Examiner Initials	Cite No. ¹	Include name of the author ( in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²		

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

DC2/993401

Examiner	Date
Signature	Considered

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

Electronic Acl	knowledgement Receipt		
EFS ID:	4328596		
Application Number:	11098385		
International Application Number:			
Confirmation Number:	8277		
Title of Invention:	Video surveillance system employing video primitives		
First Named Inventor/Applicant Name:	Peter L. Venetianer		
Customer Number:	26694		
Filer:	Kyle D. Pataja/Tracie Xhema		
Filer Authorized By:	Kyle D. Pataja		
Attorney Docket Number:	37112-215811		
Receipt Date:	20-NOV-2008		
Filing Date:	05-APR-2005		
Time Stamp:	19:09:37		
Application Type:	Utility under 35 USC 111(a)		

# Payment information:

Submitted wi	th Payment	no					
File Listing:							
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)		
1		215811ids.pdf	106690 24b7dab7025264df1d337f219848cf96dccc e901	yes	3		

Multipart Description/PDF files in .zip description							
Document Description	Start En						
Information Disclosure Statement Letter	1	2					
Information Disclosure Statement (IDS) Filed (SB/08)	3	3					

#### Warnings:

#### Information:

Total Files Size (in bytes):	106690

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### New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

### National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

### New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.



Under the Panerwork Reduction Act of 1995, no pers	1	U.S. Patent and	Trademark	for use through 05/31/2008. OMB 0651-0031 Office; U.S. DEPARTMENT OF COMMERCE
Onder the Paperwork Reduction Act of 1995, no pers	ons are required to res	Application Num		n unless it displays a valid OMB control number
TRANSMITT	AL	Filing Date		April 5, 2005
FORM		First Named Inve	entor	Peter L. Venetianer
		Art Unit		2621
(to be used for all correspondence after	initial filing)	Examiner Name		M. Dastouri
Total Number of Pages in This Submiss	Attorney Docket	Number	37112-215811	
EN	CLOSURES	(Check all tha	t apply	
x Fee Transmittal Form Fee Attached Amendment/Reply After Final Affidavits/declaration(s) Extension of Time Request Express Abandonment Request Information Disclosure Statement withPTO/SB/08 and copies of 5		onvert to a pplication rney, Revocation rrespondence Addr claimer Refund	Eress	After Allowance Communication to TC  Appeal Communication to Board of Appeals and Interferences  Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)  Proprietary Information  Status Letter  Other Enclosure(s) (please Identify below):
cited references  Certified Copy of Priority Document(s)  Reply to Missing Parts/		ape Table on CD		4
Incomplete Application Reply to Missing Parts under 37 CFR 1.52 or 1.53	rwinding			
SIGNAT	JRE OF APPLICA	ANT, ATTORNE	Y, OR A	GENT
Firm Name VENABLE LLP				
Signature Media 11.	foty)			
Printed name Kyle D. Petaja				
Date 6/4/08		Reg	j. No.	60,309

DC2/959640

PTO/SB/17 (10-07) Approved for use through 06/30/2010. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
the Paperwork Reduction Act of 1995, no person are required to respond to a collection of information unless it displays a valid OMB control number. Complete if Known Effective on 12/08/2004. Application Number rsuant to the Consolidated Appropriations Act, 2005 (H.R. 4818). 11/098,385-Conf. #8277 TRANSMITTAL April 5, 2005 Filing Date Peter L. Venetianer First Named Inventor For FY 2008 Examiner Name M. Dastouri 2621 Applicant claims small entity status. See 37 CFR 1.27 Art Unit 37112-215811 TOTAL AMOUNT OF PAYMENT Attorney Docket No METHOD OF PAYMENT (check all that apply) Money Order Check Credit Card None Other (please identify): Venable LLP X Deposit Account Deposit Account Number 22-0261 For the above-identified deposit account, the Director is hereby authorized to: (check all that apply) Charge fee(s) indicated below, except for the filing fee Charge fee(s) indicated below Charge any additional fee(s) or underpayments of x Credit any overpayments X fee(s) under 37 CFR 1.16 and 1.17 FEE CALCULATION 1. BASIC FILING, SEARCH, AND EXAMINATION FEES **FILING FEES SEARCH FEES EXAMINATION FEES** Small Entity Small Entity Small Entity **Application Type** Fee (\$) Fee (\$) Fee (\$) Fees Paid (\$) Fee (\$) Fee (\$) 510 210 Utility 310 155 255 105 100 50 Design 210 105 130 65 Plant 210 105 310 155 160 80 Reissue 310 155 510 255 620 310 Provisional 210 0 2. EXCESS CLAIM FEES **Small Entity** Fee (\$) Fee (\$) Fee Description Each claim over 20 (including Reissues) 50 25 Each independent claim over 3 (including Reissues) 210 105 Multiple dependent claims 370 185 Multiple Dependent Claims **Total Claims** Extra Claims Fee (\$) Fee (\$) Fee Paid (\$) HP = highest number of total claims paid for, if greater than 20. Extra Claims Fee (\$) Fee Paid (\$) -3= X HP = highest number of independent claims paid for, if greater than 3. 3. APPLICATION SIZE FEE If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$260 (\$130 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s). Total Sheets Extra Sheets Number of each additional 50 or fraction thereof Fee Paid (\$) Fee (\$) _ /50 = - 100 = (round up to a whole number) x Fees Paid (\$) Non-English Specification, \$130 fee (no small entity discount) Other (e.g., late filing surcharge):

Registration No

(Attorney/Agent)

60.309

Telephone

DC2/959639

SUBMITTED BY

Name (Print/Type)

kyle D. Petaja

(202) 344-4457



Docket No.: 37112-215811

(PATENT)

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Peter Venetianer et al.

Art Unit: 2621

Application No: 11/098,385

Examiner: Mehrdad Dastouri

Confirmation No: 8277

Filed: April 5, 2005

Atty. Docket No: 37112-215811

Customer No:

For: VIDEO SURVEILLANCE SYSTEM EMPLOYING VIDEO PRIMITIVES

26694
PATENT TRADEMARK OFFICE

## **INFORMATION DISCLOSURE STATEMENT (IDS)**

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the documents listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the documents be made of record therein and appear on any patent to issue therefrom.

The Examiner is advised that the present application is related to pending U.S. Application Nos. 09/987,707, 11/057,154, 11/167,218, 11/300,581 and 11/828,842. Documents A1-A22, C1-C2 and C5 were previously cited in one or more of the above-listed U.S. Applications. Documents C3-C4 are International Search Reports that were issued in PCT Applications that share priority with the above-listed U.S. Applications. Copies of documents C1-C5 are enclosed.

This Information Disclosure Statement is filed before the mailing date of a first Office Action on the merits as far as is known to the undersigned (37 CFR 1.97(b)(3)).

Application No.: 11/098,385 Docket No.: 37112-215811

In accordance with 37 CFR 1.98(a)(2)(ii), Applicant has not submitted copies of U.S. patents and U.S. patent applications. Applicant submits herewith copies of foreign patents and non-patent literature in accordance with 37 CFR 1.98(a)(2).

In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing of this Information Disclosure Statement shall not be construed to be an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

It is submitted that the Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed documents.

It is believed that no fees are required with the submission of this IDS. However, the Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 22-0261, under Order No. 37112-215811.

Dated: b/q/o8

Respectfully submitted,

DC2/959634

Michael A. Sartori, Ph.D. Registration No.: 41,289

Kyle D. Petaja

Registration No.: 60,309

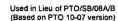
VENABLE LLP P.O. Box 34385

Washington, DC 20043-9998

(202) 344-4000

(202) 344-8300 (Fax)

Attorney/Agent For Applicant



Complete if Known Substitute for form 1449/PTO 11/098,385 - Conf. #8277 Application Number **INFORMATION DISCLOSURE** April 5, 2005 Filing Date STATEMENT BY APPLICANT First Named Inventor Peter Venetianer 2621 Art Unit (Use as many sheets as necessary) Mehrdad Dastouri Examiner Name 2 37112-215811 Sheet of Attorney Docket Number

			U.S. PA	TENT DOCUMENTS	
Examiner	Cite	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or	Pages, Columns, Lines, Where Relevant Passages or Relevant
Initials*	No.	Number-Kind Code ² ( if known)	MINHOUSTTTT	Applicant of Cited Document	Figures Appear
	A1	4,249,207	2/3/1981	Harman et al.	
	A2	4,257,063	3/17/1981	Loughry et al.	
	A3	5,926,210	7/20/1999	Hackett et al.	
	A4	5,963,202	10/5/1999	Polish	
	A5	6,069,653	5/30/2000	Hudson et al.	
	A6	6,297,844	10/2/2001	Schatz et al.	
	A7	6,570,608	May-03	Tsergn	
	A8	6,573,907	6/3/2003	Madrane et al.	
	A9	6,696,945	2/24/2004	Venetianer et al.	
	A10	6,727,938	4/27/2004	Randall	
	A11	6,738,424	5/18/2004	Allmen et al.	·
	A12	6,954,498	10/11/2005	Lipton	
	A13	6,987,883	1/17/2006	Lipton et al.	
	A14	2002/0008758	1/24/2002	Broemmelsiek et al.	
	A15	2002/0082769	6/27/2002	Church et al.	
	A16	2005/0146605	7/7/2005	Lipton et al.	
	A17	2005/0157169	7/21/2005	Brodsky et al.	
.,,,,,	A18	2005/0162515	7/28/2005	Venetianer et al.	
	A19	2005/0168574	8/4/2005	Lipton et al.	
	A20	2007/0013776	1/18/2007	Venetianer et al.	
•	A21	2007/0127774	6/7/2007	Zhang et al.	
	A22	2008/0100704A1	5/1/2008	Venetianer et al.	

	FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No.1	Foreign Patent Document  Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	т6		

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. *CITE NO.: Those application(s) which are marked with an single asterisk (*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(iii)) because that application was filed after June 30, 2003 or is available in the IFW. 'Applicant's unique citation designation number (optional). *2 see Kinds Codes of USPTO Patent Documental power of MPEP 901.04. *3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). *For Japanesse patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. *5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. *8 Applicant is to place a check mark here if English language Translation is attached.

Examiner	Date	
Signature	Considered	

Substitute for form 1449/PTO				Complete if Known		
000	State for form 14400 10			Application Number	11/098,385 - Conf. #8277	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many she ets as necessary)				Filing Date	April 5, 2005	
				First Named Inventor	Peter Venetianer	
				Art Unit	2621	
				Examiner Name	Mehrdad Dastouri	
Sheet	2	of	2	Attorney Docket Number	37112-215811	

NON PATENT LITERATURE DOCUMENTS							
Examiner Initials	Cite No.1 Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publi and/or country where published.						
	C1	CN Office Action for CN 02822772.7 on October 14, 2005 in English.					
	C2	International Search Report issued for PCT Application No. PCT/US06/45625, mailed on September 24, 2007					
	C3	International Search Report issued for PCT Application No. PCT/US01/32614 on May 6, 2002.					
	C4	International Search Report issued for PCT Application No. PCT/US02/22688 on December 11, 2002.					
	C5	Written Opinion of the International Searching Authority issued for PCT Application No. PCT/US06/45625, mailed on September 24, 2007					

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

DC2/958994

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Examiner	Date	
Signature	Considered	

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

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PTO/SB/21 (01-08)
Approved for use through 01/31/2008. OMB 0551-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Monder the Paperwork Reduction Act of 1995, no pen	sons are required to res	U.S. Patent pond to a collect	and Trademar	to for use through 01/31/2008. OMB 0651-003 in the common of the common	
		Application I		11/098,385-Conf. #8277	
TRANSMITT	AL	Filing Date		April 5, 2005	
FORM		First Named Inventor		Peter L. Venetianer	
	Art Unit		2621		
(to be used for all correspondence afte	rinitial filing)	Examiner N	ame	M. Dastouri	
Total Number of Pages in This Submis	sion	Attorney Do	cket Numbe	37112-215811	
EN	ICLOSURES	(Check all	that appl	γ)	
X Fee Transmittal Form	Drawing(s)			After Allowance Communication to TC	
Fee Attached	Licensing-rel	ated Papers		Appeal Communication to Board of Appeals and Interferences	
Amendment/Reply	Petition			Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)	
After Final	Petition to Co Provisional A		Proprietary Information		
Affidavits/declaration(s)		rney, Revocation rrespondence	Status Letter		
Extension of Time Request	Terminal Disclaimer			Other Enclosure(s) (please Identify below):	
Express Abandonment Request	Request for	Request for Refund			
Information Disclosure Statement with PTO/SB/08 and copies of 2 cited references	CD, Number	of CD(s)			
Certified Copy of Priority Document(s)	Landso	ape Table on	CD		
Reply to Missing Parts/ Incomplete Application	Remarks				
Reply to Missing Parts under					
37 CFR 1.52 or 1.53					
SIGNAT	URE OF APPLICA	ANT, ATTOR	RNEY, OR	AGENT	
Firm Name VENABLE LLP					
Signature	mi	42709			
Printed name Michael A. Sartori, F		,			
Date 4////0/	<del></del>		Reg. No.	41,289	

Approved for use through 06/30/2010. OMB 05/51-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no person are required to respond to a collection of information unless it displays a valid OMB control number. Complete if Known Effective on 12/08/2004 rsuant to the Consolidated Appropriations Act, 2005 (H.R. 4818). 11/098,385-Conf. #8277 **Application Number** FEE TRANSMITTAL April 5, 2005 Filing Date Peter L. Venetianer First Named Inventor For FY 2008 Examiner Name M. Dastouri Applicant claims small entity status. See 37 CFR 1.27 2621 Art Unit TOTAL AMOUNT OF PAYMENT 37112-215811 Attorney Docket No. METHOD OF PAYMENT (check all that apply) Check Credit Card Money Order Other (please identify): x Deposit Account Deposit Account Number 22-0261 Venable LLP Deposit Account Name: For the above-identified deposit account, the Director is hereby authorized to: (check all that apply) Charge fee(s) indicated below Charge fee(s) indicated below, except for the filing fee Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17 x Credit any overpayments **FEE CALCULATION** 1. BASIC FILING, SEARCH, AND EXAMINATION FEES **FILING FEES** SEARCH FEES **EXAMINATION FEES Small Entity Small Entity Small Entity Application Type** Fee (\$) Fee (\$) Fee (\$) Fee (\$) Fees Paid (\$) Fee (\$) Utility 310 510 210 155 255 105 105 100 50 130 Design 210 65 Plant 105 310 210 155 160 80 510 Reissue 310 155 255 620 310 Provisional 210 105 0 0 0 2. EXCESS CLAIM FEES **Small Entity** Fee (\$) Fee (\$) Fee Description Each claim over 20 (including Reissues) 50 25 Each independent claim over 3 (including Reissues) 210 105 Multiple dependent claims 370 185 **Multiple Dependent Claims Total Claims** Extra Claims Fee Paid (\$) Fee (\$) Fee Paid (\$) Fee (\$) HP = highest number of total claims paid for, if greater than 20. Extra Claims Fee Paid (\$) _ x HP = highest number of independent claims paid for, if greater than 3. 3. APPLICATION SIZE FEE If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$260 (\$130 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s). Total Sheets Extra Sheets Number of each additional 50 or fraction thereof Fee Paid (\$) Fee (\$) - 100 = ___ /50 = (round up to a whole number) x 4. OTHER FEE(S) Fees Paid (\$) Non-English Specification, \$130 fee (no small entity discount) Other (e.g., late filing surcharge): SUBMITTED BY Registration No 4229 (202) 344-4002 41,289 Telephone Michael A. Sartori, Ph.D. Name (Print/Type)



Docket No.: 37112-215811

(PATENT)

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Peter Venetianer et al.

Art Unit: 2621

Application No: 11/098,385

Examiner: Mehrdad Dastouri

Confirmation No: 8277

Filed: April 5, 2005

Atty. Docket No: 37112-215811

Customer No:

For: VIDEO SURVEILLANCE SYSTEM EMPLOYING VIDEO PRIMITIVES

26694
PATENT TRADEMARK OFFICE

## **INFORMATION DISCLOSURE STATEMENT (IDS)**

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the documents listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the documents be made of record therein and appear on any patent to issue therefrom. A copy of document **B1** and **C1** is enclosed.

This Information Disclosure Statement is filed before the mailing date of a first Office Action on the merits as far as is known to the undersigned (37 CFR 1.97(b)(3)).

The references cited here were first cited in a Notification issued on February 21, 2008 in counterpart Israeli Application No. 161777. A copy of the Notification, and an English translation thereof, are enclosed.

Application No.: 11/098,385 Docket No.: 37112-215811

In accordance with 37 CFR 1.98(a)(2)(ii), Applicant has not submitted copies of U.S. patents and U.S. patent applications. Applicant submits herewith copies of foreign patents and non-patent literature in accordance with 37 CFR 1.98(a)(2).

In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing of this Information Disclosure Statement shall not be construed to be an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

It is submitted that the Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed documents.

It is believed that no fees are required with the submission of this IDS. However, the Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 22-0261, under Order No. 37112-215811.

Dated: 4////08

Respectfully submitted,

DC2/944387

Michael A. Sartori, Ph.D. Registration No.: 41,289

VENABLE LLP P.O. Box 34385

Washington, DC 20043-9998

(202) 344-4000 (202) 344-8300 (Fax)

Attorney/Agent For Applicant





Complete if Known Substitute for form 1449/PTO 11/098,385 - Conf. #8277 Application Number INFORMATION DISCLOSURE April 5, 2005 Filing Date Peter Venetianer STATEMENT BY APPLICANT First Named Inventor 2621 Art Unit (Use as many sheets as necessary) Mehrdad Dastouri Examiner Name 37112-215811 of Attomey Docket Number

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No.1	Document Number  Number-Kind Code ² ( if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	A1	6,211,907	04-03-2001	Scaman et al.	

	FOREIGN PATENT DOCUMENTS						
Examiner	Cite	Foreign Patent Document	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where Relevant Passages	_	
Initials*	No.1	Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)	MM-DD-YYYY	Applicant of Cited Document	Or Relevant Figures Appear		
	B1	WO 01/62005	08-23-2001	Wilson			
						Г	

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NON PATENT LITERATURE DOCUMENTS						
Cite No.1	Include name of the author ( in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²				
C1	Notification for IL App. No. 161777 issued February 21, 2008 and English translation thereof					
	No.1	Cite No.1 Include name of the author ( in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.				

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Examiner	 Date	
Signature	 Cons	idered

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.



Docket No.: 37112-215811

(PATENT)

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Peter Venetianer et al.

Art Unit: 2621

Application No: 11/098,385

Examiner: Mehrdad Dastouri

Confirmation No: 8277

Filed: April 5, 2005

Atty. Docket No: 37112-215811

Customer No:

For: VIDEO SURVEILLANCE SYSTEM EMPLOYING VIDEO PRIMITIVES

26694
PATENT TRADEMARK OFFICE

#### INFORMATION DISCLOSURE STATEMENT (IDS)

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the documents listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the documents be made of record therein and appear on any patent to issue therefrom. Copies of documents <u>B1-B5</u> and <u>C1-C2</u> are enclosed.

This Information Disclosure Statement is filed before the mailing date of a first Office Action on the merits as far as is known to the undersigned (37 CFR 1.97(b)(3)).

In accordance with 37 CFR 1.98(a)(2)(ii), Applicant has not submitted copies of U.S. patents and U.S. patent applications. Applicant submits herewith copies of foreign patents and non-

Application No.: 11/098,385 Docket No.: 37112-215811

patent literature in accordance with 37 CFR 1.98(a)(2). Foreign patent reference **B5** is a Japanese-language document and is accompanied by an English-language abstract.

In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing of this Information Disclosure Statement shall not be construed to be an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

It is submitted that the Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed documents.

It is believed that no fees are required with the submission of this IDS. However, the Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 22-0261, under Order No. 37112-215811.

Dated: 3/14/08 Respectfully submitted,

DC2/935161

By /// ////

Michael A. Sartori, Ph.D. Registration No.: 41,289

VENABLE LLP P.O. Box 34385

Washington, DC 20043-9998

(202) 344-4000 (202) 344-8300 (Fax)

Attorney/Agent For Applicant

Used in Lieu of PTO/SB/08A/B (Based on PTO 10-07 version)



Sheet

Substitute for form 1449/PTO

Application Number Fitting Date

STATEMENT BY APPLICANT

(Use as many she ets as necessary)

Application Number Fitting Date

First Named Inventor

1

Complete if Known					
Application Number	11/098,385 - Conf. #8277				
Filing Date	April 5, 2005				
First Named Inventor	Peter Venetianer				
Art Unit	2621				
Examiner Name	Mehrdad Dastouri				
Attorney Docket Number	37112-215811				

	U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No.1	Document Number  Number-Kind Code ² ( if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear		
	A1	2002/0191851 A1	12-19-2002	Keinan			
	A2	6,707,852 B1	03-16-2004	Wang			

	FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No.1	Foreign Patent Document  Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶		
	B1	EP 0893823 A1	01-27-1999	Texas Instruments France				
	B2	EP 1333682 A1	08-06-2003	Samsung Electronics Co., Ltd.				
	В3	EP 0293189 B1	07-13-1994	Sony Corporation		and other trans		
	B4	WO 1994/003014 A1	02-03-1994	Koz et al.				
	B5	JP 09-247654 A	09-19-1997	Fujitsu General Ltd.		X		

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	C1	International Search Report issued in PCT Application No. PCT/US2006/012556, mailed on February 12, 2008.				
	C2	Written Opinion issued in PCT Application No. PCT/US2006/012556, mailed on February 12, 2008.				

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Examiner	Date	
Signature	Considered	

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

PTO/SB/21 (01-08)

Under the Paperwork Reduction Act of 1995, no pers	ons are required to res	U.S. Patent and	Approvi d Tradema of informat	ed for use through 01/31/2008. OMB 0651-0031 rk Office; U.S. DEPARTMENT OF COMMERCE tion unless it displays a valid OMB control number
	•	Application Nu	mber	11/098,385 – Conf. #8277
TRANSMITT	AL	Filing Date		April 5, 2005
FORM		First Named In	ventor	Peter L. Venetianer
_		Art Unit		2621
(to be used for all correspondence after	initial filing)	Examiner Nam	ie .	Mehrdad Dastouri
Total Number of Pages in This Submiss	ion	Attorney Docke	et Numbe	37112-215811
EN	CLOSURES	(Check all th	at appl	(y)
X Fee Transmittal Form	Drawing(s)			After Allowance Communication to TC
Fee Attached	Licensing-rel	ated Papers		Appeal Communication to Board of Appeals and Interferences
Amendment/Reply	Petition			Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
After Final	Petition to Co Provisional A			Proprietary Information
Affidavits/declaration(s)		rney, Revocation prespondence Address		Status Letter
Extension of Time Request	Terminal Dis	claimer		Other Enclosure(s) (please Identify below):
Express Abandonment Request	Request for	Refund		
Information Disclosure Statement with PTO/SB/08 and copies of 7 cited references	CD, Number	of CD(s)		· .
Certified Copy of Priority Document(s)	Landso	cape Table on Cl	D	
Reply to Missing Parts/ Incomplete Application	Remarks			11 - 11 - 11 - 11 - 11 - 11 - 11 - 11
Reply to Missing Parts under 37 CFR 1.52 or 1.53				
	JRE OF APPLICA	ANT, ATTORN	EY, OR	AGENT
Firm Name VENABLE LLP				•
Signature	1/2, 427	109		
Printed name Michael A. Sartori, F	h.D.	<del></del>		
Date 3/14/09	3	R	eg. No.	41,289

Approved for use through 06/30/2010. OMB 06/51-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no person are required to respond to a collection of information unless it displays a valid OMB control number. Complete if Known Effective on 12/08/2004 11/098,385 - Conf. #8277 es pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818). **Application Number** FEE TRANSMITTAL April 5, 2005 Filing Date Peter L. Venetianer First Named Inventor For FY 2008 Examiner Name Mehrdad Dastouri Applicant claims small entity status. See 37 CFR 1.27 2621 Art Unit 37112-215811 TOTAL AMOUNT OF PAYMENT Attorney Docket No. METHOD OF PAYMENT (check all that apply) Check Credit Card Money Order Other (please identify): 22-0261 Venable LLP X Deposit Account Deposit Account Number: For the above-identified deposit account, the Director is hereby authorized to: (check all that apply) Charge fee(s) indicated below Charge fee(s) indicated below, except for the filing fee Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17 x Credit any overpayments х FEE CALCULATION 1. BASIC FILING, SEARCH, AND EXAMINATION FEES **FILING FEES SEARCH FEES EXAMINATION FEES Small Entity Small Entity Small Entity Application Type** Fee (\$) Fee (\$) Fee (\$) Fees Paid (\$) Fee (\$) Fee (\$) Utility 310 510 210 155 255 105 105 100 50 Design 210 130 65 Plant 105 310 210 155 160 80 510 Reissue 310 155 255 620 310 Provisional 210 105 2. EXCESS CLAIM FEES Small Entity Fee (\$) Fee (\$) Fee Description Each claim over 20 (including Reissues) 50 25 Each independent claim over 3 (including Reissues) 210 105 Multiple dependent claims 370 185 **Total Claims** Extra Claims **Multiple Dependent Claims** Fee (\$) Fee Paid (\$) Fee (\$) HP = highest number of total claims paid for, if greater than 20. Extra Claims Fee (\$) Fee Paid (\$) _ # X HP = highest number of independent claims paid for, if greater than 3. 3. APPLICATION SIZE FEE If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$260 (\$130 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s). **Total Sheets** Extra Sheets Number of each additional 50 or fraction thereof . Fee (\$) Fee Paid (\$) - 100 = _ /50 = (round up to a whole number) x 4. OTHER FEE(S) Fees Paid (\$) Non-English Specification, \$130 fee (no small entity discount) Other (e.g., late filing surcharge): SUBMITTED BY 4279 Registration No. (Attorney/Agent) (202) 344-4975 41,289 Name (Print/Type) Michael A. Sartori, Ph.D. DC2/935209

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PTO/SB/21 (01-08)

Approved for use through 01/31/2008. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE and to a collection of information unless it displays a valid AUR section.

Under the Paperwork Reduction Act of 1995, no pers	ons are required to res	pond to a collec	tion of informa	tion unless it displays a valid OMB control number
		Application	Number	11/098,385 - Conf. #8277
TRANSMITT	AL	Filing Date		April 5, 2005
FORM		First Named Inventor		Peter L. Venetianer
		Art Unit		2621
(to be used for all correspondence after	rinitial filing)	Examiner N	ame	Mehrdad Dastouri
Total Number of Pages in This Submiss	sion	Attorney Do	cket Numbe	37112-215811
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x Fee Transmittal Form	Drawing(s)			After Allowance Communication to TC
Fee Attached	Licensing-ref	ated Papers		Appeal Communication to Board of Appeals and Interferences
Amendment/Reply	Petition			Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
After Final	Petition to Co			Proprietary Information
Affidavits/declaration(s)	Power of Attorney, Revocation Change of Correspondence Address			Status Letter
Extension of Time Request	Terminal Disclaimer			Other Enclosure(s) (please Identify below):
Express Abandonment Request	Request for	Refund		
Information Disclosure Statement with PTO/SB/08 and copies of 3 eited references to what to	CD, Number	of CD(s)		
Certified Copy of Priority Document(s)	Landso	ape Table on	CD	
Reply to Missing Parts/ Incomplete Application	Remarks			
Reply to Missing Parts under 37 CFR 1.52 or 1.53				
SIGNATI	JRE OF APPLICA	NT, ATTO	RNEY, OR	AGENT
Firm Name VENABLE LLP			·	
Signature M., Jel	luv	J		
Printed name Marina V. Zalevsky				
Date 2-4-08	2		Reg. No.	53,825



PTO/SB/17 (10-07)
Approved for use through 06/30/2010. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no person are required to respond to a collection of information unless it displays a valid OMB control number.

	Effective on 12/08/	2004			Co	mplete if Know	n	
Fees pursuant to	the Consolidated Approp		. 4818).	Application Nun	nber	11/098,385 - Conf. #8277		
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				First Named Inv	entor	Peter L. Venetianer		
	For FY 20	<u> 801</u>		Examiner Name		Mehrdad Dasto	ouri	
Applican	t claims small entity state	us. See 37 CFR 1.27		Art Unit 2621				
TOTAL AMOUNT	OF PAYMENT	(\$) 0.00		Attomey Docket	No.	37112-215811		
METHOD OF	PAYMENT (check	all that apply)						
Check	Credit Card	Money Order	Noi	ne Other (	please iden	tify):		
X Deposit Ac	count Deposit Account I	Number: 22-0	)261	Deposit	Account Na	me: Ver	nable LLI	<b>-</b>
For the	above-identified depo	sit account, the Dir	rector is	hereby authorize	ed to: (che	eck all that apply)		
CI	narge fee(s) indicated	l below		Charge	e fee(s) i	ndicated below, ex	cept for t	the filing fee
	narge any additional f e(s) under 37 CFR 1.		nents o	f x Credit	any over	payments		
FEE CALCUI		TO allu 1.17						
	G, SEARCH, AND E	YAMINATION EEE						
I. DASIO FILIK		LING FEES		ARCH FEES	EXAM	INATION FEES		
l <u>-</u>		Small Entity		Small Entity		Small Entity	_	
Application Ty			Fee (\$		Fee (\$		Fees	Paid (\$)
Utility	310	155	510	255	210	105		
Design	210	105	100	50	130	65		
Plant	210	105	310	155	160	80		
Reissue	310	155	510	255	620	310		
Provisional	210	105	0	0	0	0		
2. EXCESS CL							F (6)	Small Entity
Fee Description	r 20 (including Reiss	an)					Fee (\$)	Fee (\$)
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Multiple depend	•	lulig Keissues)					210 370	105 185
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	- =	·			<u>.</u>	<u>-ee (\$)</u> <u>r</u>	ee Faiu I	<b>₹1</b>
Indep. Claims	Extra Claims	Fee (\$)	Fee I	Paid (\$)				— i
maep. Olaimis				<u>u.u.(v)</u>				
HP = highest num	ber of independent claims	paid for, if greater than	3.					
3. APPLICATIO			_			<b></b>		
	tion and drawings ex ler 37 CFR 1.52(e)),							
	action thereof. See 3				oi siliali	entity) for each ac	iditional 2	,0
Total Sheet		,,,,,	•	dditional 50 or frac	tion there	of Fee (\$)	Fee	Paid (\$)
	100 =							
4. OTHER FEE						•	Fees	s Paid (\$)
	Specification, \$130	) fee (no small enti	ity disc	ount)			,	
1	ate filing surcharge)	•		, 				
SUBMITTED BY								
Signature	111/11	WYW	1	Registration No.	53,825	Telephone	(202) 34	44-4975
<del>_</del>		· · · · · · · · · · · · · · · · · · ·		(Attorney/Agent)	00,020			
Name (Print/Type)	Marina V. Zalevsl	γy				Date 2	- Y -	レン



Docket No.: 37112-215811

(PATENT)

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Peter Venetianer et al.

Art Unit: 2621

Application No: 11/098,385

Examiner: Mehrdad Dastouri

Confirmation No: 8277

Filed: April 5, 2005

Atty. Docket No: 37112-215811

Customer No:

For: VIDEO SURVEILLANCE SYSTEM EMPLOYING VIDEO PRIMITIVES

26694
PATENT TRADEMARK OFFICE

#### **INFORMATION DISCLOSURE STATEMENT (IDS)**

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

In accordance with 37 C.F.R. §§ 1.56, 1.97, 1.98 and MPEP § 609, Applicant submits the following Information Disclosure Statement concerning art of which the Applicant is aware. A copy of PTO/SB/08 Form is enclosed. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the documents be made of record therein and appear on any patent to issue therefrom.

In accordance with 37 C.F.R. § 1.98(a)(2)(ii), Applicant has not submitted copies of U.S. patents and U.S. published patent applications. Applicant submits herewith copies of foreign patents, non-patent literature, non published patent applications, and/or International Search Report and/or International Office Action along with an English translation in accordance with 37 C.F.R. § 1.98(a)(2).

Application No.: 11/098,385 Docket No.: 37112-215811

In accordance with 37 C.F.R. § 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 C.F.R. § 1.56(a) exists. In accordance with 37 C.F.R. § 1.97(h), the filing of this Information Disclosure Statement shall not be construed to be an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

Consideration of the appropriate paragraph(s) indicated below is respectfully requested:

WITHIN THREE MONTHS OF FILING: Under § 1.97(b)(1), this Information Disclosure П Statement is being filed within three months of the filing date of the application (or date of entry of the national stage). Although it is believed no fee is necessary, any deficiency in fees should be handled as set forth below.  $\boxtimes$ BEFORE FIRST OFFICE ACTION: Under § 1.97(b)(3), this Information Disclosure Statement is being filed before the mailing date of a first Office Action on the merits. Although it is believed no fee is necessary, any deficiency in fees should be handled as set forth below. BEFORE FINAL ACTION, OR NOTICE OF ALLOWANCE, OR ACTION THAT CLOSES PROSECUTION/WITH STATEMENT: Under § 1.97(c)(1), this information shall be considered if filed before the mailing date of a final action, or a Notice of Allowance or action that otherwise closes prosecution in the application if accompanied by the statement: Under § 1.97(e)(1), the undersigned states: that each item of information contained in the Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the Information Disclosure Statement; or that no item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the Information Disclosure Statement was known to any individual designated in § 1.56(c) more than three months prior to the filing of the Information Disclosure Statement. BEFORE FINAL ACTION, OR NOTICE OF ALLOWANCE, OR ACTION THAT П CLOSES PROSECUTION/WITH FEE: Under § 1.97(c)(2), this information shall be considered if filed

before the mailing date of a final action, or a Notice of Allowance or action that otherwise closes prosecution

in the application if accompanied by a fee in the amount of \$180.00 as required by \$1.17(p). Accordingly, the necessary fee accompanies this Information Disclosure Statement, as set forth below. AFTER FINAL ACTION, OR NOTICE OF ALLOWANCE, OR ACTION THAT CLOSES PROSECUTION/AND ON OR BEFORE PAYMENT OF THE ISSUE FEE: 1 Under § 1.97(e)(1), the undersigned states: that each item of information contained in the Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the Information Disclosure Statement; or that no item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the Information Disclosure Statement was known to any individual designated in § 1.56(c) more than three months prior to the filing of the Information Disclosure Statement; and the fee in the amount of \$180.00 as required by § 1.17(p). Accordingly, the necessary fee accompanies this Information Disclosure Statement, as set forth below. PRIORITY CLAIM: The attached PTO /SB/08 Form includes all patents, publications, or other information previously cited by or submitted to the Office in one or more prior applications from which the present application claims priority. These one or more prior applications are identified in the papers accompanying the filing of this application.

Application No.: 11/098,385

It is submitted that the Information Disclosure Statement is in compliance with 37 C.F.R. § 1.98 and the Examiner is respectfully requested to consider the listed documents.

Docket No.: 37112-215811

Application No.: 11/098,385 Docket No.: 37112-215811

It is believed that no fees are required with the submission of this IDS. However, the Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 22-0261, under Order No. 37112-215811.

Dated: 2-U-08

Respectfully submitted,

DC2/929042

By M. Murina V. Zalevsky

Registration No.: 53,825

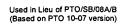
VENABLE LLP P.O. Box 34385

Washington, DC 20043-9998

(202) 344-4000

(202) 344-8300 (Fax)

Attorney/Agent For Applicant





INFORMATION DISCLOSURE STATEMENT BY APPLICANT

 Complete if Known

 Application Number
 11/098,385 - Conf. #8277

 Filing Date
 April 5, 2005

 First Named Inventor
 Peter Venetianer

 Art Unit
 2621

 Examiner Name
 Mehrdad Dastouri

 Attorney Docket Number
 37112-215811

(Use as many she ets as necess ary)

Substitute for form 1449/PTO

Sheet 1 of 1

	U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No.1	Document Number  Number-Kind Code ² ( if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear		
	A1	6,424,370	07-23-2002	Courtney			

	FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Foreign Patent Document  Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	т°
						Г

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. * CITE NO.: Those application(s) which are marked with an single asterisk (*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(iii)) because that application was filed after June 30, 2003 or is available in the IFW. 'Applicant's unique citation designation number (optional). * See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. * The Policant's unique citation designation number (optional). * For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. * Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. * Applicant is to place a check mark here if English language Translation is attached.

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No. ¹	Include name of the author ( in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	C1	International Search Report issued for PCT Application No. PCT/US06/25196, mailed on January 16, 2008.	
	C2	Written Opinion issued for PCT Application No. PCT/US06/25196, mailed on January 16, 2008.	
	C3	Shio et al., "Segmentation of People in Motion", IEEE 1991, p. 325-332.	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Examiner	Date	
Signature	Considered	
Signature	Considered	

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

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NOV 1 3 2007

PTO/SB/21 (09-06)

Approved for use through 03/31/2007. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Application Number

Application Number 11/098,385 - Conf. #8277 **TRANSMITTAL** Filing Date April 5, 2005 First Named Inventor **FORM** Peter Venetianer Art Unit 2621 Examiner Name Mehrdad Dastouri (to be used for all correspondence after initial filing) Attorney Docket Number Total Number of Pages in This Submission 37112-215811

	EN	CLOSURES (Check all	that appl	y)
x Fee Trans	mittal Form	Drawing(s)		After Allowance Communication to TC
Fee	Attached	Licensing-related Papers		Appeal Communication to Board of Appeals and Interferences
Amendmer	nt/Reply	Petition		Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
After	Final	Petition to Convert to a Provisional Application		Proprietary Information
Affida	avits/declaration(s)	Power of Attorney, Revocation Change of Correspondence		Status Letter
Extension	of Time Request	Terminal Disclaimer		Other Enclosure(s) (please Identify below):
Express At	pandonment Request	Request for Refund		<ul> <li>Copy of Japanese Office Action with English translation</li> </ul>
x Informatio	n Disclosure Statement 6B/08A	CD, Number of CD(s)		- Copies of eight (8) documents
Certified C Document(	opy of Priority (s)	Landscape Table on	CD	
	issing Parts/ Application	Remarks		
	y to Missing Parts under FR 1.52 or 1.53			
<del></del>	SIGNATI	URE OF APPLICANT, ATTOR	NEY, OR	AGENT
Firm Name	VENABLE LLP			
Signature	M. Jal	umy		
Printed name	Marina V. Zallevsky			
Date	November 13, 2007		Reg. No.	53,825

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PTO/SB/17 (07-06)

Approved for use through 01/31/2007. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

The Paparous Paduction Act of 1995, no person are required to respond to a collection of information unless it displays a valid OMB control number.

Under the Paperwork Reduction Act of 1995	, no person are required to							
Effective on 12/08/2004			Complete if Know					
Fees pursuant to the Consolidated Appropriation	ons Act, 2005 (H.R. 4818).	Application Number	11/098,385 – C	Conf. #8277				
FEE TRANSM	ITTAL	Filing Date	April 5, 2005					
For FY 200	7	First Named Inventor						
10111200	<u></u>	Examiner Name	Mehrdad Dasto	ouri				
Applicant claims small entity status.	See 37 CFR 1.27	Art Unit	2621					
TOTAL AMOUNT OF PAYMENT	(\$) 0.00	Attorney Docket No.	37112-215811					
METHOD OF PAYMENT (check all t	hat apply)							
Check Credit Card N	Money Order No	one Other (please	identify):					
X Deposit Account Deposit Account Numl	Deposit A	count Name:	Venable LLF	<b>D</b>				
For the above-identified deposit	For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)							
Charge fee(s) indicated be	Charge fee(s) indicated below Charge fee(s) indicated below, except for the filing fee							
X Charge any additional fee(		of X Credit any o	verpayments					
fee(s) under 37 CFR 1.16	and 1.1/							
1. BASIC FILING, SEARCH, AND EXAM	MINATION FEES		<del>,</del>					
•		ARCH FEES EXA	AMINATION FEES					
	Small Entity	Small Entity	Small Entity					
Application Type Fee (\$)	Fee (\$) Fee (		→ (\$) Fee (\$)	Fees Paid (\$)				
Utility 300	150 500		00 100					
Design 200	100 100		30 65					
Plant 200	100 300		60 80					
Reissue 300	150 500	250 6	00 300					
Provisional 200	100	0	0 0					
2. EXCESS CLAIM FEES				Small Entity				
Fee Description				Fee (\$) Fee (\$)				
Each claim over 20 (including Reissues	,			50 25				
Each independent claim over 3 (including	ng Reissues)			200 100				
Multiple dependent claims				360 180				
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-20 = x	=		Fee (\$)	Fee Paid (\$)				
HP = highest number of total claims paid for, if g								
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-3 = X  HP = highest number of independent claims paid	for, if greater than 3.							
3. APPLICATION SIZE FEE	or or or or or or or or or							
If the specification and drawings exceed	ed 100 sheets of pape	r (excluding electronica	IIv filed sequence or	computer				
listings under 37 CFR 1.52(e)), the								
sheets or fraction thereof. See 35 L	J.S.C. 41(a)(1)(G) and	d 37 CFR 1.16(s).	**					
Total Sheets Extra Sheets		additional 50 or fraction t		Fee Paid (\$)				
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4. OTHER FEE(S)				Fees Paid (\$)				
Non-English Specification, \$130 fee (no small entity discount)								
Other (e.g., late filing surcharge):								
SUBMITTED BY								
Signature	M	Registration No. (Attorney/Agent) 53,	825 Telephone	(202) 344-4975				
Name (Print/Type) Marina V. Zalevsky	0		Date	November 3 2007				
				<del></del>				



Docket No.: 37112-215811

(PATENT)

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Peter L. Venetianer et al.

Art Unit: 2621

Application No: 11/098,385

Examiner: Mehrdad Dastouri

Confirmation No: 8277

Filed: April 5, 2005

Atty. Docket No: 37112-215811

Customer No:

For: VIDEO SURVEILLANCE SYSTEM EMPLOYING VIDEO PRIMITIVES

26694
PATENT TRADEMARK OFFICE

#### **INFORMATION DISCLOSURE STATEMENT (IDS)**

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

In accordance with 37 C.F.R. §§ 1.56, 1.97, 1.98 and MPEP § 609, Applicant submits the following Information Disclosure Statement concerning art of which the Applicant is aware. A copy of PTO/SB/08 Form is enclosed. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the documents be made of record therein and appear on any patent to issue therefrom.

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Application No.: 11/098,385 Docket No.: 37112-215811

Under § 1.98(a)(3), no concise explanation of relevance is required for information that is in the English language. Accordingly, the enclosed art in English requires no further explanation. For patent documents BA-BC and BE - BG, English abstracts are submitted. Also, for patent document BB, related U.S. Patent is listed on enclosed PTO/SB/08 as document AA, for patent document BC related English Patent Documents are listed on enclosed PTO/SB/08 as documents BD and AB, and for patent document BG related English Patent Documents are listed on enclosed PTO/SB/08 as documents BH and AC.

In accordance with 37 C.F.R. § 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 C.F.R. § 1.56(a) exists. In accordance with 37 C.F.R. § 1.97(h), the filing of this Information Disclosure Statement shall not be construed to be an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

Consideration of the appropriate paragraph(s) indicated below is respectfully requested:

	WITHIN THREE MONTHS OF FILING: Under § 1.97(b)(1), this Information Disclosure
Statement is be	ing filed within three months of the filing date of the application (or date of entry of the
national stage).	Although it is believed no fee is necessary, any deficiency in fees should be handled as set
forth below.	
$\boxtimes$	BEFORE FIRST OFFICE ACTION: Under § 1.97(b)(3), this Information Disclosure
Statement is bei	ng filed before the mailing date of a first Office Action on the merits. Although it is believed
no fee is necess	ary, any deficiency in fees should be handled as set forth below.
	BEFORE FINAL ACTION, OR NOTICE OF ALLOWANCE, OR ACTION THAT
CLOSES PROS	SECUTION/WITH STATEMENT: Under § 1.97(c)(1), this information shall be considered
f filed before t	he mailing date of a final action, or a Notice of Allowance or action that otherwise closes
prosecution in t	he application if accompanied by the statement:
Under §	1.97(e)(1), the undersigned states:
	A. that each item of information contained in the Information Disclosure Statement was ed in any communication from a foreign patent office in a counterpart foreign application not an three months prior to the filing of the Information Disclosure Statement; or

Docket No.: 37112-215811 Application No.: 11/098,385 that no item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the Information Disclosure Statement was known to any individual designated in § 1.56(c) more than three months prior to the filing of the Information Disclosure Statement. П BEFORE FINAL ACTION, OR NOTICE OF ALLOWANCE, OR ACTION THAT CLOSES PROSECUTION/WITH FEE: Under § 1.97(c)(2), this information shall be considered if filed before the mailing date of a final action, or a Notice of Allowance or action that otherwise closes prosecution in the application if accompanied by a fee in the amount of \$180.00 as required by \$1.17(p). Accordingly, the necessary fee accompanies this Information Disclosure Statement, as set forth below. AFTER FINAL ACTION, OR NOTICE OF ALLOWANCE, OR ACTION THAT CLOSES PROSECUTION/AND ON OR BEFORE PAYMENT OF THE ISSUE FEE: 1 Under § 1.97(e)(1), the undersigned states: that each item of information contained in the Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the Information Disclosure Statement; or that no item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the Information Disclosure Statement was known to any individual designated in § 1.56(c) more than three months prior to the filing of the Information Disclosure Statement: and the fee in the amount of \$180.00 as required by § 1.17(p). Accordingly, the necessary fee accompanies this Information Disclosure Statement, as set forth below. PRIORITY CLAIM: The attached PTO /SB/08 Form includes all patents, publications, or other information previously cited by or submitted to the Office in one or more prior applications from which the present application claims priority. These one or more prior applications are identified in the papers accompanying the filing of this application.

It is submitted that the Information Disclosure Statement is in compliance with 37 C.F.R. § 1.98 and the Examiner is respectfully requested to consider the listed documents.

It is believed that no fees are required with the submission of this IDS. However, the Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which Application No.: 11/098,385 Docket No.: 37112-215811

should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 22-0261, under Order No. 37112-215811.

Dated: November 3, 2007

Respectfully submitted,

DC2/903217

Registration No.: 53,825

VENABLE LLP P.O. Box 34385

Washington, DC 20043-9998

(202) 344-4000 (202) 344-8300 (Fax)

Attorney/Agent For Applicant



Substitute for form 1449/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

STATEMENT BY APPLICANT
Sheet 1 of 1

	Complete if Known	
Application Number	11/098,385 - Conf. # 8277	
Filing Date	April 5, 2005	
First Named Inventor	Peter L. Venetianer	
Art Unit	2621	
Examiner Name	Mehrdad Dastouri	
Attorney Docket Number	37112-215811	

			U.S. PA	TENT DOCUMENTS	
Examiner Initials*	Cite	Document Number  Number-Kind Code ² ( if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
					rigures Appear
	AA	6,987,528	01/17/06	Nagahisa	
	AB	6,741,977	05/25/04	Nagaya	
	AC	6,542,840	04/01/03	Shusaku	
	AD	6,816,184	11/2004	Brill et al.	
	ΑE	7,023,469	04/2006	Olson	
	AF	6,924,801	08/2005	Dorbie	
	AG	6,844,818	01/2005	Grech-Cini	
	AH	2002/0024446	02/2002	Grech-Cini	
	AI	2002/0163521	11/2002	Ellenby et al.	
	AJ	6,088,484	07/2000	Mead	
	AK	2002/0051058	05/2002	Ito et al.	
	AL	6,829,371	12/2004	Nichani et al.	
	AM	6,404,455	06/2002	Ito et al.	
	AN	2003/0053659	03/2003	Pavlidis et al.	
	AO	4,737,847	04/1988	Araki et al.	
	AP	2002/0135483	09/2002	Merheim et al.	· ·
	AQ	5,802,361	09/1998	Wang et al.	
	AR	5,515,453	05/1996	Hennessey et al.	
	AS	4,908,704	03/1990	Fujioka et al.	
	AT	5,872,865	02/1999	Normile et al.	

		FOREI	GN PATENT	DOCUMENTS		
Examiner Initials*	Cite No.1	Foreign Patent Document  Country Code ³ -Number ⁴ -Kind Code ³ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
	BA	JP 10-048008	2/20/98	Omron		1
	BB	JP 2000-339923	8/12/2000	Mitsubishi		1
	BC	JP 2000-224542	11/08/2000	Hitachi		1
	BD	EP 1024666 A2	8/02/2000	Hitachi		Г
	BE	JP 2001-175868	6/29/01	NEC Corp		V
	BF	JP 2000-175174	6/23/2000	Mitsubishi		V
	BG	JP 2001-285681	10/12/2001	Matsushita		1
	ВН	EP 1120746 A2	8/01/2001	Matsushita		

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS					
Examiner Initials	Cite No.1	Include name of the author ( in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²		
	CA	JP Office Action issued in PCT/US02/22688, along with an English translation	1		
	<u> </u>	or Office Action Issued in PC170502/22000, along with an English translation	_		

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

Examiner	Date
Signature	Considered

Approved for use through 03/31/2007. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. Application Number 11/098,385 - Conf. #8277 Filing Date **TRANSMITTAL** April 5, 2005 First Named Inventor **FORM** Peter Venetianer Art Unit Examiner Name Mehrdad Dastouri (to be used for all correspondence after initial filing) Attorney Docket Number 37112-215811 Total Number of Pages in This Submission ENCLOSURES (Check all that apply) After Allowance Communication x Fee Transmittal Form Drawing(s) Appeal Communication to Board of Fee Attached Licensing-related Papers Appeals and Interferences Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) Amendment/Reply Petition Petition to Convert to a After Final Proprietary Information Provisional Application Power of Attorney, Revocation Change of Correspondence Address Affidavits/declaration(s) Status Letter Other Enclosure(s) (please Extension of Time Request Terminal Disclaimer Identify below): Copy of International Search **Express Abandonment Request** Request for Refund Report and Written Opinion Information Disclosure Statement CD, Number of CD(s) and PTO/SB/08A Certified Copy of Priority Landscape Table on CD Document(s) Reply to Missing Parts/ Remarks Incomplete Application Reply to Missing Parts under 37 CFR 1.52 or 1.53 SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT Firm Name VENABLE LLP Signature Printed name

Reg. No.

53,825

DC2/900422

Date

Marina V. Zalevsky

October 16, 2007

OCI 16 AND WE

PTO/SB/17 (07-06)
Approved for use through 01/31/2007. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of	1995, no person are required to	respond to a collection	n of information	n unless it displays	a valid OMB	control number.
Effective on 12/08/3	2004.			olete if Knowi		
Fees pursuant to the Consolidated Appropri	riations Act, 2005 (H.R. 4818).	Application Num		1/098,385 – C	onf. #82	77
│ FEE TRANSI	MITTAL	Filing Date			April 5, 2005	
For FY 20		First Named Inv		eter Venetian		
[]	Examiner Name		lehrdad Dasto	uri		
Applicant claims small entity state	Art Unit	<del>-   -</del>	621			
TOTAL AMOUNT OF PAYMENT	(\$) 0.00	Attorney Docket	No. 3	7112-215811		
METHOD OF PAYMENT (check	all that apply)	-				
Check Credit Card	Money Order No	one Other (	please identif	fy):		
X Deposit Account Deposit Account	Number: 22-0261 Deposit A	count Name:		Venable LLF	•	
For the above-identified depo	sit account, the Director	is hereby authorize	ed to: (check	( all that apply)		
Charge fee(s) indicated	below	Charge	e fee(s) indi	cated below, ex	cept for t	he filing fee
	ee(s) or underpayments	of x Credit	any overpa	yments		
fee(s) under 37 CFR 1	.10 and 1.17					
1. BASIC FILING, SEARCH, AND E	KAMINATION FEES					
		EARCH FEES	EXAMINA	ATION FEES		
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Application Type Fee (\$ Utility 300	150 Fee (\$) Fee (		<u>Fee (\$)</u> 200	Fee (\$) 100	rees	Paid (\$)
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Design 200 Plant 200	100 100		160	80		
Reissue 300	150 500 100 0		600	300		
Provisional 200 2. EXCESS CLAIM FEES	100	0	0	0		Small Entity
Fee Description					Fee (\$)	Fee (\$)
Each claim over 20 (including Reiss	ues)				50	25
Each independent claim over 3 (incl	uding Reissues)				200	100
Multiple dependent claims					360	180
Total Claims Extra Claims	Fee (\$) Fee	Paid (\$)	<u>Mu</u>	Itiple Depende	nt Claims	
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HP = highest number of total claims paid for	· ·					
Indep. Claims Extra Claims	Fee (\$) Fee	Paid (\$)				
HP = highest number of independent claims						
3. APPLICATION SIZE FEE						
If the specification and drawings ex- listings under 37 CFR 1.52(e)),						0
sheets or fraction thereof. See 3				• •		
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4. OTHER FEE(S)	D.C. (1114 41-				Fees	Paid (\$)
Non-English Specification, \$13	•	count)				
Other (e.g., late filing surcharge)						
SUBMITTED BY	1 1	15 73 22 23				
Signature M > X	m v v A	Registration No. (Attorney/Agent)	53,825	Telephone	(202) 34	4-4975
Name (Print/Type) Mar ina V. Zalevsl	ку			Date	October	16, 2007



Docket No.: 37112-215811

(PATENT)

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Peter L. Venetianer Art Unit: 2621

Application No: 11/098,385 Examiner: Mehrdad Dastouri

Confirmation No: 8277

Filed: April 5, 2005 Atty. Docket No: 37112-215811

Customer No:

For: VIDEO SURVEILLANCE SYSTEM EMPLOYING VIDEO PRIMITIVES

26694
PATENT TRADEMARK OFFICE

#### **INFORMATION DISCLOSURE STATEMENT (IDS)**

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom. Copies of **Documents CA and CB** are enclosed.

The present Information Disclosure Statement is being filed before the mailing date of the first Office Action on the merits, and therefore no Statement Under 37 C.F.R. § 1.97(e) or fee under 37 C.F.R. § 1.17(p) is required.



Application No.: 11/098,385

Docket No.: 58086-215811

In accordance with 37 CFR 1.98(a)(2)(ii), Applicant has not submitted copies of U.S. patents and U.S. patent applications. Applicant submits herewith copies of non-patent literature in accordance with 37 CFR 1.98(a)(2).

In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing of this Information Disclosure Statement shall not be construed to be an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

It is submitted that the Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed references.

We believe that no fees are required with the submission of this IDS. However, the Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 22-0261, under Order No. 37112-215811.

Dated: October 16, 2007

Respectfully submitted,

DC2/900411

Registration No.: 53,825

VENABLE LLP P.O. Box 34385

Washington, DC 20043-9998

(202) 344-4000

(202) 344-8300 (Fax)

Attorney/Agent For Applicant



Used in Lieu of PTO/SB/08A/B (Based on PTO 04-07 version)

				Complete if Known			
Substitute for form 1449/PTO		Application Number	11/098,385 - Conf. # 8277				
				Filing Date	April 5, 2005		
IN	FORMATION	וט ו	SCLOSURE	First Named Inventor	Peter L. Venetianer		
	TATEMENT I			Art Unit	2621		
	IAILMENT	J , ,	ALL COMM	Examiner Name	Mehrdad Dastouri		
Sheet	1	of	1	Attorney Docket Number	37112-215811		

	U.S. PATENT DOCUMENTS								
Examiner Initials* Cite No. Number-Kind Code ² ( if known)		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear					
	AA	2002/0008758 A1	01-24-2002	Broemmelsiek et al.					
	AB	6,727,938 B1	04-27-2004	Randall					
	AC	2005/0157169 A1	07-21-2005	Brodsky et al.					

	FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No.1	Foreign Patent Document  Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear				

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. \(^1\) Applicant's unique citation designation number (optional). \(^2\) See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. \(^3\) Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). \(^4\) For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. \(^5\) Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. \(^6\) Applicant is to place a check mark here if English language Translation is attached.

	NON PATENT LITERATURE DOCUMENTS					
Examiner Initials	Cite No.1	Include name of the author ( in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journ al, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²			
	CA	International Search Report issued for PCT Application No. PCT/US06/45625, mailed on September 24, 2007				
	СВ	Written Opinion of the International Searching Authority issued for PCT Application No. PCT/US06/45625, mailed on September 24, 2007				

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Examiner	Date	
Signature	Considered	

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

AUG 1 3 2007	<i>(</i> \$2)	o persons are required		atent and Trad	PTO/SB/21 (09 ad for use through 03/31/2007. OMB 0651-0031 emark Office; U.S. DEPARTMENT OF COMME ormation unless it displays a valid OMB control nur	
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Т	TRANSMITTAL				April 5, 2005	
	FORM		First Named	Inventor	Peter Venetianer	
			Art Unit		2621	
(to be us	(to be used for all correspondence after initial filing)			ame	Mehrdad Dastouri	
				cket Number	37112-215811	
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Fee	Attached	Licensing-re	lated Papers		Appeal Communication to Board of Appeals and Interferences	
Amendme	ent/Reply	Petition		Appeal Communication (Appeal Notice, Brief, Rep		
Afte	r Final	Petition to C			Proprietary Information	
Affic	davits/declaration(s)	Power of Attorney, Revocation Change of Correspondence Address			Status Letter	
Extension	of Time Request	Terminal Dis	inal Disclaimer		X Other Enclosure(s) (please Identify below):	
Express A	Abandonment Request	Request for	Request for Refund		Copy of International Search Report in PCT/US06/02700 and	
	ental Information e Statement and 18A	CD, Number	r of CD(s)		Written Opinion	
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	/lissing Parts/ e Application	Remarks				
	oly to Missing Parts under CFR 1.52 or 1.53					
	SIGNAT	JRE OF APPLIC	ANT, ATTO	RNEY, OR	AGENT	
Firm Name	VENABLE LLP					
Signature	M. val	WM	7			
Printed name	Marina V. Zalevsky		7			
Date	August 13, 2007			Reg. No.	53,825	

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<u>)</u>	// FEE	TRANS	MIIIAL	_	Filing Date		April 5, 2005		
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		claims small entity stat		<del></del>	Art Unit		37112-215811		
	TOTAL AMOUN	T OF PAYMENT	(\$) 0.00		Attorney Docket	No.	37112-213611		
	METHOD OF I	PAYMENT (check	all that apply)						
	Check	Credit Card	Money Order	None	Other (	please ide	entify):		
	X Deposit Acco	ount Deposit Account	Number: 22-0261 D	eposit Accou	nt Name:		Venable LL	Р	
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	FEE CALCULA	ATION							
	1. BASIC FILING	, SEARCH, AND E			2011 5550	<b>-</b> V414	INVATION FEED		
		FI	LING FEES Small Entity	SEAR	RCH FEES Small Entity	EXAM	INATION FEES Small Entity		
	Application Type	oe <u>Fee (\$</u>		Fee (\$)	Fee (\$)	Fee (\$		Fees F	Paid (\$)
	Utility	300	150	500	250	200	100		
	Design	200	100	100	50	130	65		
	Plant	200	100	300	150	160			
	Reissue	300	150	500	250	600			
	Provisional	200	100	0	0	0	0		Sun all Fuells
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		20 (including Reiss	ues)					50	25
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	Total Claims	Extra Claims	Fee (\$)	Fee Pa	id (\$)		Multiple Depende	ent Claims	
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	Indep. Claims	Extra Claims 3 =	 x =	Fee Pa	HU (\$)				
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	listings unde	I SIZE FEE ion and drawings ear or 37 CFR 1.52(e)), ction thereof. See 3	the application siz	e fee due	is \$250 (\$125 f				0
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	_	Specification, \$13	•	ity discou	ınt)			<u>Fees</u>	Paid (\$)
	Other (e.g., la	te filing surcharge)	:						
	SUBMITTED BY	11 4 3		A 1-	Registration No.		T		
	Signature	MM . $M$	UIII YU	$\lambda$ $\Gamma$	registration NO.	53.82	5 Telephone	(202) 34	4-4975

#883046

Name (Print/Type)

Marina V. Zalevsky

Docket No.: 37112-215811

(PATENT)

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Venetianer et al.

Application No: 11/098,385

Confirmation No: 8277

Filed: April 5, 2005

For: VIDEO SURVEILLANCE SYSTEM EMPLOYING VIDEO PRIMATIVES

Art Unit: 2621

Examiner: Mehrdad Dastouri

Atty. Docket No: 37112-215811

Customer No:

26694
PATENT TRADEMARK OFFICE

## SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT TO THE INFORMATION DISCLOSURE STATEMENT FILED JUNE 29, 2007

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to International Search Report and Written Opinion in related International Patent Application No. PCT/US06/02700. It is respectfully requested that the information be expressly considered during the prosecution of this application.

The present Supplemental Information Disclosure Statement is being filed before the mailing date of the first Office Action on the merits, and therefore no Statement Under 37 C.F.R. § 1.97(e) or fee under 37 C.F.R. § 1.17(p) is required.

In accordance with 37 CFR 1.97(g), the filing of this Supplemental Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing of this Supplemental Information Disclosure Statement shall not be construed to be an

Application No.: 11/098,385 Docket No.: 37112-215811

admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

We believe that no fees are required with the submission of this Supplemental Information Disclosure Statement. However, the Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 22-0261, under Order No. 37112-215811.

Dated: August <u>13</u>, 2007

Respectfully submitted,

Marina V. Zalevsky

Registration No.: 53,825

VENABLE LLP P.O. Box 34385

Washington, DC 20043-9998

(202) 344-4000 (202) 344-8300 (Fax)

Attorney/Agent For Applicant

DC2DOCS1-#883043-v1-Supplemental_IDS_37112-215811.DOC

PTO/SB/08A/B (09-06)
Approved for use through 03/31/2007. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Inder the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1 of 1

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THE COMPONENTS

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	Complete if Known
Application Number	11/098,385 – Conf. #8277
Filing Date	April 5, 2005
First Named Inventor	Peter Venetianer
Art Unit	2621
Examiner Name	Mehrdad Dastouri
Attorney Docket Number	37112-215811

	U.S. PATENT DOCUMENTS								
Examiner Initials*	Cite No.1	Document Number  Number-Kind Code ² ( if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear				
	AA								
	AB								

	FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No.1	Foreign Patent Document  Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	۳°			
	ВА								
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
	CA	International Search Report and Written Opinion in PCT/US06/02700	
	СВ		

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Examiner	Date	
Signature	Considered	

^{&#}x27;Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

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PTO/SB/17 (07-06)
Approved for use through 01/31/2007. OMB 0651-0032
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JUL 8 3 2007	اس) الس	<del>-</del>			First Named Inventor		eter Venetian	er	
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				170	torney Docket	140.			
	METHOD OF PA	AYMENT (check a	Ithat apply)						
	Check	Credit Card	Money Order	None	Other (	please identi	ify):		
	x Deposit Accou	nt Deposit Account Nu	mber: 22-0261 De	eposit Account	Name:		Venable LLF	·	
	For the abo	ve-identified depos	it account, the Dir	ector is he	reby authorize	d to: (chec	k all that apply)		
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	1. BASIC FILING,		AMINATION FEE	s					
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	Utility	300	150	500	250	200	100		
	Design	200	100	100	50	130	65		
	Plant	200	100	300	150	160	80		
	Reissue	300	150	500	250	600	300		
	Provisional	200	100	0	0	0	0		
	2. EXCESS CLAIM	FEES							mall Entity
	Fee Description							Fee (\$)	Fee (\$)
	Each claim over 20							50	25
	•	claim over 3 (includ	ing Reissues)					200	100
	Multiple dependent							360	180
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	3. APPLICATION S								
		n and drawings exc	eed 100 sheets of	paper (exc	luding electro	onically file	ed sequence or o	omputer	
	listings under 3	37 CFR 1.52(e)), th	e application size	fee due is	\$250 (\$125 fo	or small en	tity) for each ad	ditional 50	
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	4. OTHER FEE(S)							Fees P	Paid (\$)
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	Other (e.g., late	filing surcharge): _							
Ī	SUBMITTED BY	11.							
	Signature	MITAL	WYV	Reg	istration No. orney/Agent)	53,825	Telephone	(202) 344	-4975
Ì	Name (Print/Type) M	arina V. Zalevsky		J 1000	23921		Date	July 23, 2	2007

Under the Pressor			U.S. Patent and Trad	emark mation	PTO/SB/21 (09-06 for use through 03/31/2007. OMB 0651-0031 Office; U.S. DEPARTMENT OF COMMERCE nucless it displays a valid OMB control number 11/098,385 — Conf. #8277		
	RANSMITT	AL	First Named Inventor		April 5, 2005		
	FORM				Peter Venetianer 2621		
					Mehrdad Dastouri		
(to be us	(to be used for all correspondence after initial filing)				37112-215811		
ENCLOSURES (Check all that apply)							
X Fee Trans	mittal Form	Drawing(s)	`		After Allowance Communication to TC		
Fee	Attached	Licensing-related Papers			Appeal Communication to Board of Appeals and Interferences		
x Amendme	ent/Reply	Petition			Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)		
After	Final	Petition to Convert to a Provisional Application			Proprietary Information		
Affid	avits/declaration(s)	Power of Attorney, Revocation Change of Correspondence Address			Status Letter		
Extension	of Time Request	Terminal Disclaimer			Other Enclosure(s) (please Identify below):		
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Information and PTO/S	n Disclosure Statement SB/08A	CD, Number of CD(s)					
Certified C	opy of Priority (s)	Landscape Table on CD					
	lissing Parts/ Application	Remarks					
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SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT							
Firm Name	VENABLE LLP						
Signature			July Y	N	79		
Printed name	Marina V. Zalevsky	M.	9		~		
Date	July 23, 2007		Reg. No	). ₅	53,825		



In re Patent Application of:

Venetianer et al.

Art Unit: 2621

Application No: 11/098,385

Examiner: Mehrdad Dastouri

Confirmation No: 8277

Filed: April 5, 2005

Atty. Docket No: 37112-215811

Customer No:

For: VIDEO SURVEILLANCE SYSTEM EMPLOYING VIDEO PRIMATIVES

26694
PATENT TRADEMARK OFFICE

### **FIRST PRELIMINARY AMENDMENT**

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

### **INTRODUCTORY COMMENTS**

Prior to examination on the merits, please amend the above-identified U.S. patent application as follows:

Amendments to the Specification begin on page 2 of this paper.

Remarks begin on page 4 of this paper.

### Amendments to the Specification:

Please add the following new paragraphs 144.1-144.6 immediately following paragraph 144:

- [144.1] In block 31, one or more objects types of interests are identified in terms of video primitives or abstractions thereof. Examples of one or more objects include: an object; a person; a red object; two objects; two persons; and a vehicle.
- [144.2] In block 32, one or more spatial areas of interest are identified. An area refers to one or more portions of an image from a source video or a spatial portion of a scene being viewed by a video sensor. An area also includes a combination of areas from various scenes and/or images. An area can be an image-based space (e.g., a line, a rectangle, a polygon, or a circle in a video image) or a three-dimensional space (e.g., a cube, or an area of floor space in a building).
- [144.3] Figure 12 illustrates identifying areas along an aisle in a grocery store. Four areas are identified: coffee; soda promotion; chips snacks; and bottled water. The areas are identified via a point-and-click interface with the system.
- [144.4] In block 33, one or more temporal attributes of interest are optionally identified. Examples of a temporal attribute include: every 15 minutes; between 9:00 p.m. to 6:30 a.m.; less than 5 minutes; longer than 30 seconds; over the weekend; and within 20 minutes of.
- In block 34, a response is optionally identified. Examples of a response includes the following: activating a visual and/or audio alert on a system display; activating a visual and/or audio alarm system at the location; activating a silent alarm; activating a rapid response mechanism; locking a door; contacting a security service; forwarding data (e.g., image data, video data, video primitives; and/or analyzed data) to another computer system via a network, such as the Internet; saving such data to a designated computer-readable medium; activating

some other sensor or surveillance system; tasking the computer system 11 and/or another computer system; and directing the computer system 11 and/or another computer system.

[144.6] In block 35, one or more discriminators are identified by describing interactions between video primitives (or their abstractions), spatial areas of interest, and temporal attributes of interest. An interaction is determined for a combination of one or more objects identified in block 31, one or more spatial areas of interest identified in block 32, and one or more temporal attributes of interest identified in block 33. One or more responses identified in block 34 are optionally associated with each event discriminator.

Please replace paragraph 170 in the specification with the following replacement paragraph:

[170] In block 53, blobs are generated. In general, a blob is any object in a frame. Examples of a blob include: a moving object, such as a person or a vehicle; and a consumer product, such as a piece of furniture, a clothing item, or a retail shelf item. Blobs are generated using the detected objects from blocks 51 and 52 32 and 33. Any technique for generating blobs can be used for this block. An exemplary technique for generating blobs from motion detection and change detection uses a connected components scheme. For example, the morphology and connected components algorithm can be used, which is described in {1}.

Please replace paragraph 179 in the specification with the following replacement paragraph:

[179] In block 61, responses are undertaken as dictated by the event discriminators that detected the event occurrences. The responses, if any, are identified for each event discriminator in block [[34]] 162.

### **REMARKS**

The amendments made in this preliminary amendment are to correct minor typographical mistakes and add a detailed description of Figures 3 and 12 (new paragraphs 144.1-144.6). The support for new paragraphs 144.1-144.6 is found in a parent Patent Application No. 09/987,707, paragraphs 92-97, which parent application is incorporated by reference in the present application in its entirety. Applicants respectfully submit that the amendments to the specification do not represent any new subject matter. An examination on the merits of the application is respectfully requested.

Dated: July 23, 2007

Respectfully submitted,

Marina V. Zalevsky

Registration No.: 53,825

VENABLE LLP P.O. Box 34385

Washington, DC 20043-9998

(202) 344-4000

(202) 344-8300 (Fax)

Attorney/Agent For Applicant

#878091

PTO/SB/21 (09-06)
Approved for use through 03/31/2007. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

er the Paperwork Reduction Act of 1995, no persons are required to resp and to a collection of information unless it displays a valid OMB control number. Application Number 11/098,385 - Conf. #8277 Filing Date TRANSMITTAL April 5, 2005 First Named Inventor **FORM** Peter Venetianer Art Unit 2621 Examiner Name Mehrdad Dastouri (to be used for all correspondence after initial filing) Attorney Docket Number 37112-215811 Total Number of Pages in This Submission ENCLOSURES (Check all that apply) After Allowance Communication x Fee Transmittal Form Drawing(s) to TC Appeal Communication to Board of Fee Attached Licensing-related Papers Appeals and Interferences Appeal Communication to TC Amendment/Reply Petition (Appeal Notice, Brief, Reply Brief) Petition to Convert to a After Final Proprietary Information Provisional Application Power of Attorney, Revocation Affidavits/declaration(s) Status Letter Change of Correspondence Address Other Enclosure(s) (please Extension of Time Request Terminal Disclaimer Identify below): Express Abandonment Request Request for Refund Information Disclosure Statement CD, Number of CD(s) and PTO/SB/08A Certified Copy of Priority Landscape Table on CD Document(s) Reply to Missing Parts/ Remarks Incomplete Application Reply to Missing Parts under 37 CFR 1.52 or 1.53 SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT Firm Name VENABLE LLP Signature

Reg. No.

53.825

DC1/244940

Date

Printed name

Marina V. Zalevsky

June 29, 2007

PTO/SB/17 (07-06)

PLO/SB/17 (07-06)
Approved for use through 01/31/2007. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no person are required to respond to a collection of information unless it displays a valid OMB control number. Complete if Known Effective on 12/08/2004. 11/098,385 - Conf. #8277 ees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818). Application Number RANSMIT April 5, 2005 Filing Date Peter Venetianer First Named Inventor For FY 2006 Examiner Name Mehrdad Dastouri Applicant claims small entity status. See 37 CFR 1.27 2621 Art Unit TOTAL AMOUNT OF PAYMENT 37112-215811 Attorney Docket No METHOD OF PAYMENT (check all that apply) Money Order Credit Card Other (please identify): X Deposit Account Deposit Account Number: 22-0261 Deposit Account Name Venable LLP For the above-identified deposit account, the Director is hereby authorized to: (check all that apply) Charge fee(s) indicated below, except for the filing fee Charge fee(s) indicated below Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17 x Credit any overpayments FEE CALCULATION 1. BASIC FILING, SEARCH, AND EXAMINATION FEES **FILING FEES** SEARCH FEES **EXAMINATION FEES** Small Entity **Small Entity** Small Entity **Application Type** Fee (\$) Fee (\$) Fee (\$) Fees Paid (\$) Fee (\$) Fee (\$) Fee (\$) 500 200 Utility 300 150 250 100 Design 200 100 100 50 130 65 Plant 200 100 300 150 160 80 Reissue 300 150 500 250 600 300 Provisional 2. EXCESS CLAIM FEES Small Entity Fee (\$) Fee (\$) Fee Description Each claim over 20 (including Reissues) 25 50 Each independent claim over 3 (including Reissues) 200 100 Multiple dependent claims 360 180 **Total Claims** Fee Paid (\$) **Multiple Dependent Claims** Fee (\$) Fee (\$) Fee Paid (\$) HP = highest number of total claims paid for, if greater than 20. Fee Paid (\$) Extra Claims Indep. Claims HP = highest number of independent claims paid for, if greater than 3. 3. APPLICATION SIZE FEE If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s). Number of each additional 50 or fraction thereof Fee Paid (\$) **Total Sheets** Extra Sheets Fee (\$) - 100 = /50 _ (round up to a whole number) x 4. OTHER FEE(S) Fees Paid (\$) Non-English Specification, \$130 fee (no small entity discount) Other (e.g., late filing surcharge): SUBMITTED BY Registration No Signature 53,825 Telephone (202) 344-4975 (Attorney/Agent) Name (Print/Type) Marina V. Zalevsky June 29, 2007

DC1/244936



Docket No.: 37112-215811

(PATENT)

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Venetianer et al.

Art Unit: 2613

Application No: 11/098,385

Examiner: Mehrdad Dastouri

Confirmation No: 8277

Filed: April 5, 2005

Atty. Docket No: 37112-215811

Customer No:

For: VIDEO SURVEILLANCE SYSTEM EMPLOYING VIDEO PRIMATIVES

26694
PATENT TRADEMARK OFFICE

### **INFORMATION DISCLOSURE STATEMENT (IDS)**

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the reference listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

The present Information Disclosure Statement is being filed before the mailing date of the first Office Action on the merits, and therefore no Statement Under 37 C.F.R. § 1.97(e) or fee under 37 C.F.R. § 1.17(p) is required.

In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as

Application No.: 11/098,385 Docket No.: 37112-215811

defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing of this Information Disclosure Statement shall not be construed to be an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

It is submitted that the Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed references.

We believe that no fees are required with the submission of this IDS. However, the Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 22-0261, under Order No. 37112-215811.

Dated: June 29, 2007

Respectfully submitted,

DC1/244916

Marina V. Zalevsky
Registration No.: 53,825

VENABLE LLP P.O. Box 34385

Washington, DC 20043-9998

(202) 344-4000 (202) 344-8300 (Fax)

Attorney/Agent For Applicant



PTO/SB/08A/B (09-06)
Approved for use through 03/31/2007. OMB 0651-0031
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Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

### INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet of

	Complete if Known
Application Number	11/098,385 - Conf. #8277
Filing Date	April 5, 2005
First Named Inventor	Peter Venetianer
Art Unit	2621
Examiner Name	Mehrdad Dastouri
Attorney Docket Number	37112-215811

	U.S. PATENT DOCUMENTS									
Examiner Initials*	Cite No.1	Document Number  Number-Kind Code ² ( if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear					
	AA	US-6,628,835	09-30-2003	Brill et al.						
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		FOREIG	GN PATENT I	DOCUMENTS		
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 'Applicant's unique citation designation number (optional). 'See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. 'Senter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 'For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.' Skind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 'Applicant is to place a check mark here if English language Translation is attached.

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
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^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Examiner	Date
Signature	Considered
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Firm or Individual name  Venable P.O. Box 34385 Washington, D.C. 20043-9998  Signature  Date  Venable P.O. Box 34385 Washington, D.C. 20043-9998  PATENT TRADEMARK OFFICE  Jeffrey W. Gluck – Reg. No. 44,457  November 29, 2005	Parts under 3						
or Individual name P.O. Box 34385 Washington, D.C. 20043-9998  Signature Date P.O. Box 34385 PATENT TRADEMARK OFFICE  Jeffrey W. Gluck – Reg. No. 44,457  November 29, 2005		SIGNA	TURE OF	APPLICANT, ATTORN	EY, OR AGI	ENT	
Date November 29, 2005	or	P.O. Box 34385	043-9998				
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### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Confirmation No: 8277

Peter VENETIANER et al. | Art Unit: 2613

Application No: 11/098,385 Examiner: Not yet assigned

Filed: April 5, 2005 Atty. Docket No: 37112-215811

For: VIDEO SURVEILLANCE SYSTEM Customer No:

EMPLOYING VIDEO PRIMITIVES 26694

### INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents P. O. Box 1450 Alexandria, VA 22313-1450

Sir:

This is an Information Disclosure Statement submitted under 37 C.F.R. § 1.97 within the time specified under 37 C.F.R. § 1.97(b).

In order to comply with applicant's duty of disclosure under 37 C.F.R. § 1.56, the U.S. Patent and Trademark Office is notified of the document listed on the attached Form PTO/SB/08A, and which the Examiner may deem relevant to patentability of the claims of the above-identified application. A copy of the cited reference is enclosed, including a translation of the abstract.

The present Information Disclosure Statement is being filed before the mailing date of the first Office Action on the merits, and therefore no Statement Under 37 C.F.R. § 1.97(e) or fee under 37 C.F.R. § 1.17(p) is required.

In view of the above, no further translation or statement of relevance is required, and as all requirements of 37 C.F.R. § 1.97 and all official guidelines pertaining to Information Disclosure Statements have been complied with, and it is therefore respectfully requested that the Examiner consider the documents and make them of record.

Applicants: Peter VENETIANER et al. Application No.: 11/098,385

No fee is due for the submission of this Information Disclosure Statement. However, if any additional fees are deemed necessary, please charge any necessary fee or credit any overpayment in connection with this Information Disclosure Statement to Deposit Account No. 22-0261.

Respectfully submitted,

Date: 11/29/05

Registration No. 44,457 VENABLE LLP P.O. Box 34385

Washington, D.C. 20043-9998

Telephone: (202) 344-4000 Facsimile: (202) 344-8300

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				U.S. PATENT DOCUM	MENTS	
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Examiner Initials *	Cite No.1	Number	Kind Code ² (if known)	Name of Patentee or Applicant of Cited Document	Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



DC2DOCS1/701094





In re application of:

Confirmation No: 8277

Peter VENETIANER et al.

Art Unit: 2613

Application No: 11/098,385

Examiner: Not yet assigned

Filed: April 5, 2005

Atty. Docket No: 37112-215811

For: VIDEO SURVEILLANCE SYSTEM EMPLOYING VIDEO PRIMITIVES

Customer No:

26694
PATENT TRADEMARK OFFICE

### INFORMATION DISCLOSURE STATEMENT

Mail Stop: Patent Applications
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Sir:

This is an Information Disclosure Statement submitted under 37 C.F.R. § 1.97 within the time specified under 37 C.F.R. § 1.97(b).

In order to comply with applicant's duty of disclosure under 37 C.F.R. § 1.56, the U.S. Patent and Trademark Office is notified of the documents which are listed on the attached Form PTO/SB/08A and which the Examiner may deem relevant to patentability of the claims of the above-identified application. No copies of the listed documents are being submitted as these documents have previously been submitted to the Patent Office and/or made of record in copending Applications No. 09/694,712, 09/987,707 and 11/057,154.

The present Information Disclosure Statement is being filed before the mailing date of the first Office Action on the merits, and therefore no Statement Under 37 C.F.R. § 1.97(e) or fee under 37 C.F.R. § 1.17(p) is required.

In view of the above, no further translation or statement of relevance is required, and as all requirements of 37 C.F.R. § 1.97 and all official guidelines pertaining to Information



Applicants: Peter VENETIANER et al. Application No.: 11/098,385

Disclosure Statements have been complied with, and it is therefore respectfully requested that the Examiner consider the documents and make them of record.

No fee is due for the submission of this Information Disclosure Statement. However, if any additional fees are deemed necessary, please charge any necessary fee or credit any overpayment in connection with this Information Disclosure Statement to Deposit Account No. 22-0261.

Respectfully submitted,

Date: July 1, 2005

Registration No. 44,457 VENABLE LLP P.O. Box 34385

Washington, D.C. 20043-9998

Telephone: (202) 344-4000 Facsimile: (202) 344-8300

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Substitute	for form 1449A/PTC	)	<b>102</b>		Complete if Known	
				Application Number	11/098,385	
INFO	RMATION	DIS	CLOSURE	Filing Date April 25, 2005		
STAT	<b>TEMENT B</b>	Y A	PPLICANT	First Named Inventor	P. VENETIANER et al.	
				Group Art Unit	2613	
	(use as many she	ets as	necessary)	Examiner Name	Not Yet Assigned	
Sheet	1	of	3	Attorney Docket Number	37112-215811	

				U.S. PATENT DOCU	MENTS	
Examiner	Cite	U.S. Patent Doc		Name of Patentee or Applicant	Date of Publication of	Pages, Columns, Lines, Where Relevant
Initials *	No.1	Number Kind (		of Cited Document	Cited Document MM-DD-YYYY	Passages or Relevant Figures Appear
	1	6,801,662	BI	OWECHKO, et al.	10/05/2004	
	2	6,597,800	Bl	MURRAY, et al.	7/22/2003	
	3	2003/0051255	A1	BULMAN, et al.	3/13/2003	1
	4	6,504,479	Bl	LEMONS, et al.	1/07/2003	
	5	6,411,724	B1	VAITHILINGAM, et al.	6/25/2002	
	6	6,351,265	Bl	BULMAN	2/26/2002	
	7	6,351,492	Bl	KIM, Jin-Hun	2/26/2002	
	8	6,326,964	B1	SNYDER, et al.	12/04/2001	
	9	6,310,916	B1	HAN, Seok-Won	10/30/2001	
	10	6,307,885	B1	MOON, et al.	10/23/2001	
	11	6,226,388		QIAN, et al.	05/01/01	
	12	6,201,473		SCHAFFER	03/13/01	
	13	6,177,886		BILLINGTON, et al.	01/23/01	i
	14	6,166,744	A	JASZLICS, et al.	12/26/2000	
	15	6,151,413	A	JANG, Euce-scon	11/21/2000	
	16	6,144,375		JAIN et al.	11/7/2000	
	17	6,097,429		SEELEY, et al.	08/01/00	
	18	6,091,771		SEELEY, et al.	07/18/00	
	19	6,075,560		KATZ	06/13/00	
	20	6,014,461		HENNESSEY et al.	1/11/2000	
	21	5,999,189		KAJIYA, et al.	12/07/99	
	22	5,987,211		ABECASSIS	11/16/99	
,	23	5,983,147	A	KRUMM, John	11/09/1999	
	24	5,959,690		TOEBES, VIII, et al.	09/28/99	
	25	5,956,081		KATZ, et al.	09/21/99	
A A /A	26	5,886,701		CHAUVIN, et al.	03/23/99	
	27	5,860,086		CRUMP, et al.	01/12/99	
	28	5,801,943		NASBURG	09/01/98	
······································	29	5,696,503		NASBURG	12/09/97	
	30	5,623,249		CAMIRE	04/22/97	
	31	5,610,653		ABECASSIS	03/11/97	
	32	5,491,511		ODLE	02/13/96	
	33	5,448,315		SOOHOO	09/05/95	
	34	3,812,287		LEMELSON	05/21/74	

	-			FOREIG	N PATENT	DOCU	MENTS			
Examiner Initials* Cite No.1	Cite	For	Foreign Patent Document			Name of Patentee		oublication of	Pages, Columns, Lines, Where Relevant	
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Sheet

### INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Under the Paperwork Reduction All of 1995, no person

(use as many sheets as necessary)

2 of 3

Complete if Known					
Application Number	11/098,385				
Filing Date	April 5, 2005				
First Named Inventor	P. VENETIANER et al.				
Group Art Unit	2613	_			
Examiner Name	Not Yet Assigned				
Attorney Docket Number	37112-215811	J			

		OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS				
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²			
	35	H. Fujiyoshi and A. J. Lipton, "Real-time Human Motion Analysis by Image Skeletonization, "Proceedings of IEEE WACV'98, Princeton, NJ, 1998, pp.15-21.				
	A. J. Lipton, H. Fujiyoshi and R. S. Patil, "Moving Target Classification and Tracking from Real-time Video," Proceedings of IEEE WACV'98, Princeton, NJ, 1998, pp.8-14.  A. J. Lipton, "Local Application of Optic Flow to Analyse Rigid Versus Non-Rigid Motion," International Conference on Computer Vision, Corfu, Greece, September 1999.					
	38	R. T. Collins, Y. Tsin, J. R. Miller, and A. J. Lipton "Using a DEM to Determine Geospatial Object Trajectories," CMU-RI-TR-98-19, 1998.				
	39	A. Selinger and L. Wixson, "Classifying Moving Objects as Rigid or Non-Rigid Without Correspondences," <u>Proceedings of DARPA Image Understanding Workshop</u> , 1, November 1998, pp. 341-47.				
	40	Jemez Technology Corp., Variant iD Web-Site, www.variantid.com, printed August 25, 2003.				
4,11,00	41	Alan J. Lipton "Virtual Postman-An Illustrative Example of Virtual Video," International Journal of Robotics and Automation, Vol. 15, No. 1, January 2000, pages 9-16.				
	42	Alan J. Lipton, "Virtual Postman – Real-Time, Interactive Virtual Video," IASTED Conference on Computer Graphics and Imaging (CGIM '99), Palm Springs, October 25-27, 1999.				
	43	Robert T. Collins et al., "A System for Video Surveillance and Monitoring," Technical Report CMU-RI-TR-00-12, Robotics Institute, Carnegie Mellon University, May 2000.				
	44	L. WIXSON ET AL., "Detecting Salient Motion by Accumulating Directionally-Consistent Flow," IEEE, 1999.				
_	45	W.E.L. GRIMSON ET AL., "Using Adaptive Tracking to Classify and Monitor Activities in a Site," CVPR, pp. 22-29, June 1998.				
	46	A.J. LIPTON ET AL., "Moving Target Classification and Tracking from Real-time Video," IUW, pp. 129-136, 1998.				
·	47	T.J. OLSEN ET Al., "Moving Object Detection and Event Recognition Algorithm for Smart Cameras," IUW, pp. 159-175, May 1997.				
	48	A. J. LIPTON, "Local Application of Optical Flow to Analyse Rigid Versus Non-Rigid Motion," International Conference on Computer Vision Frame Rate Workshop, Corfu, Greece, September 1999.				
	49	F. BARTOLINI ET AL., "Counting people getting in and out of a bus by real-time image-sequence processing," IVC, 12(1):36-41, January 1994.				
	50	M. ROSSI ET AL., "Tracking and counting moving people," ICIP94, pp. 212-216, 1994.				
	51	C.R. WREN ET AL., "Pfinder: Real-time tracking of the human body," Vismod, 1995.				
	52	L. KHOUDOUR ET AL., "Real-Time Pedestrian Counting by Active Linear Cameras," JEI, 5(4):452-459, October 1996.				
	53	S. IOFFE ET AL., "Probabilistic Methods for Finding People," IJCV, 43(1):45-68, June 2001.				
Examiner Signature		Date Considered				

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						App	lication Number	11/098,385
	INFO	RMATION	DIS	CLOSU	RE	Filir	g Date	April 5, 2005
	STAT	EMENT B	Y A	PPLICA	NT	Firs	Named Inventor	P. VENETIANER et al.
						Gro	ip Art Unit	2613
		(use as many she	ets as	necessary)		Exa	miner Name	Not Yet Assigned
-	Sheet	3	of	3		Atto	rney Docket Number	37112-215811

		OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS				
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²			
	54	M. ISARD ET AL., "BraMBLe: A Bayesian Multiple-Blob Tracker," ICCV, 2001.				
	55 D.M. GAVRILA, "The Visual Analysis of Human Movement: A Survey," CVIU, 73(1):82-98, January 1999.					
	56	N. HAERING ET AL., "Visual Event Detection," Video Computing Series, Editor Mubarak Shah, 2001.				
	57	COLLINS ET AL., "A System for Video Surveillance and Monitoring: VSAM Final Report," Technical Report CMU-RI- TR-00-12, Robotics Institute, Carnegie Mellon University, May 2000.				
	58	J.P. DEPARIS ET AL., "A Device for Counting Passengers Making Use of Two Active Linear Cameras: Comparison of Algorithms," IEEE, pp. 1629-1634, 1996.				
	59	C.R. WREN ET AL "Pfinder: Real-Time Tracking of the Human Body," PAMI, vol 19, pp. 780-784, 1997.				
	60	M. ALLMEN ET AL., "LongRange Spatiotemporal Motion Understanding Using Spatiotemporal Flow Curves," Proc. IEEE CVPR, Lahaina, Maui, Hawaii, pp. 303-309, 1991.				
	61	L. WIXSON, "Detecting Salient Motion by Accumulating Directionally Consistent Flow", IEEE Trans. Pattern Anal. Mach. Intell., vol. 22, pp. 774-781, Aug, 2000.				
Examiner Signature		Date Considered				

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



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### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Peter L. VENETIANER

Art Unit: 2613

Appl. No. 11/098,385

Examiner: Not Yet Assigned

Confirmation No. 8277

Filed: April 5, 2005

Atty. Docket No. 37112-215811

For:

VIDEO SURVEILLANCE SYSTEM EMPLOYING VIDEO PRIMITIVES

Customer No.

26694
PATENT TRADEMARK OFFICE

### Request for Corrected Filing Receipt

Mail Stop: Office of Initial Patent Examination Filing Receipt Corrections

Commissioner for Patents P. O. Box 1450 Alexandria, VA 22313-1450

**Attention: BOX PATENT APPLICATION** 

Sir:

Submitted herewith is the original filing receipt with a request that a corrected filing receipt be issued reflecting the correct spelling of the eighth inventor's last name.

-- ZHONG ZHANG --

Respectfully submitted,

Date: 6/30/05

Jeffrey W. Gluck, Ph.D. Registration No. 44,457

VENABLE LLP P.O. Box 34385

Washington, D.C. 20043-9998 Telephone: (202) 344-4000

Telefax: (202) 344-8300

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APPL NO. | FILING OR 371 | ART UNIT | FIL FEE REC'D | ATTY.DOCKET NO | DRAWINGS | TOT CLMS | IND CLMS | 11/098,385 | 04/05/2005 | 2613 | 650 | 37112-215811 | 10/6 | 19 | 26 | 2

26694 VENABLE LLP P.O. BOX 34385 WASHINGTON, DC 20045-9998 CONFIRMATION NO. 8277
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*OC000000015892436*

Date Mailed: 06/02/2005

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### Applicant(s)

Peter L. Venetianer, McLean, VA; Alan J. Lipton, Herndon, VA; Andrew J. Chosak, Arlington, VA; Matthew F. Frazier, Arlington, VA; Niels Haering, Reston, VA; Gary W. Myers, Ashburn, VA; Weihong Yin, Herndon, VA; Zhong Zhang Herndon, VA;

### **Assignment For Published Patent Application**

OBJECTVIDEO, INC., RESTON, VA

Power of Attorney: The patent practitioners associated with Customer Number 26694.

### Domestic Priority data as claimed by applicant

This application is a CIP of 11/057,154 02/15/2005 which is a CIP of 09/987,707 11/15/2001 which is a CIP of 09/694,712 10/24/2000

**Foreign Applications** 

If Required, Foreign Filing License Granted: 04/27/2005

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is US11/098,385

Projected Publication Date: 08/04/2005

Non-Publication Request: No

Early Publication Request: No

** SMALL ENTITY **

Title

Video surveillance system employing video primitives

**Preliminary Class** 

348

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**CONFIRMATION NO. 8277** 

26694 VENABLE LLP P.O. BOX 34385 **WASHINGTON, DC 20435-9998**  **FILING RECEIPT** *OC000000015892436*

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OBJECTVIDEO, INC., RESTON, VA

Power of Attorney: The patent practitioners associated with Customer Number 26694.

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### Foreign Applications

If Required, Foreign Filing License Granted: 04/27/2005

The country code and number of your priority application, to be used for filing abroad under the Paris The State of State of the State of Stat Convention, is **US11/098,385** ្រុក ( ១៩) ស្ត្^រ ១ ( ១៩ ) ស

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Projected Publication Date: 08/04/2005

Non-Publication Request: No

Early Publication Request: No

** SMALL ENTITY **

Title

Video surveillance system employing video primitives

**Preliminary Class** 

348

## LICENSE FOR FOREIGN FILING UNDER Title 35, United States Code, Section 184 Title 37, Code of Federal Regulations, 5.11 & 5.15

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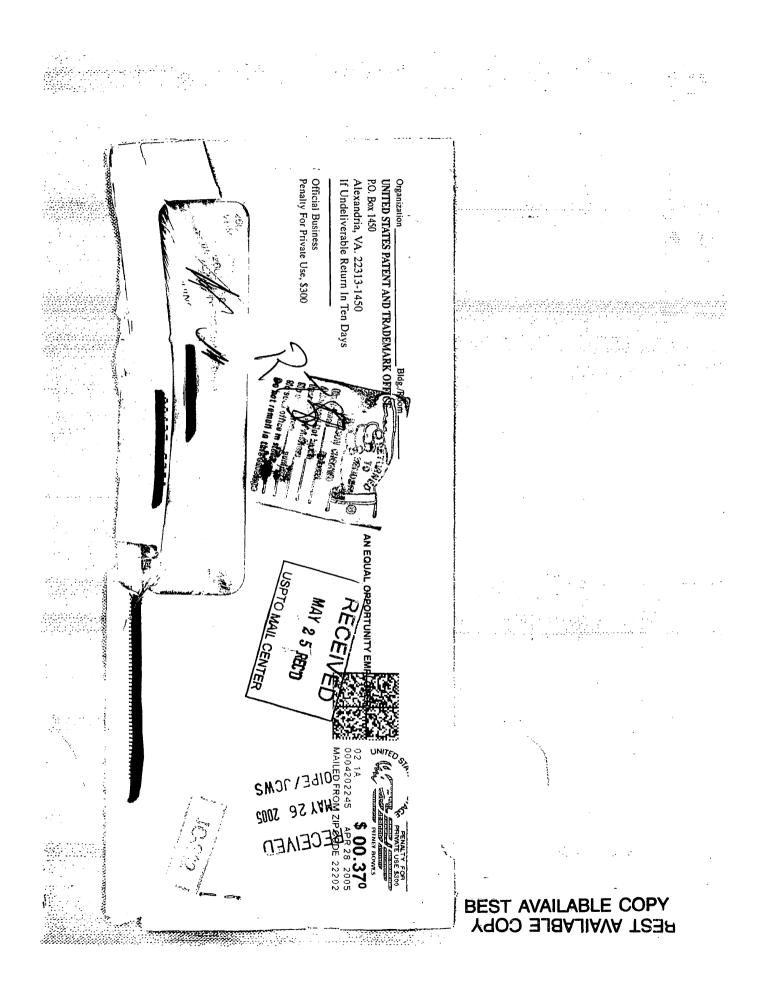
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# UTILITY PATENT APPLICATION TRANSMITTAL

Attorney Docket No.		3/112-215811
First Inventor		Peter L. Venetianer
VIDEO SUR VIDEO PRIM		VEILLANCE SYSTEM EMPLOYING MITIVES
_	- 14-11	

(ONLY FOR NEW NONPROVISIONAL APPLICATIONS UNDER 37 CFR 1.53(B))	VIDEO I INIMITYEE				
Exp	s Mail Label No.				
APPLICATION ELEMENTS See MPEP chapter 600 concerning utility patent application contents.	ADDRESS TO: Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450				
Fee Transmittal Form (e.g., PTO/SB/17)     (Submit an original and a duplicate for fee processing)	ACCOMPANYING APPLICATION PARTS				
2. X Applicant claims small entity status. See 37 CFR 1.27.	9. X Assignment Papers (cover sheet & document(s))				
3. X Specification [Total Pages 54]	Name of Assignee:				
Both the claims and abstract must start on a new page (For information on the preferred arrangement, see MPEP 608.01(a))	ObjectVideo, Inc.				
4. X Drawing(s) (35 U.S.C. 113) [Total Sheets 19]					
5. Oath or Declaration [Total Sheets 4]	10. 37 CFR 3.73(b) Statement X Power of Attorney				
a. X Newly executed (original or copy)	11. English Translation Document (if applicable)				
b. A copy from a prior application (37 CFR 1.63(d))  (for continuation/divisional with Box 18 completed)	12. Information Disclosure Statement (PTO/SB/08 or PTO-1449)				
i. DELETION OF INVENTOR(S) Signed statement attached deleting inventor(s)	Copies of citations attached				
named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).	13. Preliminary Amendment				
6. X Application Data Sheet. See 37 CFR 1.76	_				
7. CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)	14. X Return Receipt Postcard (MPEP 503) (Should be specifically itemized)				
Landscape Table on CD					
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a. Computer Readable Form (CRF)	16. Nonpublication Request under 35 U.S.C.122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.				
b. Specification Sequence Listing on:					
i. CD-ROM or CD-R (2 copies); or ii. Pape	r 17. Other:				
c. Statements verifying identity of above copies					
18. If a CONTINUING APPLICATION, check appropriate box, and su specification following the title, or in an Application Data Sheet un					
Continuation Divisional X Continuation-in-par	t (CIP) of prior application No.: 11/057,154				
Prior application information: Examiner Not Yet A	Assigned Art Unit: N/A				
19. CORRESI	PONDENCE ADDRESS				
X The address associated with Customer Number:	26694 OR Correspondence address below				
Name VENABLE LLP					
Address P.O. Box 34385					
City Washington State	D.C. Zip Code 20043-9998				
Country U.S.A. Telephon	e 202-344-8017 Fax 202-344-8300				
Signature	Date April 5, 2005				
Name (Print/Type) Jeffrey W. Gluck, Ph.D. Registration No. (Attorney/Agent) 44,457					

DC2-637735

**FEE TRANSMITTAL** 

665.00

### for FY 2005

TOTAL AMOUNT OF PAYMENT

	Complete If Known					
Application Number	Not Yet Assigned					
Filing Date	Concurrently Herewith					
First Named Inventor	Peter L. Venetianer					
Examiner Name	Not Yet Assigned					
Group / Art Unit	Not Yet Assigned					
Attorney Docket No.	37112-215811					

METHOD OF PAYMENT (check one)					J	FEE CALCULATION (continued)					
The Commissioner is hereby authorized to charge				3. ADI	3. ADDITIONAL FEES						
1.		indicated fee	s and credit any over payme	nts to:	Fee	Lrg Ent	Fee	Sm Ent Fee		Description	Fee
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		SUBTOTAL	(1)	(\$)150	1451	1,510	1451	1,510	Petition to insti proceeding	tute a public use	
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ļ.			Claims below	Paid	1501	1,400	2501	700	Utility issue fee	e (or reissue)	
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Claims	2		0 X 100		1807	50	1807	50	Processing fee	under 37 CFR 1.17 (q)	
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**or num	ber previously	paid, if greater, I	For Reissues, see above								
SUBMIT		Complete (if a									
Name (P	Print/Type)	Jeffrey W. Glu	ick, Ph.D.	Reg No. A	ttomey/A	gent)	44,457		Telephone	202-344-4000	

Signature Date April 5, 2005

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PC Docs No. 637737

VENABLE

# UTILITY PATENT APPLICATION TRANSMITTAL

Attomey Docket No.		37112-215811				
First Inventor Peter L. Venetianer						
Title	VIDEO SUR VIDEO PRIM	VEILLANCE SYSTEM EMPLOYING MITIVES				

(ONLY FOR NEW NONPROVISIONAL APPLICATIONS UNDER	VIDEO PRIMITIVES			
37 CFR 1.53(B))	Express Mail Label No.			
APPLICATION ELEMENTS See MPEP chapter 600 concerning utility patent application co	Commissioner for Patents ADDRESS TO: P.O. Box 1450 Alexandria, VA 22313-1450			
Fee Transmittal Form (e.g., PTO/SB/17)     (Submit an original and a duplicate for fee processing)	ACCOMPANYING APPLICATION PARTS			
Applicant claims small entity status.     See 37 CFR 1.27.	9. X Assignment Papers (cover sheet & document(s))			
	54 ] Name of Assignee:			
Both the claims and abstract must start on a new page (For information on the preferred arrangement, see MPEP 608	ObjectVideo, Inc.			
4. X Drawing(s) (35 U.S.C. 113) [Total Sheets	19 1			
5. Oath or Declaration [Total Sheets	4 ] 10. 37 CFR 3.73(b) Statement X Power of Attorney			
a. X Newly executed (original or copy)	11. English Translation Document (if applicable)			
b. A copy from a prior application (37 CFR 1.63(d)) (for continuation/divisional with Box 18 completed)	12. Information Disclosure Statement (PTO/SB/08 or PTO-1449)			
i. DELETION OF INVENTOR(S)  Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).	Copies of citations attached  13. Preliminary Amendment			
6. X Application Data Sheet. See 37 CFR 1.76				
7. CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)	14. X Return Receipt Postcard (MPEP 503) (Should be specifically itemized)			
Landscape Table on CD				
Nucleotide and/or Amino Acid Sequence Submission (if applicable, items a. – c. are required)	n Certified Copy of Priority Document(s) (if foreign priority is claimed)			
a. Computer Readable Form (CRF)	16. Nonpublication Request under 35 U.S.C.122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.			
b. Specification Sequence Listing on:				
i. CD-ROM or CD-R (2 copies); or ii.	Paper 17. Other:			
c. Statements verifying identity of above copies				
specification following the title, or in an Application Data S	x, and supply the requisite information below and in the first sentence of the Sheet under 37 CFR 1.76:  ion-in-part (CIP) of prior application No.: 11/057,154			
	t Yet Assigned Art Unit: N/A			
	ORRESPONDENCE ADDRESS			
X The address associated with Customer Number:	26694 OR Correspondence address below			
Name VENABLE LLP				
Address P.O. Box 34385				
City Washington S	State         D.C.         Zip Code         20043-9998			
Country U.S.A.	Telephone 202-344-8017 Fax 202-344-8300			
Signature	Date April 5, 2005			
Name (Print/Type) Jeffrey W. Gluck, Ph.D. Registration No. (Attorney/Agent) 44,457				

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### FEE TRANSMITTAL for FY 2005

Patent fees are subject to annual revision.

665.00

TOTAL AMOUNT OF PAYMENT

	Complete If Known				
Application Number	Not Yet Assigned				
Filing Date	Concurrently Herewith				
First Named Inventor	Peter L. Venetianer				
Examiner Name	Not Yet Assigned				
Group / Art Unit	Not Yet Assigned				
Attorney Docket No.	37112-215811				

METHOD OF PAYMENT (check one)						FEE CALCULATION (continued)						
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				1312	130	2312	65	Design Examin				
Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17						160	2313	80	Plant Examination Fee			
Applicant claims small entity status. See 37 CFR 1.27						600	2314	300	Reissue Exami			
2. Payment Enclosed:						130	2051	65	Surcharge - late filing fee or oath			
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FEE CALCULATION						130	1053	130	Non-English specification			
1. BASIC FILING FEE				1812	2,520 920*	1812 1804	2,520 920*	For filing a request for reexamination  Requesting publication of SIR prior to				
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2. EXTRA CLAIM FEES						500	2452	250	Petition to revive – unavoidable			
2. EXIR	A CLAIM F	EES	Extra Fee from	Fee	1453	1,500	2453	750	Petition to reviv	ve - unintentional		
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1202	50	2202 25	Claims in excess of 20		I				(37 ČFR § 1.12	29(a))		
1201	200	2201 100	DO Independent claims in excess of 3		1810	310 790 2810 395 For each additional invention t examined (37 CFR § 1.129(b))						
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SUBTOTAL (2) (\$)125					*Redu	*Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$)390						
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SUBMITTED BY		Complete (if applicable)				т			T *			
Name (Print/Type)		Jeffrey W. Gluck, Ph.D. Reg No. A			ttorney/A	gent)	44,457		Telephone	202-344-4000		

Signature Date April 5, 2005

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PC Docs No. 637737

### **APPLICATION FOR UNITED STATES PATENT**

INVENTORS: PÉTER L. VENETIANER, McLean, Virginia

ALAN J. LIPTON, Herndon, Virginia

ANDREW J. CHOSAK, Arlington, Virginia MATTHEW F. FRAZIER, Arlington, Virginia

NIELS HAERING, Reston, Virginia GARY W. MYERS, Ashburn, Virginia WEIHONG YIN, Herndon, Virginia ZHONG ZHANG, Herndon, Virginia

TITLE: VIDEO SURVEILLANCE SYSTEM EMPLOYING

**VIDEO PRIMITIVES** 

### **ATTORNEYS/AGENTS:**

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### ATTORNEY DOCKET NO.:

37112-215811

### VIDEO SURVEILLANCE SYSTEM EMPLOYING VIDEO PRIMITIVES

### CROSS-REFERENCE TO RELATED APPLICATIONS

[1] This application is a continuation-in-part of U.S. Patent Application No. 11/057,154, filed on February 15, 2005, which is a continuation-in-part of U.S. Patent Application No. 09/987,707, filed on November 15, 2001, which claims the priority of U.S. Patent Application No. 09/694,712, filed on October 24, 2000, all of which are incorporated herein by reference.

### **BACKGROUND OF THE INVENTION**

### Field of the Invention

[2] The invention relates to a system for automatic video surveillance employing video primitives.

### References

- [3] For the convenience of the reader, the references referred to herein are listed below. In the specification, the numerals within brackets refer to respective references. The listed references are incorporated herein by reference.
  - [4] The following references describe moving target detection:
- [5] {1} A. Lipton, H. Fujiyoshi and R. S. Patil, "Moving Target Detection and Classification from Real-Time Video," <u>Proceedings of IEEE WACV '98</u>, Princeton, NJ, 1998, pp. 8-14.
- [6] {2} W.E.L. Grimson, et al., "Using Adaptive Tracking to Classify and Monitor Activities in a Site", <u>CVPR</u>, pp. 22-29, June 1998.

(37112-215811)

- [7] {3} A.J. Lipton, H. Fujiyoshi, R.S. Patil, "Moving Target Classification and Tracking from Real-time Video," IUW, pp. 129-136, 1998.
- [8] {4} T.J. Olson and F.Z. Brill, "Moving Object Detection and Event Recognition Algorithm for Smart Cameras," <u>IUW</u>, pp. 159-175, May 1997.
  - [9] The following references describe detecting and tracking humans:
- [10] {5} A. J. Lipton, "Local Application of Optical Flow to Analyse Rigid Versus Non-Rigid Motion," <u>International Conference on Computer Vision</u>, Corfu, Greece, September 1999.
- [11] {6} F. Bartolini, V. Cappellini, and A. Mecocci, "Counting people getting in and out of a bus by real-time image-sequence processing," IVC, 12(1):36-41, January 1994.
- [12] {7} M. Rossi and A. Bozzoli, "Tracking and counting moving people," ICIP94, pp. 212-216, 1994.
- [13] {8} C.R. Wren, A. Azarbayejani, T. Darrell, and A. Pentland, "Pfinder: Real-time tracking of the human body," <u>Vismod</u>, 1995.
- [14] {9} L. Khoudour, L. Duvieubourg, J.P. Deparis, "Real-Time Pedestrian Counting by Active Linear Cameras," <u>JEI</u>, 5(4):452-459, October 1996.
- [15] {10} S. Ioffe, D.A. Forsyth, "Probabilistic Methods for Finding People," <u>IJCV</u>, 43(1):45-68, June 2001.
- [16] {11} M. Isard and J. MacCormick, "BraMBLe: A Bayesian Multiple-Blob Tracker," ICCV, 2001.
  - [17] The following references describe blob analysis:
- [18] {12} D.M. Gavrila, "The Visual Analysis of Human Movement: A Survey," CVIU, 73(1):82-98, January 1999.

- [19] {13} Niels Haering and Niels da Vitoria Lobo, "Visual Event Detection," <u>Video</u><u>Computing Series</u>, Editor Mubarak Shah, 2001.
  - [20] The following references describe blob analysis for trucks, cars, and people:
- [21] {14} Collins, Lipton, Kanade, Fujiyoshi, Duggins, Tsin, Tolliver, Enomoto, and Hasegawa, "A System for Video Surveillance and Monitoring: VSAM Final Report," Technical Report CMU-RI-TR-00-12, Robotics Institute, Carnegie Mellon University, May 2000.
- [22] {15} Lipton, Fujiyoshi, and Patil, "Moving Target Classification and Tracking from Real-time Video," 98 Darpa IUW, Nov. 20-23, 1998.
  - [23] The following reference describes analyzing a single-person blob and its contours:
- [24] {16} C.R. Wren, A. Azarbayejani, T. Darrell, and A.P. Pentland. "Pfinder: Real-Time Tracking of the Human Body," <u>PAMI</u>, vol 19, pp. 780-784, 1997.
- [25] The following reference describes internal motion of blobs, including any motion-based segmentation:
- [26] {17} M. Allmen and C. Dyer, "Long--Range Spatiotemporal Motion
  Understanding Using Spatiotemporal Flow Curves," <u>Proc. IEEE CVPR</u>, Lahaina, Maui, Hawaii,
  pp. 303-309, 1991.
- [27] {18} L. Wixson, "Detecting Salient Motion by Accumulating Directionally Consistent Flow", IEEE Trans. Pattern Anal. Mach. Intell., vol. 22, pp. 774-781, Aug, 2000.

### **Background of the Invention**

[28] Video surveillance of public spaces has become extremely widespread and accepted by the general public. Unfortunately, conventional video surveillance systems produce

such prodigious volumes of data that an intractable problem results in the analysis of video surveillance data.

- [29] A need exists to reduce the amount of video surveillance data so analysis of the video surveillance data can be conducted.
- [30] A need exists to filter video surveillance data to identify desired portions of the video surveillance data.

### SUMMARY OF THE INVENTION

- [31] An object of the invention is to reduce the amount of video surveillance data so analysis of the video surveillance data can be conducted.
- [32] An object of the invention is to filter video surveillance data to identify desired portions of the video surveillance data.
- [33] An object of the invention is to produce a real time alarm based on an automatic detection of an event from video surveillance data.
- [34] An object of the invention is to integrate data from surveillance sensors other than video for improved searching capabilities.
- [35] An object of the invention is to integrate data from surveillance sensors other than video for improved event detection capabilities
- [36] The invention includes an article of manufacture, a method, a system, and an apparatus for video surveillance.
- [37] The article of manufacture of the invention includes a computer-readable medium comprising software for a video surveillance system, comprising code segments for operating the video surveillance system based on video primitives.

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- [38] The article of manufacture of the invention includes a computer-readable medium comprising software for a video surveillance system, comprising code segments for accessing archived video primitives, and code segments for extracting event occurrences from accessed archived video primitives.
- [39] The system of the invention includes a computer system including a computerreadable medium having software to operate a computer in accordance with the invention.
- [40] The apparatus of the invention includes a computer including a computer-readable medium having software to operate the computer in accordance with the invention.
- [41] The article of manufacture of the invention includes a computer-readable medium having software to operate a computer in accordance with the invention.
- [42] Moreover, the above objects and advantages of the invention are illustrative, and not exhaustive, of those that can be achieved by the invention. Thus, these and other objects and advantages of the invention will be apparent from the description herein, both as embodied herein and as modified in view of any variations which will be apparent to those skilled in the art.

### **Definitions**

- [43] A "video" refers to motion pictures represented in analog and/or digital form.

  Examples of video include: television, movies, image sequences from a video camera or other observer, and computer-generated image sequences.
  - [44] A "frame" refers to a particular image or other discrete unit within a video.
- [45] An "object" refers to an item of interest in a video. Examples of an object include: a person, a vehicle, an animal, and a physical subject.

- [46] An "activity" refers to one or more actions and/or one or more composites of actions of one or more objects. Examples of an activity include: entering; exiting; stopping; moving; raising; lowering; growing; and shrinking.
- [47] A "location" refers to a space where an activity may occur. A location can be, for example, scene-based or image-based. Examples of a scene-based location include: a public space; a store; a retail space; an office; a warehouse; a hotel room; a hotel lobby; a lobby of a building; a casino; a bus station; a train station; an airport; a port; a bus; a train; an airplane; and a ship. Examples of an image-based location include: a video image; a line in a video image; an area in a video image; a rectangular section of a video image; and a polygonal section of a video image.
- [48] An "event" refers to one or more objects engaged in an activity. The event may be referenced with respect to a location and/or a time.
- [49] A "computer" refers to any apparatus that is capable of accepting a structured input, processing the structured input according to prescribed rules, and producing results of the processing as output. Examples of a computer include: a computer; a general purpose computer; a supercomputer; a mainframe; a super mini-computer; a mini-computer; a workstation; a microcomputer; a server; an interactive television; a hybrid combination of a computer and an interactive television; and application-specific hardware to emulate a computer and/or software. A computer can have a single processor or multiple processors, which can operate in parallel and/or not in parallel. A computer also refers to two or more computers connected together via a network for transmitting or receiving information between the computers. An example of such a computer includes a distributed computer system for processing information via computers linked by a network.

- [50] A "computer-readable medium" refers to any storage device used for storing data accessible by a computer. Examples of a computer-readable medium include: a magnetic hard disk; a floppy disk; an optical disk, such as a CD-ROM and a DVD; a magnetic tape; a memory chip; and a carrier wave used to carry computer-readable electronic data, such as those used in transmitting and receiving e-mail or in accessing a network.
- [51] "Software" refers to prescribed rules to operate a computer. Examples of software include: software; code segments; instructions; computer programs; and programmed logic.
- [52] A "computer system" refers to a system having a computer, where the computer comprises a computer-readable medium embodying software to operate the computer.
- [53] A "network" refers to a number of computers and associated devices that are connected by communication facilities. A network involves permanent connections such as cables or temporary connections such as those made through telephone or other communication links. Examples of a network include: an internet, such as the Internet; an intranet; a local area network (LAN); a wide area network (WAN); and a combination of networks, such as an internet and an intranet.

### **BRIEF DESCRIPTION OF THE DRAWINGS**

- [54] Embodiments of the invention are explained in greater detail by way of the drawings, where the same reference numerals refer to the same features.
  - [55] Figure 1 illustrates a plan view of the video surveillance system of the invention.
- [56] Figure 2 illustrates a flow diagram for the video surveillance system of the invention.

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- [57] Figure 3 illustrates a flow diagram for tasking the video surveillance system.
- [58] Figure 4 illustrates a flow diagram for operating the video surveillance system.
- [59] Figure 5 illustrates a flow diagram for extracting video primitives for the video surveillance system.
- [60] Figure 6 illustrates a flow diagram for taking action with the video surveillance system.
- [61] Figure 7 illustrates a flow diagram for semi-automatic calibration of the video surveillance system.
- [62] Figure 8 illustrates a flow diagram for automatic calibration of the video surveillance system.
- [63] Figure 9 illustrates an additional flow diagram for the video surveillance system of the invention.
- [64] Figures 10-15 illustrate examples of the video surveillance system of the invention applied to monitoring a grocery store.
- [65] Figure 16a shows a flow diagram of a video analysis subsystem according to an embodiment of the invention.
- [66] Figure 16b shows the flow diagram of the event occurrence detection and response subsystem according to an embodiment of the invention.
  - [67] Figure 17 shows exemplary database queries.
- [68] Figure 18 shows three exemplary activity detectors according to various embodiments of the invention: detecting tripwire crossings (Figure 18a), loitering (Figure 18b) and theft (Figure 18c).

- [69] Figure 19 shows an activity detector query according to an embodiment of the invention.
- [70] Figure 20 shows an exemplary query using activity detectors and Boolean operators with modifiers, according to an embodiment of the invention.
- [71] Figures 21a and 21b show an exemplary query using multiple levels of combinators, activity detectors, and property queries.
- [72] Figure 22 shows an exemplary configuration of a video surveillance system according to an embodiment of the invention.
- [73] Figure 23 shows another exemplary configuration of a video surveillance system according to an embodiment of the invention.
- [74] Figure 24 shows another exemplary configuration of a video surveillance system according to an embodiment of the invention.
- [75] Figure 25 shows a network that may be used in exemplary configurations of embodiments of the invention.

## **DETAILED DESCRIPTION OF THE INVENTION**

[76] The automatic video surveillance system of the invention is for monitoring a location for, for example, market research or security purposes. The system can be a dedicated video surveillance installation with purpose-built surveillance components, or the system can be a retrofit to existing video surveillance equipment that piggybacks off the surveillance video feeds. The system is capable of analyzing video data from live sources or from recorded media. The system is capable of processing the video data in real-time, and storing the extracted video primitives to allow very high speed forensic event detection later. The system can have a

prescribed response to the analysis, such as record data, activate an alarm mechanism, or activate another sensor system. The system is also capable of integrating with other surveillance system components. The system may be used to produce, for example, security or market research reports that can be tailored according to the needs of an operator and, as an option, can be presented through an interactive web-based interface, or other reporting mechanism.

[77] An operator is provided with maximum flexibility in configuring the system by using event discriminators. Event discriminators are identified with one or more objects (whose descriptions are based on video primitives), along with one or more optional spatial attributes, and/or one or more optional temporal attributes. For example, an operator can define an event discriminator (called a "loitering" event in this example) as a "person" object in the "automatic teller machine" space for "longer than 15 minutes" and "between 10:00 p.m. and 6:00 a.m." Event discriminators can be combined with modified Boolean operators to form more complex queries.

[78] Although the video surveillance system of the invention draws on well-known computer vision techniques from the public domain, the inventive video surveillance system has several unique and novel features that are not currently available. For example, current video surveillance systems use large volumes of video imagery as the primary commodity of information interchange. The system of the invention uses video primitives as the primary commodity with representative video imagery being used as collateral evidence. The system of the invention can also be calibrated (manually, semi-automatically, or automatically) and thereafter automatically can infer video primitives from video imagery. The system can further analyze previously processed video without needing to reprocess completely the video. By analyzing previously processed video, the system can perform inference analysis based on

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previously recorded video primitives, which greatly improves the analysis speed of the computer system.

- [79] The use of video primitives may also significantly reduce the storage requirements for the video. This is because the event detection and response subsystem uses the video only to illustrate the detections. Consequently, video may be stored or transmitted at a lower quality. In a potential embodiment, the video may be stored or transmitted only when activity is detected, not all the time. In another potential embodiment, the quality of the stored or transmitted video may be dependent on whether activity is detected: video can be stored or transmitted at higher quality (higher frame-rate and/or bit-rate) when activity is detected and at lower quality at other times. In another exemplary embodiment, the video storage and database may be handled separately, e.g., by a digital video recorder (DVR), and the video processing subsystem may just control whether data is stored and with what quality. In another embodiment, the video surveillance system (or components thereof) may be on a processing device (such as general purpose processor, DSP, microcontroller, ASIC, FPGA, or other device) on board a video management device such as a digital video camera, network video server, DVR, or Network Video Recorder (NVR), and the bandwidth of video streamed from the device can be modulated by the system. High quality video (high bit-rate or frame-rate) need only be transmitted through an IP video network only when activities of interest are detected. In this embodiment, primitives from intelligence-enabled devices can be broadcast via a network to multiple activity inference applications at physically different locations to enable a single camera network to provide multi-purpose applications through decentralized processing.
- [80] Figure 22 shows one configuration of an implementation of the video surveillance system. Block 221 represents a raw (uncompressed) digital video input. This can be obtained, for

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example, through analog to digital capture of an analog video signal or decoding of a digital video signal. Block 222 represents a hardware platform housing the main components of the video surveillance system (video content analysis – block 225 – and activity inference – block 226). The hardware platform may contain other components such as an operating system (block 223); a video encoder (block 224) that compresses raw digital video for video streaming or storage using any available compression scheme (JPEG, MJPEG, MPEG1, MPEG2, MPEG4, H.263, H.264, Wavelet, or any other); a storage mechanism (block 227) for maintaining data such as video, compressed video, alerts, and video primitives – this storage device may be, for example, a hard-disk, on-board RAM, on-board FLASH memory, or other storage medium; and a communications layer (block 228) which may, for example, packetize and/or digitize data for transmission over a communication channel (block 229).

- [81] There may be other software components residing on computational platforms at other nodes of a network to which communications channel 229 connects. Block 2210 shows a rule management tool which is a user interface for creating video surveillance rules. Block 2211 shows an alert console for displaying alerts and reports to a user. Block 2212 shows a storage device (such as DVR, NVR, or PC) for storing alerts, primitives, and video for further after-the-fact processing.
- [82] Components on the hardware platform (block 222) may be implemented on any processing hardware (general purpose processor, microcontroller, DSP, ASIC, FPGA, or other processing device) on any video capture, processing, or management device such as a video camera, digital video camera, IP video camera, IP video server, digital video recorder (DVR), network video recorder (NVR), PC, laptop, or other device. There are a number of different possible modes of operation for this configuration.

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- [83] In one mode, the system is programmed to look for specific events. When those events occur, alerts are transmitted via the communication channel (block 229) to other systems.
- [84] In another mode, video is streamed from the video device while it is analyzing the video data. When events occur, alerts are transmitted via the communication channel (block 229).
- [85] In another mode, video encoding and streaming is modulated by the content analysis and activity inference. When there is no activity present (no primitives are being generates), no video (or low quality, bit-rate, frame rate, resolution) is being streamed. When some activity is present (primitives are being generated), higher quality, bit-rate, frame rate, resolution video is streamed. When events of interest are detected by the event inference, very high quality, bit-rate, frame rate, resolution video is streamed.
- [86] In another mode of operation, information is stored in the on-board storage device (block 227). Stored data may consist of digital video (raw or compressed), video primitives, alerts, or other information. The stored video quality may also be controlled by the presence of primitives or alerts. When there are primitives and alerts, higher quality, bit-rate, frame rate, resolution video may be stored.
- [87] Figure 23 shows another configuration of an implementation of the video surveillance system. Block 231 represents a raw (uncompressed) digital video input. This can be obtained, for example, through analog to digital capture of an analog video signal or decoding of a digital video signal. Block 232 represents a hardware platform housing the analysis component of the video surveillance system (block 235). The hardware platform may contain other components such as an operating system (block 233); a video encoder (block 234) that compresses raw digital video for video streaming or storage using any available compression

scheme (JPEG, MJPEG, MPEG1, MPEG2, MPEG4, H.263, H.264, Wavelet, or any other); a storage mechanism (block 236) for maintaining data such as video, compressed video, alerts, and video primitives – this storage device may be, for example, a hard-disk, on-board RAM, on-board FLASH memory, or other storage medium; and a communications layer (block 237) that may, for example, packetize and/or digitize data for transmission over a communication channel (block 238). In the embodiment of the invention shown in Figure 23, the activity inference component (block 2311) is shown on a separate hardware component (block 239) connected to a network to which communication channel 238 connects.

- [88] There may also be other software components residing on computational platforms at other nodes of this network (block 239). Block 2310 shows a rule management tool, which is a user interface for creating video surveillance rules. Block 2312 shows an alert console for displaying alerts and reports to a user. Block 2313 shows a storage device that could be physically located on the same hardware platform (such as a hard disk, floppy disk, other magnetic disk, CD, DVD, other optical dick, MD or other magneto-optical disk, solid state storage device such as RAM or FLASH RAM, or other storage device) or may be a separate storage device (such as external disk drive, PC, laptop, DVR, NVR, or other storage device).
- [89] Components on the hardware platform (block 222) may be implemented on any processing platform (general purpose processor, microcontroller, DSP, FPGA, ASIC or any other processing platform) on any video capture, processing, or management device such as a video camera, digital video camera, IP video camera, IP video server, digital video recorder (DVR), network video recorder (NVR), PC, laptop, or other device. Components on the back-end hardware platform (block 239) may be implemented on any processing hardware (general purpose processor, microcontroller, DSP, FPGA, ASIC, or any other device) on any processing

device such as PC, laptop, single-board computer, DVR, NVR, video server, network router, hand-held device (such as video phone, pager, or PDA). There are a number of different possible modes of operation for this configuration.

- [90] In one mode, the system is programmed on the back-end device (or any other device connected to the back-end device) to look for specific events. The content analysis module (block 235) on the video processing platform (block 232) generates primitives that are transmitted to the back-end processing platform (block 239). The event inference module (block 2311) determines if the rules have been violated and generates alerts that can be displayed on an alert console (block 2312) or stored in a storage device (block 2313) for later analysis.
- [91] In another mode, video primitives and video can be stored in a storage device on the back-end platform (2313) for later analysis.
- [92] In another mode, stored video quality, bit-rate, frame rate, resolution can be modulated by alerts. When there is an alert, video can be stored at higher quality, bit-rate, frame rate, resolution.
- [93] In another mode, video primitives can be stored on the video processing device (block 236 in block 232) for later analysis via the communication channel.
- [94] In another mode, the quality of the video stored on the video processing device (in block 236 in block 232) may be modulated by the presence of primitives. When there are primitives (when something is happening) the quality, bit-rate, frame rate, resolution of the stored video can be increased.
- [95] In another mode, video can be streamed from the video processor via the encoder (234) to other devices on the network, via communication channel 238.

- [96] In another mode, video quality can be modulated by the content analysis module (235). When there are no primitives (nothing is happening), no (or low quality, bit-rate, frame rate, resolution) video is streamed. When there is activity, higher quality, bit-rate, frame rate, resolution video is streamed.
- [97] In another mode, streamed video quality, bit-rate, frame rate, resolution can be modulated by the presence of alerts. When the back end event inference module (block 2311) detects an event of interest, it can send a signal or command to the video processing component (block 232) requesting video (or higher quality, bit-rate, frame rate, resolution video). When this request is received, the video compression component (block 234) and communication layer (block 237) can change compression and streaming parameters.
- [98] In another mode the quality of video stored on board the video processing device (block 236 in block 232) can be modulated by the presence of alerts. When an alert is generated by the event inference module (block 2311) on the back end processor (block 239) it can send a message via the communication channel (block 238) to the video processor hardware (block 232) to increase the quality, bit-rate, frame rate, resolution of the video stored in the on board storage device (238).
- [99] Figure 24 shows an extension of the configuration described in Figure 23. By separating the functionality of video content analysis and back end activity inference, it is possible to enable a multi-purpose intelligent video surveillance system through the process of late application binding. A single network of intelligence-enabled cameras can broadcast a single stream of video primitives to separate back-end applications in different parts of an organization (at different physical locations) and achieve multiple functions. This is possible because the primitive stream contains information about everything going on in the scene and is not tied to

specific application areas. The example depicted in Figure 24 pertains to a retail environment but is illustrative of the principal in general and is applicable to any other application areas and any other surveillance functionality. Block 241 shows an intelligence-enabled network of one or more video cameras within a facility or across multiple facilities. The content analysis component or components may reside on a processing device inside the cameras, in video servers, in network routers, on DVRs, on NVRs, on PCs, on laptops or any other video processing device connected to the network. From these content analysis components, streams of primitives are broadcast via standard networks to activity inference modules on back end processors (blocks 242-245) residing in physically different areas used for different purposes. The back end processors may be in computers, laptops, DVRs, NVRs, network routers, handheld devices (phones, pagers, PDAs) or other computing devices. One advantage to this decentralization is that there need not be a central processing application that must be programmed to do all the processing for all possible applications. Another advantage is security so that one part of an organization can perform activity inference on rules that are stored locally so that no one else in the network has access to that information.

[100] In block 242 the primitive stream from the intelligent camera network is analyzed for physical security applications: to determine if there has been a perimeter breach, vandalism, and to protect critical assets. Of course, these applications are merely exemplary, and any other application is possible.

[101] In block 243 the primitive stream from the intelligent camera network is analyzed for loss prevention applications: to monitor a loading dock; to watch for customer or employee theft, to monitor a warehouse, and to track stock. Of course, these applications are merely exemplary, and any other application is possible.

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[102] In block 244 the primitive stream from the intelligent camera network is analyzed for public safety and liability applications: to monitor for people or vehicle moving too fast in parking lots, to watch for people slipping and falling, and to monitor crowds in and around the facility. Of course, these applications are merely exemplary, and any other application is possible.

[103] In block 245 the primitive stream from the intelligent camera network is analyzed for business intelligence applications: to watch the lengths of queues, to track consumer behavior, to learn patterns of behavior, to perform building management tasks such as controlling lighting and heating when there are no people present. Of course, these applications are merely exemplary, and any other application is possible.

enabled devices connected to it. Block 252 is an IP camera with content analysis components on board that can stream primitives over a network. Block 253 is an IP camera with both content analysis and activity inference components on board that can be programmed directly with rules and will generate network alerts directly. Block 254 is a standard analog camera with no intelligent components on board; but it is connected to an IP video management platform (block 256) that performs video digitization and compression as well as content analysis and activity inference. It can be programmed with view-specific rules and is capable of transmitting primitive streams and alerts via a network. Block 255 is a DVR with activity inference components that is capable of ingesting primitive streams from other devices and generating alerts. Block 257 is a handheld PDA enabled with wireless network communications that has activity inference algorithms on board and is capable of accepting video primitives from the network and displaying alerts. Block 258 is complete intelligent video analysis system capable of accepting

analog or digital video streams, performing content analysis and activity inference and displaying alerts on a series of alert consoles.

[105] As another example, the system of the invention provides unique system tasking. Using equipment control directives, current video systems allow a user to position video sensors and, in some sophisticated conventional systems, to mask out regions of interest or disinterest. Equipment control directives are instructions to control the position, orientation, and focus of video cameras. Instead of equipment control directives, the system of the invention uses event discriminators based on video primitives as the primary tasking mechanism. With event discriminators and video primitives, an operator is provided with a much more intuitive approach over conventional systems for extracting useful information from the system. Rather than tasking a system with an equipment control directives, such as "camera A pan 45 degrees to the left," the system of the invention can be tasked in a human-intuitive manner with one or more event discriminators based on video primitives, such as "a person enters restricted area A."

[106] Using the invention for market research, the following are examples of the type of video surveillance that can be performed with the invention: counting people in a store; counting people in a part of a store; counting people who stop in a particular place in a store; measuring how long people spend in a store; measuring how long people spend in a part of a store; and measuring the length of a line in a store.

[107] Using the invention for security, the following are examples of the type of video surveillance that can be performed with the invention: determining when anyone enters a restricted area and storing associated imagery; determining when a person enters an area at unusual times; determining when changes to shelf space and storage space occur that might be unauthorized; determining when passengers aboard an aircraft approach the cockpit; determining

when people tailgate through a secure portal; determining if there is an unattended bag in an airport; and determining if there is a theft of an asset.

[108] An exemplary application area may be access control, which may include, for example: detecting if a person climbs over a fence, or enters a prohibited area; detecting if someone moves in the wrong direction (e.g., at an airport, entering a secure area through the exit); determining if a number of objects detected in an area of interest does not match an expected number based on RFID tags or card-swipes for entry, indicating the presence of unauthorized personnel. This may also be useful in a residential application, where the video surveillance system may be able to differentiate between the motion of a person and pet, thus eliminating most false alarms. Note that in many residential applications, privacy may be of concern; for example, a homeowner may not wish to have another person remotely monitoring the home and to be able to see what is in the house and what is happening in the house.

Therefore, in some embodiments used in such applications, the video processing may be performed locally, and optional video or snapshots may be sent to one or more remote monitoring stations only when necessary (for example, but not limited to, detection of criminal activity or other dangerous situations).

[109] Another exemplary application area may be asset monitoring. This may mean detecting if an object is taken away from the scene, for example, if an artifact is removed from a museum. In a retail environment asset monitoring can have several aspects to it and may include, for example: detecting if a single person takes a suspiciously large number of a given item; determining if a person exits through the entrance, particularly if doing this while pushing a shopping cart; determining if a person applies a non-matching price tag to an item, for example,

filling a bag with the most expensive type of coffee but using a price tag for a less expensive type; or detecting if a person leaves a loading dock with large boxes.

- [110] Another exemplary application area may be for safety purposes. This may include, for example: detecting if a person slips and falls, e.g., in a store or in a parking lot; detecting if a car is driving too fast in a parking lot; detecting if a person is too close to the edge of the platform at a train or subway station while there is no train at the station; detecting if a person is on the rails; detecting if a person is caught in the door of a train when it starts moving; or counting the number of people entering and leaving a facility, thus keeping a precise headcount, which can be very important in case of an emergency.
- [111] Another exemplary application area may be traffic monitoring. This may include detecting if a vehicle stopped, especially in places like a bridge or a tunnel, or detecting if a vehicle parks in a no parking area.
- [112] Another exemplary application area may be terrorism prevention. This may include, in addition to some of the previously-mentioned applications, detecting if an object is left behind in an airport concourse, if an object is thrown over a fence, or if an object is left at a rail track; detecting a person loitering or a vehicle circling around critical infrastructure; or detecting a fast-moving boat approaching a ship in a port or in open waters.
- [113] Another exemplary application area may be in care for the sick and elderly, even in the home. This may include, for example, detecting if the person falls; or detecting unusual behavior, like the person not entering the kitchen for an extended period of time.
- [114] Figure 1 illustrates a plan view of the video surveillance system of the invention.

  A computer system 11 comprises a computer 12 having a computer-readable medium 13 embodying software to operate the computer 12 according to the invention. The computer

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system 11 is coupled to one or more video sensors 14, one or more video recorders 15, and one or more input/output (I/O) devices 16. The video sensors 14 can also be optionally coupled to the video recorders 15 for direct recording of video surveillance data. The computer system is optionally coupled to other sensors 17.

- [115] The video sensors 14 provide source video to the computer system 11. Each video sensor 14 can be coupled to the computer system 11 using, for example, a direct connection (e.g., a firewire digital camera interface) or a network. The video sensors 14 can exist prior to installation of the invention or can be installed as part of the invention. Examples of a video sensor 14 include: a video camera; a digital video camera; a color camera; a monochrome camera; a camera; a camcorder, a PC camera; a webcam; an infra-red video camera; and a CCTV camera.
- [116] The video recorders 15 receive video surveillance data from the computer system 11 for recording and/or provide source video to the computer system 11. Each video recorder 15 can be coupled to the computer system 11 using, for example, a direct connection or a network. The video recorders 15 can exist prior to installation of the invention or can be installed as part of the invention. The video surveillance system in the computer system 11 may control when and with what quality setting a video recorder 15 records video. Examples of a video recorder 15 include: a video tape recorder; a digital video recorder; a network video recorder; a video disk; a DVD; and a computer-readable medium. The system may also modulate the bandwidth and quality of video streamed over a network by controlling a video encoder and streaming protocol. When activities of interest are detected, higher bit-rate, frame-rate, or resolution imagery may be encoded and streamed.

- [117] The I/O devices 16 provide input to and receive output from the computer system

  11. The I/O devices 16 can be used to task the computer system 11 and produce reports from the
  computer system 11. Examples of I/O devices 16 include: a keyboard; a mouse; a stylus; a
  monitor; a printer; another computer system; a network; and an alarm.
- [118] The other sensors 17 provide additional input to the computer system 11. Each other sensor 17 can be coupled to the computer system 11 using, for example, a direct connection or a network. The other sensors 17 can exit prior to installation of the invention or can be installed as part of the invention. Examples of another sensor 17 include, but are not limited to: a motion sensor; an optical tripwire; a biometric sensor; an RFID sensor; and a card-based or keypad-based authorization system. The outputs of the other sensors 17 can be recorded by the computer system 11, recording devices, and/or recording systems.
- [119] Figure 2 illustrates a flow diagram for the video surveillance system of the invention. Various aspects of the invention are exemplified with reference to Figures 10-15, which illustrate examples of the video surveillance system of the invention applied to monitoring a grocery store.
- [120] In block 21, the video surveillance system is set up as discussed for Figure 1. Each video sensor 14 is orientated to a location for video surveillance. The computer system 11 is connected to the video feeds from the video equipment 14 and 15. The video surveillance system can be implemented using existing equipment or newly installed equipment for the location.
- [121] In block 22, the video surveillance system is calibrated. Once the video surveillance system is in place from block 21, calibration occurs. The result of block 22 is the ability of the video surveillance system to determine an approximate absolute size and speed of a

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particular object (e.g., a person) at various places in the video image provided by the video sensor. The system can be calibrated using manual calibration, semi-automatic calibration, and automatic calibration. Calibration is further described after the discussion of block 24.

- [122] In block 23 of Figure 2, the video surveillance system is tasked. Tasking occurs after calibration in block 22 and is optional. Tasking the video surveillance system involves specifying one or more event discriminators. Without tasking, the video surveillance system operates by detecting and archiving video primitives and associated video imagery without taking any action, as in block 45 in Figure 4.
- [123] Figure 3 illustrates a flow diagram for tasking the video surveillance system to determine event discriminators. An event discriminator refers to one or more objects optionally interacting with one or more spatial attributes and/or one or more temporal attributes. An event discriminator is described in terms of video primitives (also called activity description metadata). Some of the video primitive design criteria include the following: capability of being extracted from the video stream in real-time; inclusion of all relevant information from the video; and conciseness of representation.
- [124] Real-time extraction of the video primitives from the video stream is desirable to enable the system to be capable of generating real-time alerts, and to do so, since the video provides a continuous input stream, the system cannot fall behind.
- [125] The video primitives should also contain all relevant information from the video, since at the time of extracting the video primitives, the user-defined rules are not known to the system. Therefore, the video primitives should contain information to be able to detect any event specified by the user, without the need for going back to the video and reanalyzing it.

- [126] A concise representation is also desirable for multiple reasons. One goal of the proposed invention may be to extend the storage recycle time of a surveillance system. This may be achieved by replacing storing good quality video all the time by storing activity description meta-data and video with quality dependent on the presence of activity, as discussed above. Hence, the more concise the video primitives are, the more data can be stored. In addition, the more concise the video primitive representation, the faster the data access becomes, and this, in turn may speed up forensic searching.
- [127] The exact contents of the video primitives may depend on the application and potential events of interest. Some exemplary embodiments are described below
- [128] An exemplary embodiment of the video primitives may include scene/video descriptors, describing the overall scene and video. In general, this may include a detailed description of the appearance of the scene, e.g., the location of sky, foliage, man-made objects, water, etc; and/or meteorological conditions, e.g., the presence/absence of precipitation, fog, etc. For a video surveillance application, for example, a change in the overall view may be important. Exemplary descriptors may describe sudden lighting changes; they may indicate camera motion, especially the facts that the camera started or stopped moving, and in the latter case, whether it returned to its previous view or at least to a previously known view; they may indicate changes in the quality of the video feed, e.g., if it suddenly became noisier or went dark, potentially indicating tampering with the feed; or they may show a changing waterline along a body of water (for further information on specific approaches to this latter problem, one may consult, for example, co-pending U.S. Patent Application No. 10/954,479, filed on October 1, 2004, and incorporated herein by reference).

- descriptors referring to an observable attribute of an object viewed in a video feed. What information is stored about an object may depend on the application area and the available processing capabilities. Exemplary object descriptors may include generic properties including, but not limited to, size, shape, perimeter, position, trajectory, speed and direction of motion, motion salience and its features, color, rigidity, texture, and/or classification. The object descriptor may also contain some more application and type specific information: for humans, this may include the presence and ratio of skin tone, gender and race information, some human body model describing the human shape and pose; or for vehicles, it may include type (e.g., truck, SUV, sedan, bike, etc.), make, model, license plate number. The object descriptor may also contain activities, including, but not limited to, carrying an object, running, walking, standing up, or raising arms. Some activities, such as talking, fighting or colliding, may also refer to other objects. The object descriptor may also contain identification information, including, but not limited to, face or gait.
- [130] Another exemplary embodiment of the video primitives may include flow descriptors describing the direction of motion of every area of the video. Such descriptors may, for example, be used to detect passback events, by detecting any motion in a prohibited direction (for further information on specific approaches to this latter problem, one may consult, for example, co-pending U.S. Patent Application No. 10/766,949, filed on January 30, 2004, and incorporated herein by reference).
- [131] Primitives may also come from non-video sources, such as audio sensors, heat sensors, pressure sensors, card readers, RFID tags, biometric sensors, etc.

- [132] A classification refers to an identification of an object as belonging to a particular category or class. Examples of a classification include: a person; a dog; a vehicle; a police car; an individual person; and a specific type of object.
- [133] A size refers to a dimensional attribute of an object. Examples of a size include: large; medium; small; flat; taller than 6 feet; shorter than 1 foot; wider than 3 feet; thinner than 4 feet; about human size; bigger than a human; smaller than a human; about the size of a car; a rectangle in an image with approximate dimensions in pixels; and a number of image pixels.
- [134] Position refers to a spatial attribute of an object. The position may be, for example, an image position in pixel coordinates, an absolute real-world position in some world coordinate system, or a position relative to a landmark or another object.
- [135] A color refers to a chromatic attribute of an object. Examples of a color include: white; black; grey; red; a range of HSV values; a range of YUV values; a range of RGB values; an average RGB value; an average YUV value; and a histogram of RGB values.
- [136] Rigidity refers to a shape consistency attribute of an object. The shape of non-rigid objects (e.g., people or animals) may change from frame to frame, while that of rigid objects (e.g., vehicles or houses) may remain largely unchanged from frame to frame (except, perhaps, for slight changes due to turning).
- [137] A texture refers to a pattern attribute of an object. Examples of texture features include: self-similarity; spectral power; linearity; and coarseness.
- [138] An internal motion refers to a measure of the rigidity of an object. An example of a fairly rigid object is a car, which does not exhibit a great amount of internal motion. An example of a fairly non-rigid object is a person having swinging arms and legs, which exhibits a great amount of internal motion.

- [139] A motion refers to any motion that can be automatically detected. Examples of a motion include: appearance of an object; disappearance of an object; a vertical movement of an object; a horizontal movement of an object; and a periodic movement of an object.
- [140] A salient motion refers to any motion that can be automatically detected and can be tracked for some period of time. Such a moving object exhibits apparently purposeful motion. Examples of a salient motion include: moving from one place to another; and moving to interact with another object.
- [141] A feature of a salient motion refers to a property of a salient motion. Examples of a feature of a salient motion include: a trajectory; a length of a trajectory in image space; an approximate length of a trajectory in a three-dimensional representation of the environment; a position of an object in image space as a function of time; an approximate position of an object in a three-dimensional representation of the environment as a function of time; a duration of a trajectory; a velocity (e.g., speed and direction) in image space; an approximate velocity (e.g., speed and direction) in a three-dimensional representation of the environment; a duration of time at a velocity; a change of velocity in image space; an approximate change of velocity in a three-dimensional representation of the environment; a duration of a change of velocity; cessation of motion; and a duration of cessation of motion. A velocity refers to the speed and direction of an object at a particular time. A trajectory refers a set of (position, velocity) pairs for an object for as long as the object can be tracked or for a time period.
- [142] A scene change refers to any region of a scene that can be detected as changing over a period of time. Examples of a scene change include: an stationary object leaving a scene; an object entering a scene and becoming stationary; an object changing position in a scene; and an object changing appearance (e.g. color, shape, or size).

- [143] A feature of a scene change refers to a property of a scene change. Examples of a feature of a scene change include: a size of a scene change in image space; an approximate size of a scene change in a three-dimensional representation of the environment; a time at which a scene change occurred; a location of a scene change in image space; and an approximate location of a scene change in a three-dimensional representation of the environment.
- [144] A pre-defined model refers to an *a priori* known model of an object. Examples of a pre-defined model may include: an adult; a child; a vehicle; and a semi-trailer.
- [145] Figure 16a shows an exemplary video analysis portion of a video surveillance system according to an embodiment of the invention. In Figure 16a, a video sensor (for example, but not limited to, a video camera) 1601 may provide a video stream 1602 to a video analysis subsystem 1603. Video analysis subsystem 1603 may then perform analysis of the video stream 1602 to derive video primitives, which may be stored in primitive storage 1605. Primitive storage 1605 may be used to store non-video primitives, as well. Video analysis subsystem 1603 may further control storage of all or portions of the video stream 1602 in video storage 1604, for example, quality and/or quantity of video, as discussed above.
- [146] Referring now to Figure 16b, once the video, and, if there are other sensors, the non-video primitives 161 are available, the system may detect events. The user tasks the system by defining rules 163 and corresponding responses 164 using the rule and response definition interface 162. The rules are translated into event discriminators, and the system extracts corresponding event occurrences 165. The detected event occurrences 166 trigger user defined responses 167. A response may include a snapshot of a video of the detected event from video storage 168 (which may or may not be the same as video storage 1604 in Figure 16a). The video storage 168 may be part of the video surveillance system, or it may be a separate recording

device 15. Examples of a response may include, but are not necessarily limited to, the following: activating a visual and/or audio alert on a system display; activating a visual and/or audio alarm system at the location; activating a silent alarm; activating a rapid response mechanism; locking a door; contacting a security service; forwarding or streaming data (e.g., image data, video data, video primitives; and/or analyzed data) to another computer system via a network, such as, but not limited to, the Internet; saving such data to a designated computer-readable medium; activating some other sensor or surveillance system; tasking the computer system 11 and/or another computer system; and/or directing the computer system 11 and/or another computer system.

[147] The primitive data can be thought of as data stored in a database. To detect event occurrences in it, an efficient query language is required. Embodiments of the inventive system may include an activity inferencing language, which will be described below.

[148] Traditional relational database querying schemas often follow a Boolean binary tree structure to allow users to create flexible queries on stored data of various types. Leaf nodes are usually of the form "property relationship value," where a property is some key feature of the data (such as time or name); a relationship is usually a numerical operator (">", "<", "=", etc); and a value is a valid state for that property. Branch nodes usually represent unary or binary Boolean logic operators like "and", "or", and "not".

[149] This may form the basis of an activity query formulation schema, as in embodiments of the present invention. In case of a video surveillance application, the properties may be features of the object detected in the video stream, such as size, speed, color, classification (human, vehicle), or the properties may be scene change properties. Figure 17 gives examples of using such queries. In Figure 17a, the query, "Show me any red vehicle," 171

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is posed. This may be decomposed into two "property relationship value" (or simply "property") queries, testing whether the classification of an object is vehicle 173 and whether its color is predominantly red 174. These two sub-queries can combined with the Boolean operator "and" 172. Similarly, in Figure 17b, the query, "Show me when a camera starts or stops moving," may be expressed as the Boolean "or" 176 combination of the property sub-queries, "has the camera started moving" 177 and "has the camera stopped moving" 178.

[150] Embodiments of the invention may extend this type of database query schema in two exemplary ways: (1) the basic leaf nodes may be augmented with activity detectors describing spatial activities within a scene; and (2) the Boolean operator branch nodes may be augmented with modifiers specifying spatial, temporal and object interrelationships.

They describe how an object might interact with a location in the scene. Figure 18 illustrates three exemplary activity detectors. Figure 18a represents the behavior of crossing a perimeter in a particular direction using a virtual video tripwire (for further information about how such virtual video tripwires may be implemented, one may consult, e.g., U.S. Patent No. 6,696,945). Figure 18b represents the behavior of loitering for a period of time on a railway track. Figure 18c represents the behavior of taking something away from a section of wall (for exemplary approaches to how this may be done, one may consult U.S. Patent Application No. 10/331,778, entitled, "Video Scene Background Maintenance - Change Detection & Classification," filed on January 30, 2003). Other exemplary activity detectors may include detecting a person falling, detecting a person changing direction or speed, detecting a person entering an area, or detecting a person going in the wrong direction.

- [152] Figure 19 illustrates an example of how an activity detector leaf node (here, tripwire crossing) can be combined with simple property queries to detect whether a red vehicle crosses a video tripwire 191. The property queries 172, 173, 174 and the activity detector 193 are combined with a Boolean "and" operator 192.
- [153] Combining queries with modified Boolean operators (combinators) may add further flexibility. Exemplary modifiers include spatial, temporal, object, and counter modifiers.
- [154] A spatial modifier may cause the Boolean operator to operate only on child activities (i.e., the arguments of the Boolean operator, as shown below a Boolean operator, e.g., in Figure 19) that are proximate/non-proximate within the scene. For example, "and within 50 pixels of" may be used to mean that the "and" only applies if the distance between activities is less than 50 pixels.
- [155] A temporal modifier may cause the Boolean operator to operate only on child activities that occur within a specified period of time of each other, outside of such a time period, or within a range of times. The time ordering of events may also be specified. For example "and first within 10 seconds of second" may be used to mean that the "and" only applies if the second child activity occurs not more than 10 seconds after the first child activity.
- [156] An object modifier may cause the Boolean operator to operate only on child activities that occur involving the same or different objects. For example "and involving the same object" may be used to mean that the "and" only applies if the two child activities involve the same specific object.
- [157] A counter modifier may cause the Boolean operator to be triggered only if the condition(s) is/are met a prescribed number of times. A counter modifier may generally include a numerical relationship, such as "at least n times," "exactly n times," "at most n times," etc. For

example, "or – at least twice" may be used to mean that at least two of the sub-queries of the "or" operator have to be true. Another use of the counter modifier may be to implement a rule like "alert if the same person takes at least five items from a shelf."

[158] Figure 20 illustrates an example of using combinators. Here, the required activity query is to "find a red vehicle making an illegal left turn" 201. The illegal left turn may be captured through a combination of activity descriptors and modified Boolean operators. One virtual tripwire may be used to detect objects coming out of the side street 193, and another virtual tripwire may be used to detect objects traveling to the left along the road 205. These may be combined by a modified "and" operator 202. The standard Boolean "and" operator guarantees that both activities 193 and 205 have to be detected. The object modifier 203 checks that the same object crossed both tripwires, while the temporal modifier 204 checks that the bottom-to-top tripwire 193 is crossed first, followed by the crossing of the right-to-left tripwire 205 no more than 10 seconds later.

[159] This example also indicates the power of the combinators. Theoretically it is possible to define a separate activity detector for left turn, without relying on simple activity detectors and combinators. However, that detector would be inflexible, making it difficult to accommodate arbitrary turning angles and directions, and it would also be cumbersome to write a separate detector for all potential events. In contrast, using the combinators and simple detectors provides great flexibility.

[160] Other examples of complex activities that can be detected as a combination of simpler ones may include a car parking and a person getting out of the car or multiple people forming a group, tailgating. These combinators can also combine primitives of different types and sources. Examples may include rules such as "show a person inside a room before the lights

are turned off;" "show a person entering a door without a preceding card-swipe;" or "show if an area of interest has more objects than expected by an RFID tag reader," i.e., an illegal object without an RFID tag is in the area.

other combinators, to arbitrary depths. An example, illustrated in Figures 21a and 21b, may be a rule to detect if a car turns left 2101 and then turns right 2104. The left turn 2101 may be detected with the directional tripwires 2102 and 2103, while the right turn 2104 with the directional tripwires 2105 and 2106. The left turn may be expressed as the tripwire activity detectors 2112 and 2113, corresponding to tripwires 2102 and 2103, respectively, joined with the "and" combinator 2111 with the object modifier "same" 2117 and temporal modifier "2112 before 2113" 2118. Similarly, the right turn may be expressed as the tripwire activity detectors 2115 and 2116, corresponding to tripwires 2105 and 2106, respectively, joined with the "and" combinator 2114 with the object modifier "same" 2119 and temporal modifier "2115 before 2116" 2120. To detect that the same object turned first left then right, the left turn detector 2111 and the right turn detector 2114 are joined with the "and" combinator 2121 with the object modifier "same" 2122 and temporal modifier "2111 before 2114" 2123. Finally, to ensure that the detected object is a vehicle, a Boolean "and" operator 2125 is used to combine the left-and-right-turn detector 2121 and the property query 2124.

[162] All these detectors may optionally be combined with temporal attributes.

Examples of a temporal attribute include: every 15 minutes; between 9:00pm and 6:30am; less than 5 minutes; longer than 30 seconds; and over the weekend.

[163] In block 24 of Figure 2, the video surveillance system is operated. The video surveillance system of the invention operates automatically, detects and archives video

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primitives of objects in the scene, and detects event occurrences in real time using event discriminators. In addition, action is taken in real time, as appropriate, such as activating alarms, generating reports, and generating output. The reports and output can be displayed and/or stored locally to the system or elsewhere via a network, such as the Internet. Figure 4 illustrates a flow diagram for operating the video surveillance system.

- [164] In block 41, the computer system 11 obtains source video from the video sensors 14 and/or the video recorders 15.
- [165] In block 42, video primitives are extracted in real time from the source video. As an option, non-video primitives can be obtained and/or extracted from one or more other sensors 17 and used with the invention. The extraction of video primitives is illustrated with Figure 5.
- [166] Figure 5 illustrates a flow diagram for extracting video primitives for the video surveillance system. Blocks 51 and 52 operate in parallel and can be performed in any order or concurrently. In block 51, objects are detected via movement. Any motion detection algorithm for detecting movement between frames at the pixel level can be used for this block. As an example, the three frame differencing technique can be used, which is discussed in {1}. The detected objects are forwarded to block 53.
- [167] In block 52, objects are detected via change. Any change detection algorithm for detecting changes from a background model can be used for this block. An object is detected in this block if one or more pixels in a frame are deemed to be in the foreground of the frame because the pixels do not conform to a background model of the frame. As an example, a stochastic background modeling technique, such as dynamically adaptive background subtraction, can be used, which is described in {1} and U.S. Patent Application No. 09/694,712 filed October 24, 2000. The detected objects are forwarded to block 53.

[168] The motion detection technique of block 51 and the change detection technique of block 52 are complimentary techniques, where each technique advantageously addresses deficiencies in the other technique. As an option, additional and/or alternative detection schemes can be used for the techniques discussed for blocks 51 and 52. Examples of an additional and/or alternative detection scheme include the following: the Pfinder detection scheme for finding people as described in {8}; a skin tone detection scheme; a face detection scheme; and a model-based detection scheme. The results of such additional and/or alternative detection schemes are provided to block 53.

[169] As an option, if the video sensor 14 has motion (e.g., a video camera that sweeps, zooms, and/or translates), an additional block can be inserted before blocks between blocks 51 and 52 to provide input to blocks 51 and 52 for video stabilization. Video stabilization can be achieved by affine or projective global motion compensation. For example, image alignment described in U.S. Patent Application No. 09/609,919, filed July 3, 2000, now U.S. Patent No. 6,738,424, which is incorporated herein by reference, can be used to obtain video stabilization.

[170] In block 53, blobs are generated. In general, a blob is any object in a frame. Examples of a blob include: a moving object, such as a person or a vehicle; and a consumer product, such as a piece of furniture, a clothing item, or a retail shelf item. Blobs are generated using the detected objects from blocks 32 and 33. Any technique for generating blobs can be used for this block. An exemplary technique for generating blobs from motion detection and change detection uses a connected components scheme. For example, the morphology and connected components algorithm can be used, which is described in {1}.

[171] In block 54, blobs are tracked. Any technique for tracking blobs can be used for this block. For example, Kalman filtering or the CONDENSATION algorithm can be used. As

another example, a template matching technique, such as described in {1}, can be used. As a further example, a multi-hypothesis Kalman tracker can be used, which is described in {5}. As yet another example, the frame-to-frame tracking technique described in U.S. Patent Application No. 09/694,712 filed October 24, 2000, can be used. For the example of a location being a grocery store, examples of objects that can be tracked include moving people, inventory items, and inventory moving appliances, such as shopping carts or trolleys.

[172] As an option, blocks 51-54 can be replaced with any detection and tracking scheme, as is known to those of ordinary skill. An example of such a detection and tracking scheme is described in {11}.

[173] In block 55, each trajectory of the tracked objects is analyzed to determine if the trajectory is salient. If the trajectory is insalient, the trajectory represents an object exhibiting unstable motion or represents an object of unstable size or color, and the corresponding object is rejected and is no longer analyzed by the system. If the trajectory is salient, the trajectory represents an object that is potentially of interest. A trajectory is determined to be salient or insalient by applying a salience measure to the trajectory. Techniques for determining a trajectory to be salient or insalient are described in {13} and {18}.

[174] In block 56, each object is classified. The general type of each object is determined as the classification of the object. Classification can be performed by a number of techniques, and examples of such techniques include using a neural network classifier {14} and using a linear discriminatant classifier {14}. Examples of classification are the same as those discussed for block 23.

[175] In block 57, video primitives are identified using the information from blocks 51-56 and additional processing as necessary. Examples of video primitives identified are the same

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as those discussed for block 23. As an example, for size, the system can use information obtained from calibration in block 22 as a video primitive. From calibration, the system has sufficient information to determine the approximate size of an object. As another example, the system can use velocity as measured from block 54 as a video primitive.

[176] In block 43, the video primitives from block 42 are archived. The video primitives can be archived in the computer-readable medium 13 or another computer-readable medium. Along with the video primitives, associated frames or video imagery from the source video can be archived. This archiving step is optional; if the system is to be used only for real-time event detection, the archiving step can be skipped.

[177] In block 44, event occurrences are extracted from the video primitives using event discriminators. The video primitives are determined in block 42, and the event discriminators are determined from tasking the system in block 23. The event discriminators are used to filter the video primitives to determine if any event occurrences occurred. For example, an event discriminator can be looking for a "wrong way" event as defined by a person traveling the "wrong way" into an area between 9:00a.m. and 5:00p.m. The event discriminator checks all video primitives being generated according to Figure 5 and determines if any video primitives exist which have the following properties: a timestamp between 9:00a.m. and 5:00p.m., a classification of "person" or "group of people", a position inside the area, and a "wrong" direction of motion. The event discriminators may also use other types of primitives, as discussed above, and/or combine video primitives from multiple video sources to detect event occurrences.

[178] In block 45, action is taken for each event occurrence extracted in block 44, as appropriate. Figure 6 illustrates a flow diagram for taking action with the video surveillance system.

[179] In block 61, responses are undertaken as dictated by the event discriminators that detected the event occurrences. The responses, if any, are identified for each event discriminator in block 34.

[180] In block 62, an activity record is generated for each event occurrence that occurred. The activity record includes, for example: details of a trajectory of an object; a time of detection of an object; a position of detection of an object, and a description or definition of the event discriminator that was employed. The activity record can include information, such as video primitives, needed by the event discriminator. The activity record can also include representative video or still imagery of the object(s) and/or area(s) involved in the event occurrence. The activity record is stored on a computer-readable medium.

[181] In block 63, output is generated. The output is based on the event occurrences extracted in block 44 and a direct feed of the source video from block 41. The output is stored on a computer-readable medium, displayed on the computer system 11 or another computer system, or forwarded to another computer system. As the system operates, information regarding event occurrences is collected, and the information can be viewed by the operator at any time, including real time. Examples of formats for receiving the information include: a display on a monitor of a computer system; a hard copy; a computer-readable medium; and an interactive web page.

[182] The output can include a display from the direct feed of the source video from block 41 transmitted either via analog video transmission means or via network video streaming.

For example, the source video can be displayed on a window of the monitor of a computer system or on a closed-circuit monitor. Further, the output can include source video marked up with graphics to highlight the objects and/or areas involved in the event occurrence. If the system is operating in forensic analysis mode, the video may come from the video recorder.

[183] The output can include one or more reports for an operator based on the requirements of the operator and/or the event occurrences. Examples of a report include: the number of event occurrences which occurred; the positions in the scene in which the event occurrence occurred; the times at which the event occurrences occurred; representative imagery of each event occurrence; representative video of each event occurrence; raw statistical data; statistics of event occurrences (e.g., how many, how often, where, and when); and/or human-readable graphical displays.

[184] Figures 13 and 14 illustrate an exemplary report for the aisle in the grocery store of Figure 15. In Figures 13 and 14, several areas are identified in block 22 and are labeled accordingly in the images. The areas in Figure 13 match those in Figure 12, and the areas in Figure 14 are different ones. The system is tasked to look for people who stop in the area.

[185] In Figure 13, the exemplary report is an image from a video marked-up to include labels, graphics, statistical information, and an analysis of the statistical information. For example, the area identified as coffee has statistical information of an average number of customers in the area of 2/hour and an average dwell time in the area as 5 seconds. The system determined this area to be a "cold" region, which means there is not much commercial activity through this region. As another example, the area identified as sodas has statistical information of an average number of customers in the area of 15/hour and an average dwell time in the area

as 22 seconds. The system determined this area to be a "hot" region, which means there is a large amount of commercial activity in this region.

[186] In Figure 14, the exemplary report is an image from a video marked-up to include labels, graphics, statistical information, and an analysis of the statistical information. For example, the area at the back of the aisle has average number of customers of 14/hour and is determined to have low traffic. As another example, the area at the front of the aisle has average number of customers of 83/hour and is determined to have high traffic.

[187] For either Figure 13 or Figure 14, if the operator desires more information about any particular area or any particular area, a point-and-click interface allows the operator to navigate through representative still and video imagery of regions and/or activities that the system has detected and archived.

[188] Figure 15 illustrates another exemplary report for an aisle in a grocery store. The exemplary report includes an image from a video marked-up to include labels and trajectory indications and text describing the marked-up image. The system of the example is tasked with searching for a number of areas: length, position, and time of a trajectory of an object; time and location an object was immobile; correlation of trajectories with areas, as specified by the operator; and classification of an object as not a person, one person, two people, and three or more people.

[189] The video image of Figure 15 is from a time period where the trajectories were recorded. Of the three objects, two objects are each classified as one person, and one object is classified as not a person. Each object is assigned a label, namely Person ID 1032, Person ID 1033, and Object ID 32001. For Person ID 1032, the system determined the person spent 52 seconds in the area and 18 seconds at the position designated by the circle. For Person ID 1033,

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the system determined the person spent 1 minute and 8 seconds in the area and 12 seconds at the position designated by the circle. The trajectories for Person ID 1032 and Person ID 1033 are included in the marked-up image. For Object ID 32001, the system did not further analyze the object and indicated the position of the object with an X.

- [190] Referring back to block 22 in Figure 2, calibration can be (1) manual, (2) semi-automatic using imagery from a video sensor or a video recorder, or (3) automatic using imagery from a video sensor or a video recorder. If imagery is required, it is assumed that the source video to be analyzed by the computer system 11 is from a video sensor that obtained the source video used for calibration.
- [191] For manual calibration, the operator provides to the computer system 11 the orientation and internal parameters for each of the video sensors 14 and the placement of each video sensor 14 with respect to the location. The computer system 11 can optionally maintain a map of the location, and the placement of the video sensors 14 can be indicated on the map. The map can be a two-dimensional or a three-dimensional representation of the environment. In addition, the manual calibration provides the system with sufficient information to determine the approximate size and relative position of an object.
- [192] Alternatively, for manual calibration, the operator can mark up a video image from the sensor with a graphic representing the appearance of a known-sized object, such as a person. If the operator can mark up an image in at least two different locations, the system can infer approximate camera calibration information.
- [193] For semi-automatic and automatic calibration, no knowledge of the camera parameters or scene geometry is required. From semi-automatic and automatic calibration, a

lookup table is generated to approximate the size of an object at various areas in the scene, or the internal and external camera calibration parameters of the camera are inferred.

- [194] For semi-automatic calibration, the video surveillance system is calibrated using a video source combined with input from the operator. A single person is placed in the field of view of the video sensor to be semi-automatic calibrated. The computer system 11 receives source video regarding the single person and automatically infers the size of person based on this data. As the number of locations in the field of view of the video sensor that the person is viewed is increased, and as the period of time that the person is viewed in the field of view of the video sensor is increased, the accuracy of the semi-automatic calibration is increased.
- [195] Figure 7 illustrates a flow diagram for semi-automatic calibration of the video surveillance system. Block 71 is the same as block 41, except that a typical object moves through the scene at various trajectories. The typical object can have various velocities and be stationary at various positions. For example, the typical object moves as close to the video sensor as possible and then moves as far away from the video sensor as possible. This motion by the typical object can be repeated as necessary.
  - [196] Blocks 72-75 are the same as blocks 51-54, respectively.
- [197] In block 76, the typical object is monitored throughout the scene. It is assumed that the only (or at least the most) stable object being tracked is the calibration object in the scene (i.e., the typical object moving through the scene). The size of the stable object is collected for every point in the scene at which it is observed, and this information is used to generate calibration information.
- [198] In block 77, the size of the typical object is identified for different areas throughout the scene. The size of the typical object is used to determine the approximate sizes of

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similar objects at various areas in the scene. With this information, a lookup table is generated matching typical apparent sizes of the typical object in various areas in the image, or internal and external camera calibration parameters are inferred. As a sample output, a display of stick-sized figures in various areas of the image indicate what the system determined as an appropriate height. Such a stick-sized figure is illustrated in Figure 11.

[199] For automatic calibration, a learning phase is conducted where the computer system 11 determines information regarding the location in the field of view of each video sensor. During automatic calibration, the computer system 11 receives source video of the location for a representative period of time (e.g., minutes, hours or days) that is sufficient to obtain a statistically significant sampling of objects typical to the scene and thus infer typical apparent sizes and locations.

[200] Figure 8 illustrates a flow diagram for automatic calibration of the video surveillance system. Blocks 81-86 are the same as blocks 71-76 in Figure 7.

[201] In block 87, trackable regions in the field of view of the video sensor are identified. A trackable region refers to a region in the field of view of a video sensor where an object can be easily and/or accurately tracked. An untrackable region refers to a region in the field of view of a video sensor where an object is not easily and/or accurately tracked and/or is difficult to track. An untrackable region can be referred to as being an unstable or insalient region. An object may be difficult to track because the object is too small (e.g., smaller than a predetermined threshold), appear for too short of time (e.g., less than a predetermined threshold), or exhibit motion that is not salient (e.g., not purposeful). A trackable region can be identified using, for example, the techniques described in {13}.

[202] Figure 10 illustrates trackable regions determined for an aisle in a grocery store. The area at the far end of the aisle is determined to be insalient because too many confusers appear in this area. A confuser refers to something in a video that confuses a tracking scheme. Examples of a confuser include: leaves blowing; rain; a partially occluded object; and an object that appears for too short of time to be tracked accurately. In contrast, the area at the near end of the aisle is determined to be salient because good tracks are determined for this area.

[203] In block 88, the sizes of the objects are identified for different areas throughout the scene. The sizes of the objects are used to determine the approximate sizes of similar objects at various areas in the scene. A technique, such as using a histogram or a statistical median, is used to determine the typical apparent height and width of objects as a function of location in the scene. In one part of the image of the scene, typical objects can have a typical apparent height and width. With this information, a lookup table is generated matching typical apparent sizes of objects in various areas in the image, or the internal and external camera calibration parameters can be inferred.

[204] Figure 11 illustrates identifying typical sizes for typical objects in the aisle of the grocery store from Figure 10. Typical objects are assumed to be people and are identified by a label accordingly. Typical sizes of people are determined through plots of the average height and average width for the people detected in the salient region. In the example, plot A is determined for the average height of an average person, and plot B is determined for the average width for one person, two people, and three people.

[205] For plot A, the x-axis depicts the height of the blob in pixels, and the y-axis depicts the number of instances of a particular height, as identified on the x-axis, that occur. The peak of the line for plot A corresponds to the most common height of blobs in the designated

region in the scene and, for this example, the peak corresponds to the average height of a person standing in the designated region.

[206] Assuming people travel in loosely knit groups, a similar graph to plot A is generated for width as plot B. For plot B, the x-axis depicts the width of the blobs in pixels, and the y-axis depicts the number of instances of a particular width, as identified on the x-axis, that occur. The peaks of the line for plot B correspond to the average width of a number of blobs. Assuming most groups contain only one person, the largest peak corresponds to the most common width, which corresponds to the average width of a single person in the designated region. Similarly, the second largest peak corresponds to the average width of two people in the designated region, and the third largest peak corresponds to the average width of three people in the designated region.

[207] Figure 9 illustrates an additional flow diagram for the video surveillance system of the invention. In this additional embodiment, the system analyzes archived video primitives with event discriminators to generate additional reports, for example, without needing to review the entire source video. Anytime after a video source has been processed according to the invention, video primitives for the source video are archived in block 43 of Figure 4. The video content can be reanalyzed with the additional embodiment in a relatively short time because only the video primitives are reviewed and because the video source is not reprocessed. This provides a great efficiency improvement over current state-of-the-art systems because processing video imagery data is extremely computationally expensive, whereas analyzing the small-sized video primitives abstracted from the video is extremely computationally cheap. As an example, the following event discriminator can be generated: "The number of people stopping for more than 10 minutes in area A in the last two months." With the additional embodiment, the last two

months of source video does not need to be reviewed. Instead, only the video primitives from the last two months need to be reviewed, which is a significantly more efficient process.

- [208] Block 91 is the same as block 23 in Figure 2.
- [209] In block 92, archived video primitives are accessed. The video primitives are archived in block 43 of Figure 4.
  - [210] Blocks 93 and 94 are the same as blocks 44 and 45 in Figure 4.
- [211] As an exemplary application, the invention can be used to analyze retail market space by measuring the efficacy of a retail display. Large sums of money are injected into retail displays in an effort to be as eye-catching as possible to promote sales of both the items on display and subsidiary items. The video surveillance system of the invention can be configured to measure the effectiveness of these retail displays.
- [212] For this exemplary application, the video surveillance system is set up by orienting the field of view of a video sensor towards the space around the desired retail display. During tasking, the operator selects an area representing the space around the desired retail display. As a discriminator, the operator defines that he or she wishes to monitor people-sized objects that enter the area and either exhibit a measurable reduction in velocity or stop for an appreciable amount of time.
- [213] After operating for some period of time, the video surveillance system can provide reports for market analysis. The reports can include: the number of people who slowed down around the retail display; the number of people who stopped at the retail display; the breakdown of people who were interested in the retail display as a function of time, such as how many were interested on weekends and how many were interested in evenings; and video snapshots of the people who showed interest in the retail display. The market research

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information obtained from the video surveillance system can be combined with sales information from the store and customer records from the store to improve the analysts understanding of the efficacy of the retail display.

- [214] The embodiments and examples discussed herein are non-limiting examples.
- [215] The invention is described in detail with respect to preferred embodiments, and it will now be apparent from the foregoing to those skilled in the art that changes and modifications may be made without departing from the invention in its broader aspects, and the invention, therefore, as defined in the claims is intended to cover all such changes and modifications as fall within the true spirit of the invention.

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#### **CLAIMS**

What is claimed is:

1. A video processing apparatus comprising:

a video content analysis module to analyze an input video sequence and to derive at least one video primitive; and

a video encoder to receive said input video sequence and to output compressed video.

2. The apparatus according to Claim 1, further comprising:

a storage module coupled to said video content analysis module to store at least one of the group consisting of a video primitive and at least one video frame.

3. The apparatus according to Claim 1, further comprising:

a communications module coupled to said video content analysis module and to said video encoder to facilitate communication of at least one of the group consisting of said compressed video and at least one video primitive.

4. The apparatus according to Claim 1, further comprising:

an event inference module coupled to said video content analysis module to detect at least one event.

5. The apparatus according to Claim 4, wherein said event inference module is further to generate at least one alert.

6. The apparatus according to Claim 5, further comprising:

a communications module coupled to said video encoder and to said event inference module to facilitate communication of at least one of the group consisting of said compressed video and at least one alert.

7. The apparatus according to Claim 4, further comprising:

a communications module coupled to said video encoder and to said event inference module to facilitate communication of said compressed video.

8. The apparatus according to Claim 4, further comprising:

a communications module coupled to said event inference module to receive at least one event rule and to provide the at least one event rule to said event inference module.

9. A video analysis system comprising:

the apparatus according to Claim 4; and

a rules management tool located remotely from said apparatus and coupled to said apparatus to provide at least one event rule to said event inference module.

10. The system according to Claim 9, further comprising:

an alert unit located remotely from said apparatus and coupled to receive at least one of the group consisting of compressed video and an alert.

11. The system according to Claim 9, further comprising:

a storage module located remotely from said apparatus and coupled to receive at least one of the group consisting of compressed video, a video primitive, and an alert.

12. A video analysis system comprising:

the apparatus according to Claim 1; and

an event inference unit located remotely from said apparatus and coupled to said apparatus, the event inference unit to detect at least one event based on said at least one video primitive generated by said apparatus.

13. The system according to Claim 12, further comprising:

a rules management tool located remotely from said apparatus and coupled to said event inference module to provide at least one event rule to said event inference module.

14. The system according to Claim 12, further comprising:

an alert unit located remotely from said apparatus and coupled to receive at least one of the group consisting of compressed video and an alert.

15. The system according to Claim 12, further comprising:

a storage module located remotely from said apparatus and coupled to receive at least one of the group consisting of compressed video, a video primitive, and an alert.

16. A video analysis system comprising:

at least two of the apparatuses according to Claim 1, said at least one video primitive of each of said apparatuses being combined into a single video primitive stream; and

at least two event inference units located remotely from said apparatuses, each of said event inference units coupled to said apparatuses to receive said single video primitive stream, each of the event inference units to detect at least one event based on said single video primitive stream.

- 17. The system according to Claim 16, wherein each of said at least two event inference units is adapted to detect a different type of event.
  - detecting whether or not there are one or more activities in a video sequence; encoding a video sequence to obtain encoded video; and

transmitting said encoded video;

18. A method of video processing comprising:

wherein at least one of the group consisting of said encoding and said transmitting depends upon at least one result of said detecting.

- 19. The method according to Claim 18, wherein said detecting comprises: analyzing said video sequence to obtain at least one of the group consisting of a video primitive and a detected video event.
- 20. The method according to Claim 18, wherein said transmitting is performed only if said detecting determines that at least one activity is present in said video sequence.

- 21. The method according to Claim 20, wherein said encoding is performed only if said detecting determines that at least one activity is present in said video sequence.
- 22. The method according to Claim 18, wherein a parameter of said encoding is adjusted based upon at least one result of said detecting.
- 23. The method according to Claim 18, wherein a parameter of said transmitting is adjusted based upon at least one result of said detecting.
- 24. The method according to Claim 18, wherein, based upon at least one result of said detecting, at least one of the group consisting of the following is adjusted: bit-rate for said encoding; frame-rate for said encoding; bit-rate for said transmitting; frame-rate for said transmitting; resolution for said encoding; and resolution for said transmitting.
- 25. A computer-readable medium containing instructions that when executed by a computer system cause said computer system to implement the method according to Claim 18.
  - 26. A video processing system comprising:

the computer-readable medium according to Claim 25; and

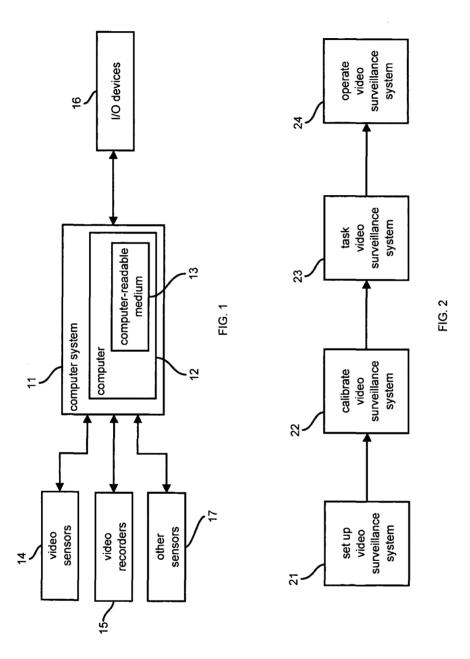
a computer coupled to said computer-readable medium to execute the instructions contained on said computer-readable medium.

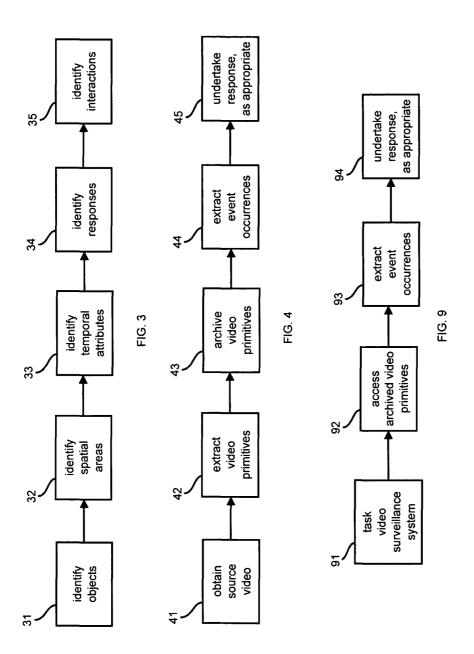
#### ABSTRACT OF THE DISCLOSURE

A video surveillance system extracts video primitives and extracts event occurrences from the video primitives using event discriminators. The system can undertake a response, such as an alarm, based on extracted event occurrences.

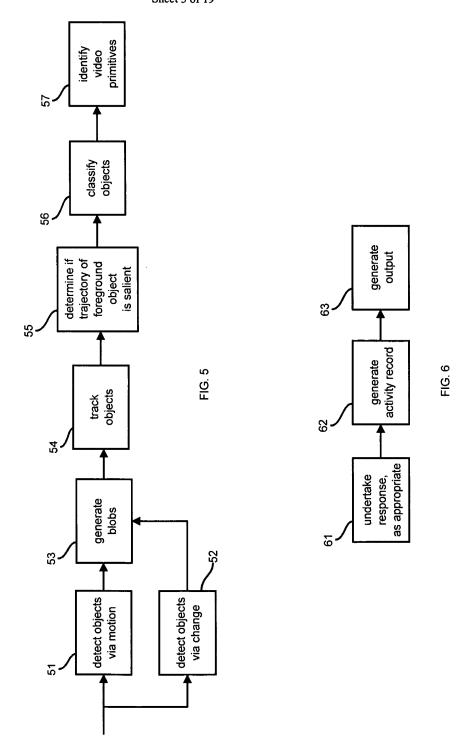
DC2-635031

New CIP Application – Peter VENETIANER et al.
Title: VIDEO SURVEILLANCE SYSTEM EMPLOYING VIDEO PRIMITIVES
Attorney Docket No. 37112-215811
Sheet 1 of 19

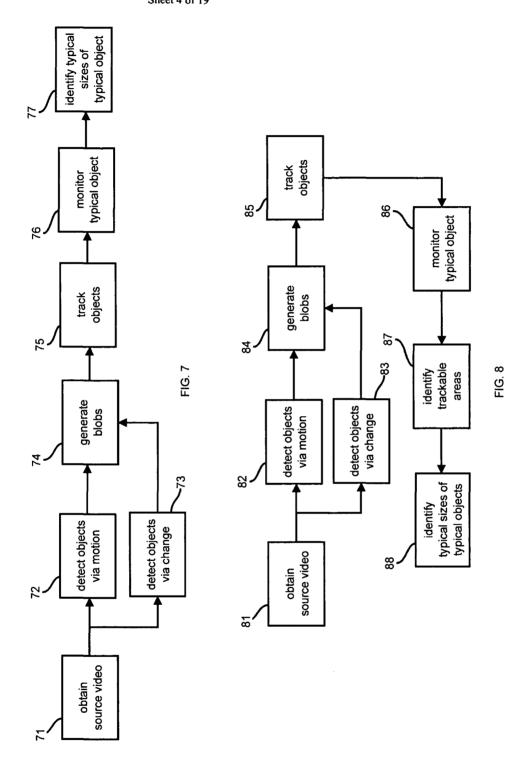




New CIP Application – Peter VENETIANER et al.
Title: VIDEO SURVEILLANCE SYSTEM EMPLOYING VIDEO PRIMITIVES
Attorney Docket No. 37112-215811
Sheet 3 of 19

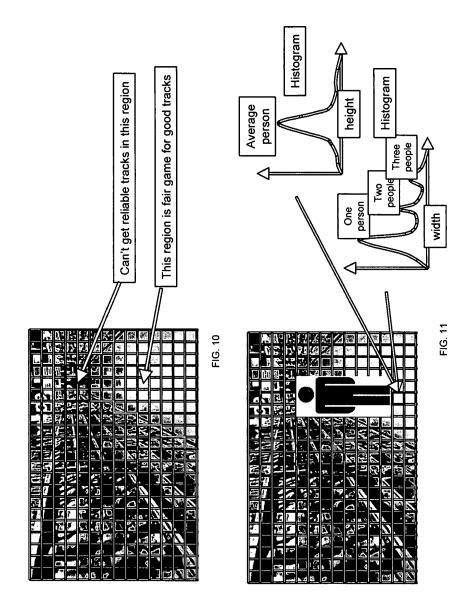


New CIP Application – Peter VENETIANER et al.
Title: VIDEO SURVEILLANCE SYSTEM EMPLOYING VIDEO PRIMITIVES
Attorney Docket No. 37112-215811
Sheet 4 of 19



New CIP Application – Peter VENETIANER *et al.*Title: VIDEO SURVEILLANCE SYSTEM EMPLOYING VIDEO PRIMITIVES

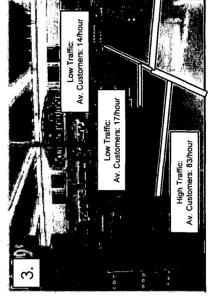
Attorney Docket No. 37112-215811 Sheet 5 of 19



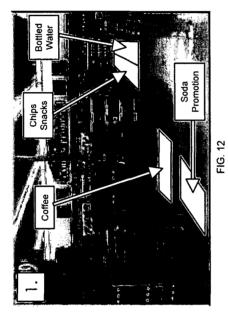
New CIP Application – Peter VENETIANER *et al.*Title: VIDEO SURVEILLANCE SYSTEM EMPLOYING VIDEO

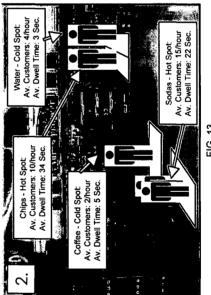
Attorney Docket No. 37112-215811

Sheet 6 of 19





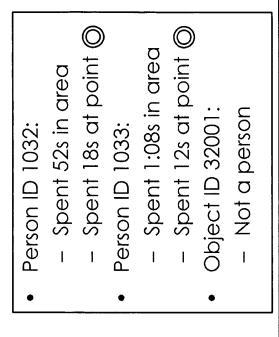




New CIP Application – Peter VENETIANER *et al.*Title: VIDEO SURVEILLANCE SYSTEM EMPLOYING VIDEO PRIMITIVES

Attorney Docket No. 37112-215811

Sheet 7 of 19



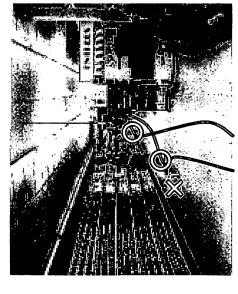


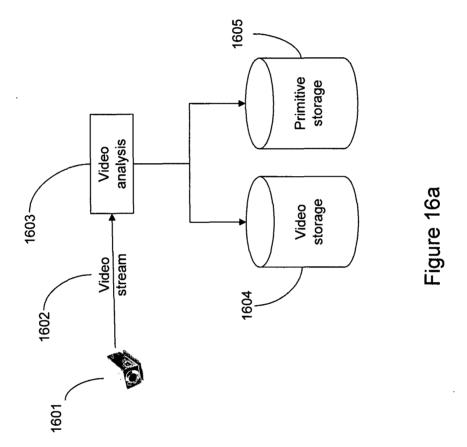
FIG. 15

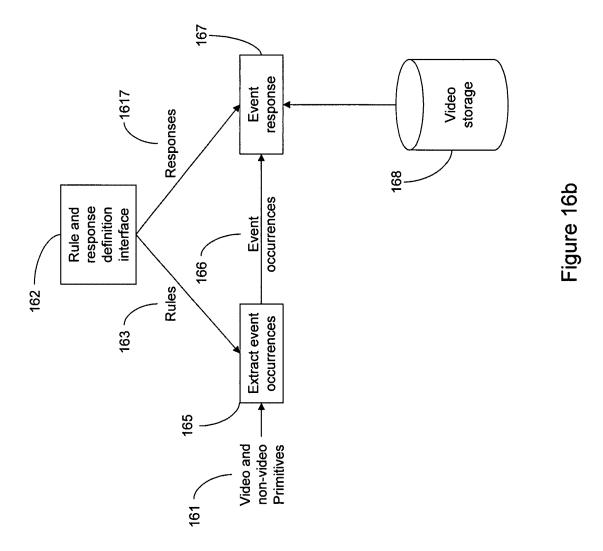
New CIP Application – Peter VENETIANER *et al.*Title: VIDEO SURVEILLANCE SYSTEM EMPLOYING VIDEO

PRIMITIVES

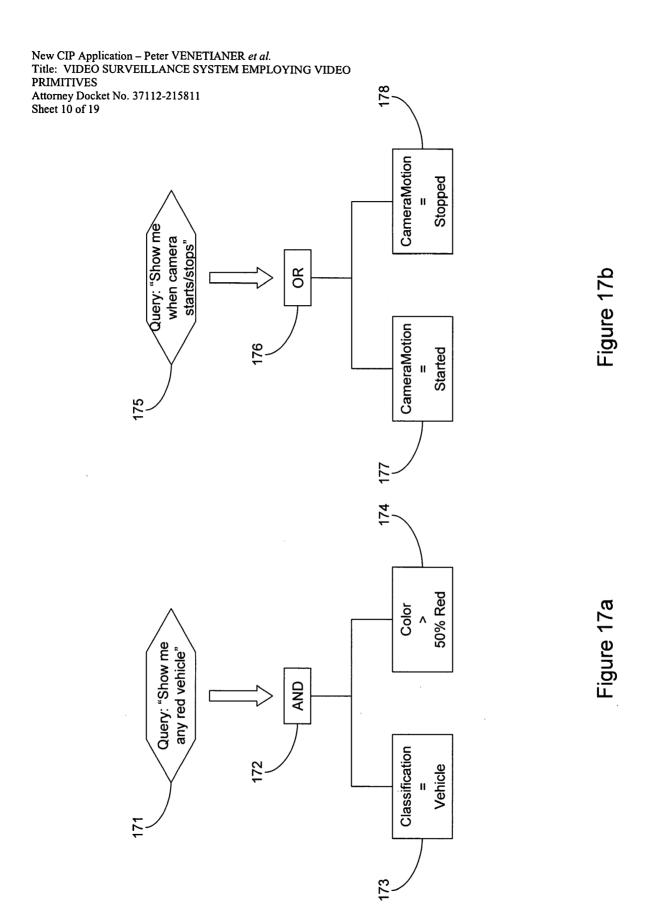
Attorney Docket No. 37112-215811

Sheet 8 of 19





Axis Exhibit 1002, Page 380 of 406

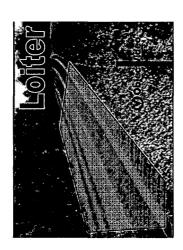


New CIP Application – Peter VENETIANER *et al.*Title: VIDEO SURVEILLANCE SYSTEM EMPLOYING VIDEO **PRIMITIVES** Attorney Docket No. 37112-215811 Sheet 11 of 19



Figure 18c



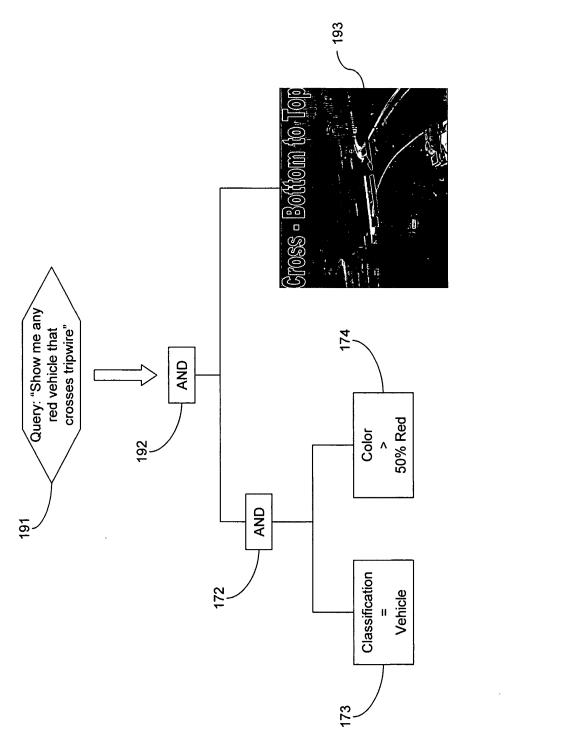




New CIP Application – Peter VENETIANER et al.
Title: VIDEO SURVEILLANCE SYSTEM EMPLOYING VIDEO

**PRIMITIVES** 

Attorney Docket No. 37112-215811 Sheet 12 of 19



New CIP Application – Peter VENETIANER *et al.*Title: VIDEO SURVEILLANCE SYSTEM EMPLOYING VIDEO

**PRIMITIVES** 

Attorney Docket No. 37112-215811

Sheet 14 of 19

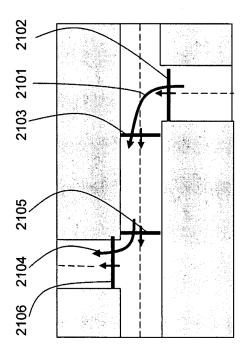
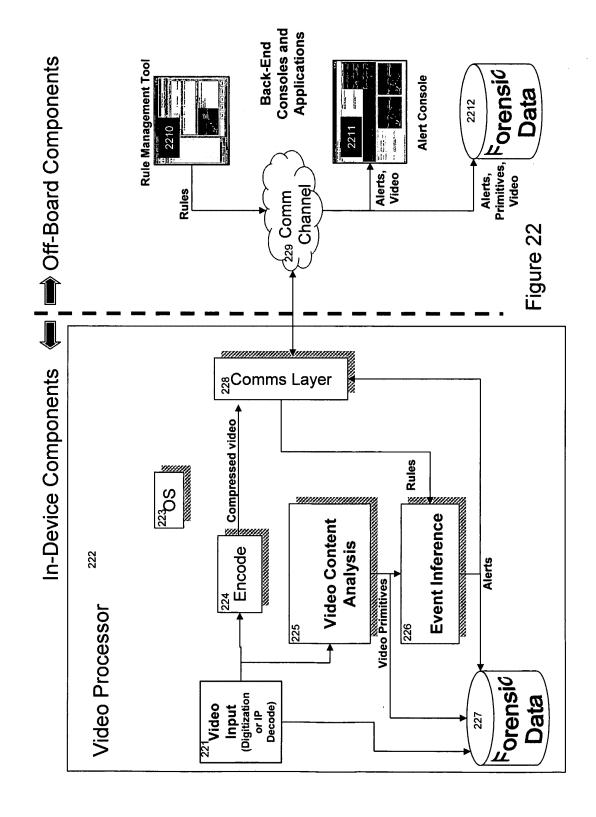


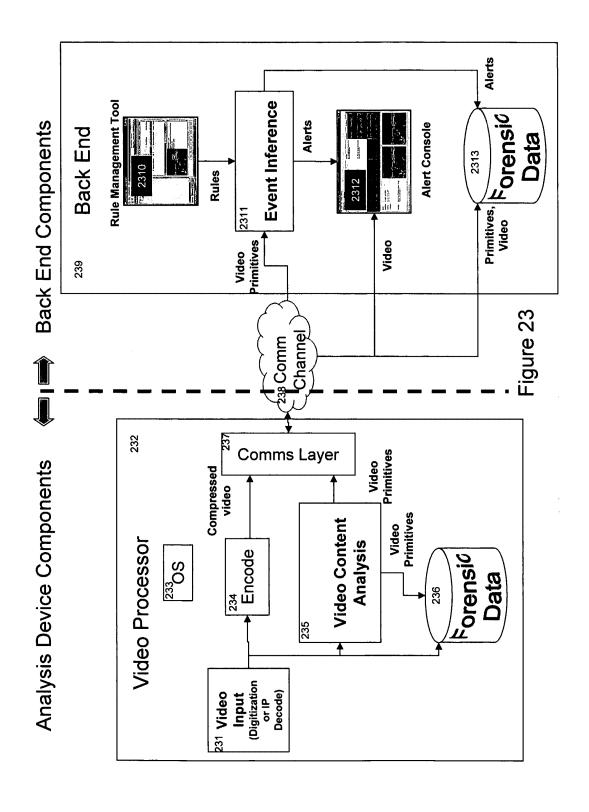
Figure 21a

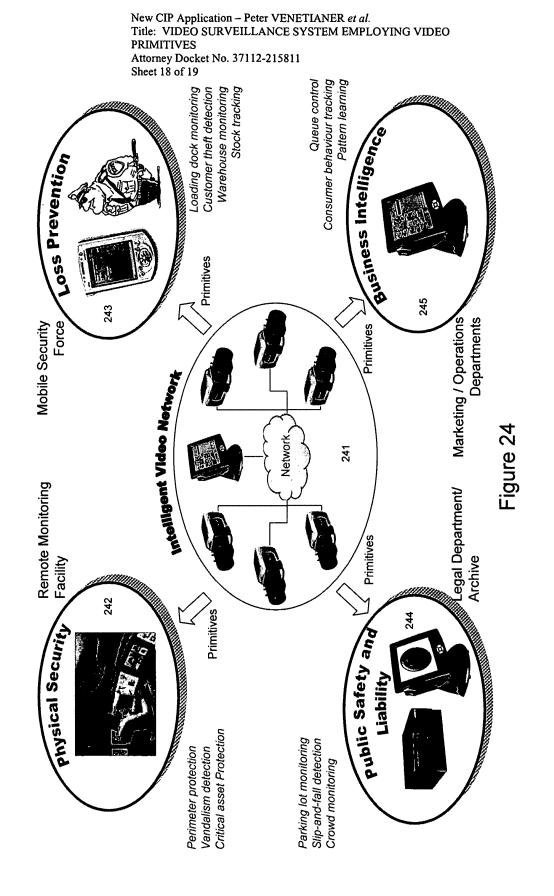
New CIP Application – Peter VENETIANER et al.

Title: VIDEO SURVEILLANCE SYSTEM EMPLOYING VIDEO **PRIMITIVES** Attorney Docket No. 37112-215811 Sheet 15 of 19 2115 before 2116 Temporal modifier: 2120~ Tripwire 2106 crossed Object modifier: same 2111 before 2114 2116-Temporal modifier: 2119-2123~ AND Tripwire 2105 crossed Object modifier: same Figure 21b 2114 2122~ 2112 before 2113 AND Temporal modifier: 2118-2121 Tripwire 2103 crossed Object modifier: same AND 2113-2117~ Classification Vehicle 2125 AND Tripwire 2102 crossed 2111 2112New CIP Application – Peter VENETIANER *et al.*Title: VIDEO SURVEILLANCE SYSTEM EMPLOYING VIDEO PRIMITIVES
Attorney Docket No. 37112-215811

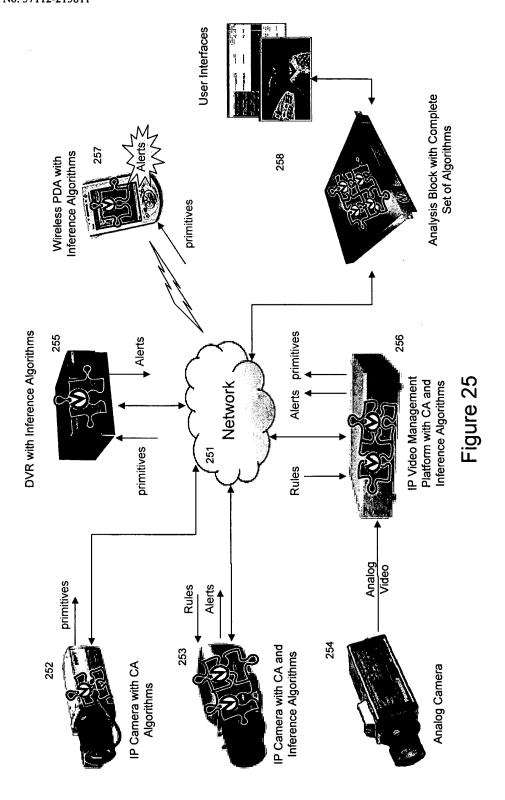
Sheet 16 of 19







Sheet 19 of 19



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B. d. add	f N	Attorney Docket No.	37112-215811					
	for Patent Application anguage Declaration	First Named Inventor	Peter L. Venetianer					
Engish L	anguage Declaration	COMPL	ETE IF KNOWN:					
		Application No.	Not Yet Assigned					
x Submitted	Submitted after initial	Filing Date	Concurrently Herewith					
with initial	filing (surcharge required	Art Unit	N/A					
filing	37 CFR 1.16(e))	Examiner	Not Yet Assigned					
As a below named inventor, I hereby declare that:  My residence, mailing address and citizenship are as stated below next to my name.  I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:  VIDEO SURVEILLANCE SYSTEM  the specification of which  X is attached hereto  OR  was filled on  as United States Application No. or PCT International Application No.  and was amended on  (if applicable).								
I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.  I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filling date of the prior application and the National or PCT International filing date of the								
continuation-in-part application.  I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or (f), or 365(b) of any foreign applications(s) for patent, inventor's or plant breeder's rights certificate(s), or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent, inventor's or plant breeder's right certificate(s), or any PCT international application having a filing date before that of the application on which priority is claimed.								
Prior Foreign A			Priority Certified Not Copy Claimed Attached YES NO					
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(Numba	r) (Country)	/Filing Dat						
(Number) (Country) (Filing Date)  Additional prior foreign applications are listed on a supplemental data sheet attached hereto.								

Page 1 of 4

IN LISU OF PTO SE/01 (00-01))

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Residence McLean, Virginia Citizenship Hungary Mailing Address  3623 Ivy Hill Dr. McLean McLean, Virginia 22101  Full name of second inventor Alan J. Lipton Second inventor's signature Residence Herndon, Virginia Citizenship Australia	
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Page 2 of 4

IN LIEU OF PTO SB-02B (03-01)

ATTY OKT 37112-215811

Andrew J. Chosak Third inventors signature	Date Apr: 1 5 2005
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Arlington, Virginia 22201  Full name of fifth inventor, if any Niels Haering  Fifth inventor's eignature	Date April 4,200
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Arlington, Virginia 22201  Full name of fifth inventor, if any Niels Haering Fifth inventor's signatule Residence Reston, Virginia Citizenship Germany Mailing Address  11182 Beaver Trail Ct. Reston, Virginia 20191  Full name of sixth inventor, if any Gary, W. Myers	1 April 4, Loc
Arlington, Virginia 22201  Full name of lifth inventor, if any Niels Haering Fifth inventor's signature Residence Reston, Virginia Citizenship Germany Mailing Address  11182 Beaver Trail Ct. Reston, Virginia 20191  Full name of sixth inventor, if any Gary W. Myers	1 April 4,200
Arlington, Virginia 22201  Full name of lifth inventor, if any Niels Haering Fifth inventor's signature  Rosidence Reston, Virginia Citizenship Germany Mailing Address  11182 Beaver Trail Ct. Reston, Virginia 20191  Full name of sixth inventor, if any Gary W. Myers Sixth inventor's signature	1 April 4, Loc
Arlington, Virginia 22201  Full name of lifth inventor, if any Niels Haering Fifth inventor's signatule Residence Reston, Virginia Citizenship Germany Mailing Address 11182 Beaver Trail Ct. Reston, Virginia 20191  Full name of sixth inventor, if any Gary W. Myers Sixth inventor's signature  Residence	1 April 4, Loc
Arlington, Virginia 22201  Full name of fifth inventor, if any Niels Haering Fifth inventor's signatule Residence Reston, Virginia Citizenship Germany Mailing Address 11182 Beaver Trail Ct. Reston, Virginia 20191  Full name of sixth inventor, if any Gary W. Myers Sixth inventor's signature Residence Ashburn, Virginia Citizenship US	1 April 4, Loc
Arlington, Virginia 22201  Full name of fifth inventor, if any Niels Haering Fifth inventor's signatule Residence Reston, Virginia Citizenship Germany Mailing Address 11182 Beaver Trail Ct. Reston, Virginia 20191  Full name of sixth inventor, if any Gary W. Myers Sixth inventor's signature Residence Ashburn, Virginia	1 April 4, Loc

Page 3 of 4

ATTY DKT 37157/215811

IN LIQU OF PTO 503-07B (03-01)

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Matthew F. Frazier	
Fourth inventor's signature	Date
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Niels Haering	
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Mailing Address	
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Sixth inventor's algoritum	Cote
Contract	4/4/05
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Cilizonship US	1/1/14
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Page 3 of 4 V11A DK1 02.18-510811

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Weihong Yin				
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Full name of eighth inventor, if any	Walker Herry Walter Control			
Zhong Zhang				
Eighth Inventor's signature	-		Date	
-	3/CM		Date 4-15-1	2005
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ATTY DKT 37112-210811

Page 4 of 4

IN LIEU OF PTO \$8-028 (03-01)

Docket No.: 37112-215811

(PATENT)

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Venetianer et al.

Application No.: Not Yet Assigned

Confirmation No.: N/A

Filed: Concurrently Herewith

Art Unit: N/A

For: VIDEO SURVEILLANCE SYSTEM

Examiner: Not Yet Assigned

#### **POWER OF ATTORNEY**

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

As named inventors, we hereby appoint the following attorneys and/or agents to prosecute this application and transact all business in the U.S. Patent and Trademark Office connected herewith:

All practitioners at Customer Number 26694.

Docket No.: 37112-215811

#### Address all communications to:

Jeffrey W. Gluck, Ph.D. VENABLE LLP P.O. Box 34385 Washington, DC 20043-9998 (202) 344-4000

Dated:	4/5/05	Peter L. Venetianer
Dated:	4/5/05	Alan J. Lipton
Dated:	April 5 2005	Andrew J. Chosak
Dated:	Apr 505	Matthew F. Frazier
Dated:	ANUS 2005	Viels Haering
Dated:		Gary W. Myers
Dated:	Appril 5, 2005	Weihong Yin
Dated:	April 5, 2005	Zhong Zhang

2

Apr 05 05 10:15a

Application No.: Not Yet Assigned

Docket No.: 37112-215811

#### Address all communications to:

Jeffrey W. Gluck, Ph.D. VENABLE LLP P.O. Box 34385 Washington, DC 20043-9998 (202) 344-4000

Dated:		
		Peter L. Venetianer
Dated:		Alas III
		Alan J. Lipton
Dated:		Andrew J. Chosak
Dated:		
Dateu.		Matthew F. Frazier
Dated:		
		Niels Haering
Dated:	4/5/05	your Marie
		Gary W. Myers
Dated:		Weihong Yin
Datad:		
Dated:		Zhong Zhang

2.

PATENT	<b>APPLICATION</b>	SERIAL	NO.		

# U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE FEE RECORD SHEET

04/06/2005 FFANAEIA 00000074 220261 11098385

01 FC:2011 150.00 DA 02 FC:2111 250.00 DA 03 FC:2311 100.00 DA 04 FC:2202 150.00 DA

PTO-1556 (5/87)

*U.S. Government Printing Office: 2002 -- 489-267/69033

	PATENT APPLICATION FEE DETERMINATION RECORD  Effective December 8, 2004  \( \lambda \ Q \ \ 3\ \ 5 \)											
	CLAIMS AS FILED - PART I (Column 1) (Column 2)						SMALL TYPE	ENTIT		OTHE	R THAN ENTITY	
T	OTAL CLAIMS	3	26	7				RATE	F	E	RATE	FEE
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INI	INDEPENDENT CLAIMS 7 minus 3 = * 9			X100		OF	1					
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AMENDMENT B		CLAIMS REMAINING AFTER AMENDMENT		HIGHE NUMB PREVIOI PAID F	ER USLY	PRESE EXTR		RATE	ADD TION FEE	AL	RATE	ADDI- TIONAL FEE
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AMENDMENT C		CLAIMS REMAINING AFTER AMENDMENT		HIGHE NUMBE PREVIOL PAID FO	R ISLY	PRESEN EXTRA		RATE	ADDI TIONA FEE	AL	RATE	ADDI- TIONAL FEE
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H	# FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM  # 180=  If the entry in column 1 is less than the entry in column 2, write "0" in column 3.  If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20."  The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column.1.											

FORM PTO-875 (Rev. 10/04)

Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

#### **Application Data Sheet**

#### **Application Information**

Application Type:: Regular (CIP)

Subject Matter:: Utility

Suggested Group Art Unit:: N/A
CD-ROM or CD-R?:: None

Sequence submission?:: None

Computer Readable Form (CRF)?:: No

Title:: VIDEO SURVEILLANCE SYSTEM

**EMPLOYING VIDEO PRIMITIVES** 

Attorney Docket Number:: 37112-215811

Request for Early Publication?:: No

Request for Non-Publication?:: No

Suggested Drawing Figure:: 22

Total Drawing Sheets:: 19

Small Entity?:: Yes

Petition included?:: No

Secrecy Order in Parent Appl.?:: No

#### **Applicant Information**

Applicant Authority Type:: Inventor
Primary Citizenship Country:: Hungary

Status:: Full Capacity

Given Name:: Peter Middle Name:: L.

Family Name:: Venetianer
City of Residence:: McLean

State or Province of Residence:: VA

Country of Residence:: US

Street of mailing address:: 6623 Ivy Hill Dr.

City of mailing address:: McLean

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State or Province of mailing address:: VA
Postal or Zip Code of mailing address:: 22101

Applicant Authority Type:: Inventor Primary Citizenship Country:: Australia

Status:: Full Capacity

Given Name:: Alan Middle Name:: J.

Family Name:: Lipton
City of Residence:: Herndon

State or Province of Residence:: VA
Country of Residence:: US

Street of mailing address:: 12633 Terrymill Dr.

City of mailing address:: Herndon

State or Province of mailing address:: VA
Postal or Zip Code of mailing address:: 20170

Applicant Authority Type:: Inventor

Primary Citizenship Country:: US

Status:: Full Capacity

Given Name:: Andrew

Middle Name:: J.

Family Name:: Chosak
City of Residence:: Arlington

State or Province of Residence:: VA
Country of Residence:: US

Street of mailing address:: 1423 N. Nash St., Apt. 7

City of mailing address:: Arlington

State or Province of mailing address:: VA
Postal or Zip Code of mailing address:: 22209

Applicant Authority Type:: Inventor

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Primary Citizenship Country:: US

Status:: Full Capacity

Given Name:: Matthew

Middle Name:: F.

Family Name:: Frazier
City of Residence:: Arlington

State or Province of Residence:: VA
Country of Residence:: US

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City of mailing address:: Arlington

State or Province of mailing address:: VA
Postal or Zip Code of mailing address:: 22201

Applicant Authority Type:: Inventor
Primary Citizenship Country:: Germany

Status:: Full Capacity

Given Name:: Niels
Family Name:: Haering
City of Residence:: Reston

State or Province of Residence:: VA
Country of Residence:: US

Street of mailing address:: 11182 Beaver Trail Ct.

City of mailing address:: Reston
State or Province of mailing address:: VA
Postal or Zip Code of mailing address:: 20191

Applicant Authority Type:: Inventor Primary Citizenship Country:: US

Status:: Full Capacity

Given Name:: Gary
Middle Name:: W.
Family Name:: Myers

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City of Residence:: Ashburn

State or Province of Residence:: VA

Country of Residence:: US

Street of mailing address:: 21407 Woodspice Ct.

City of mailing address:: Ashburn

State or Province of mailing address:: VA

Postal or Zip Code of mailing address:: 20148

Applicant Authority Type:: Inventor

Primary Citizenship Country:: People's Republic of China

Status:: Full Capacity

Given Name:: Weihong

Family Name:: Yin

City of Residence:: Herndon

State or Province of Residence:: VA

Country of Residence:: US

Street of mailing address:: 1122 Clinch Rd.

City of mailing address:: Herndon

State or Province of mailing address:: VA

Postal or Zip Code of mailing address:: 20170

Applicant Authority Type:: Inventor

Primary Citizenship Country:: People's Republic of China

Status:: Full Capacity

Given Name:: Zhong

Family Name:: Zhang

City of Residence:: Herndon

State or Province of Residence:: VA

Country of Residence:: US

Street of mailing address:: 1122 Clinch Rd.

City of mailing address:: Herndon

State or Province of mailing address:: VA

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Postal or Zip Code of mailing address:: 20170

**Correspondence Information** 

Correspondence Customer Number:: 26694

Representative Information

Representative Customer Number:: 26694

#### **Domestic Priority Information**

Application::	Continuity Type::	Parent Application::	Parent Filing Date::
This Application	Continuation-in-part	11/057,154	02/15/05
11/057,154	Continuation-in-part	09/987,707	11/15/01
09/987,707	Continuation-in-part	09/694,712	10/24/00

#### **Assignee Information**

Assignee name:: OBJECTVIDEO, INC.

11900 SUNRISE VALLEY DR., STE. 290

RESTON, VA 20191

DC2-637749

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