505167389 10/30/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5214157

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SONIC SOLUTIONS	04/21/2005

RECEIVING PARTY DATA

Name:	KWOK, CHU & SHINDLER LLC
Street Address:	2215-B RENAISSANCE DRIVE
Internal Address:	SUITE 5
City:	LAS VEGAS
State/Country:	NEVADA
Postal Code:	89119

PROPERTY NUMBERS Total: 2

Property Type	Number	
Patent Number:	8031223	
Patent Number:	8073250	

CORRESPONDENCE DATA

Fax Number: (425)679-0580

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.

Email: ivrecording@intven.com

Correspondent Name: INTELLECTUAL VENTURES MANAGEMENT- IP LEGAL

Address Line 1: 3150 139TH AVENUE SE Address Line 2: BUILDING 4, FLOOR 3

Address Line 4: BELLEVUE, WASHINGTON 98005

NAME OF SUBMITTER: JANICE L. GOEBEL	
SIGNATURE:	/Janice L. Goebel/
DATE SIGNED:	10/30/2018

Total Attachments: 4

source=Kwok, Chu & Shindler (Roxio-Sonic) Ex. B fully signed_(2149)#page1.tif source=Kwok, Chu & Shindler (Roxio-Sonic) Ex. B fully signed_(2149)#page2.tif source=Kwok, Chu & Shindler (Roxio-Sonic) Ex. B fully signed_(2149)#page3.tif source=Kwok, Chu & Shindler (Roxio-Sonic) Ex. B fully signed_(2149)#page4.tif

PATENT 505167389 REEL: 047360 FRAME: 0947

ASSIGNMENT OF PATENT RIGHTS

For good and valuable consideration, the receipt of which is hereby acknowledged, Sonic Solutions, a California corporation with an office at 101 Rowland Way, Novato, CA 94945, ("Assignor"), does hereby sell, assign, transfer and convey unto Kwok, Chu & Shindler LLC, a Nevada limited liability company, having an office at 2215-B Renaissance Drive, Suite 5, Las Vegas, NV 89119 ("Assignee") or its designees, all of Assignor's right, title and interest in and to the patent applications and patents listed below, any patents, registrations, or certificates of invention issuing on any patent applications listed below, the inventions disclosed in any of the foregoing, any and all counterpart United States patents, applications and certificates of invention based upon or covering any portion of the foregoing, and all reissues, re-examinations, divisionals, renewals, extensions, provisionals, continuations and continuations-in-part of any of the foregoing (collectively "Patent Rights"):

US Patents: Issued & Pending

Sonic Case No.	Patent No.	Application	Filing Date	.∕Status	Title
Como Gase IVo.	r atom no.	Serial No.	Tilling Date	Joialus	Title
ROXIP226	5,748,194	08/647,018	5/8/1996	Issued	RENDERING PERSPECTIVE VIEWS OF A SCENE USING A SCANLINE-COHERENT LOOK-UP TABLE
ROXIP226C	6,232,977	09/009,652	1/20/1998	Issued	RENDERING PERSPECTIVE VIEWS OF A SCENE USING A SCANLINE-COHERENT LOOK-UP TABLE
ROXIP227	6,239,807	09/039,059	3/13/1998	Issued	METHOD AND SYSTEM FOR MULTI-RESOLUTION TEXTURE MAPPING
ROXIP228	6,195,101	09/056,577	4/6/1998	Issued	METHOD AND SYSTEM FOR IMAGE TEMPLATES
ROXIP228C		09/764,029	1/16/2001	Allowed	METHOD AND SYSTEM FOR IMAGE TEMPLATES
ROXIP229	6,664,399	09/055,038	4/3/1998	Issued	METHOD AND SYSTEM FOR PANEL ALIGNMENT IN PANORAMAS
ROXIP230	6,192,393	09/057,013	4/7/1998	Issued	METHOD AND SYSTEM FOR PANORAMA VIEW-ING
ROX/P231	6,148,333	09/078,441	5/13/1998	Issued	METHOD AND SYSTEM FOR SERVER ACCESS CONTROL AND TRACKING
ROXIP232	6,356,283	09/095,459	6/10/1998	Issued	METHOD AND SYSTEM FOR HTML-DRIVEN INTERACTIVE IMAGE CLIENT
ROXIP233	6,750,988	09/151,437	9/11/1998	Issued	METHOD AND SYSTEM FOR SCANNING IMAGES IN A PHOTO KIOSK
ROXIP233.CIP	6,791,723	09/271,030	3/17/1999	Issued	METHOD AND APPARATUS FOR SCANNING IMAGES IN A PHOTO KIOSK
ROXIP234	6,301,025	08/267,140	6/24/1994	Issued	METHOD FOR PERFORMING A COLOR SPACE TRANSFORMATION

PATENT REEL: 047360 FRAME: 0948

Sonic Case No.	Patent No.	Application Serial No.	Filing Date	Status	Title
ROXIP234C	6,621,604	09/860,151	5/16/2001	Issued	METHOD FOR PERFORMING A COLOR SPACE TRANSFORMATION
ROXIP236		09/767,331	1/22/2001	Pending	METHOD AND SYSTEM FOR REMOVAL OF RED EYE EFFECTS
ROXIP239	5,968,120	08/850,690	5/2/1997	Issued	METHOD AND SYSTEM FOR PROVIDING ON-LINE INTERACTIVITY OVER A SERVER-CLIENT NETWORK
ROXIP241	6,215,494	08/992,994	12/18/1997	Issued	METHOD AND SYSTEM FOR CENTERING IMAGE OBJECTS
ROXIP242	5,963,213	08/852,496	5/7/1997	Issued	METHOD AND SYSTEM FOR ACCELERATING WARPING
ROXIP243	6,121,970	08/979,220	11/26/1997	Issued	METHOD AND SYSTEM FOR HTML-DRIVEN INTERACTIVE IMAGE CLIENT
ROXIP244	6,300,955	08/922,578	9/3/1997	Issued	METHOD AND SYSTEM FOR MASK GENERATION
ROXIP245	6,128,108	08/922,732	9/3/1997	Issued	METHOD AND SYSTEM FOR COMPOSITING IMAGES
ROXIP245D	6,385,349	09/542,495	4/3/2000	Issued	METHOD AND SYSTEM FOR COMPOSITING IMAGES
ROXIP245D2	6,349,153	09/542,149	4/4/2000	Issued	METHOD AND SYSTEM FOR COMPOSITION IMAGES
ROXIP246	6,285,410	09/151,793	9/11/1998	Issued	METHOD AND SYSTEM FOR REMOVAL OF FLASH ARTIFACTS FROM DIGITAL IMAGES
ROXIP247	5,790,708	08/327,421	10/21/1994	Issued	PROCEDURE FOR IMAGE PROCESSING IN A COMPUTERIZED SYSTEM
ROXIP247C	6,181,836	08/933,798	9/19/1997	Issued	METHOD AND SYSTEM FOR NON-DESTRUCTIVE IMAGE EDITING
ROXIP247D	6,512,855	09/712,019	11/13/2000	Issued	METHOD AND SYSTEM FOR IMAGE PROCESSING
ROXIP247D2	6,763,146	10/104,936	3/21/2002	Issued	METHOD AND SYSTEM FOR IMAGE PROCESSING
ROXIP248	5,907,640	08/525,715	11/13/1995	Issued	FUNCTIONAL INTERPOLATING TRANSFOMATION SYSTEM FOR IMAGE PROCESSING
ROXIP249	6,246,413	09/136,108	8/17/1998	Issued	METHOD AND SYSTEM FOR CREATING PANO- RAMAS
ROXIP257	6,535,878	09/045,068	3/19/1998	Issued	METHOD AND SYSTEM FOR PROVIDING ON-LINE INTERACTIVITY OVER A SERVER-CLIENT NETWORK
ROXIP257C		10/209,550	7/30/2002	Pending	A METHOD AND SYSTEM FOR PROVIDING ON- LINE INTERACTIVITY OVER A SERVER-CLIENT NETWORK

PATENT REEL: 047360 FRAME: 0949

Sonic Case No.	Patent No.	Application Serial No.	Filing Date	Status	Title
ROXIP260	6,552,744	08/938,366	9/26/1997	Issued	VIRTUAL REALITY CAMERA
ROXIP261	6,721,952	08/813,181	5/7/1997	Issued	METHOD AND SYSTEM FOR ENCODING MOVIES, PANORAMAS AND LARGE IMAGES FOR ON-LINE INTERACTIVITY VIEWING AND GAZING
ROXIP262		09/378,398	8/20/1999	Pending	VIRTUAL REALITY CAMERA
ROXIP265	6,536,043	08/778,830	1/6/1997	Issued	METHOD AND SYSTEMS FOR SCALABLE REPRESENTATION OF MULTIMEDIA DATA FOR PROGRESSIVE ASYNCHRONOUS TRANSMISSION
ROXIP265A		10/330,581	12/24/2002	Pending	SYSTEM FOR TRANSMITTING DIGITAL DATA OVER A LIMITED BANDWIDTH LINK IN PLURAL BLOCKS
ROXIP265B		10/330,466	12/24/2002	Pending	SYSTEM FOR PROVIDING ON-LINE VIRTUAL RE- ALITY MOVIES BY TRANSMITTING PARTIAL RESOLUTION FRAMES THROUGH A SUBTRAC- TION PROCESS
ROXIP289	5,497,435	08/021,084	2/23/1993	Issued	APPARATUS AND METHOD FOR ENCODING AND DECODING DIGITAL SIGNALS

The terms and conditions of this Assignment shall inure to the benefit of Assignee, its successors, assigns and other legal representatives, and shall be binding upon Assignor, its successor, assigns and other legal representatives.

IN WITNESS WHEREOF this Assignment of Patent Ri	ghts is executed at Novato, CA
on 21 April 2005.	· / ·

ASSIGNOR

By:

Name:

ROBBERT J.

Title: PROSED TOUT

(Signature MUST be notarized)

PATENT REEL: 047360 FRAME: 0950

State of California County of	SS. Name and Title of Officer (e.g., "Jane Doe, Notary Public") Name(s) of Signer(s)
CAROLE T. LOWE Commission # 1562577 Notary Public - California Marin County My Comm. Explain Mor 22, 2009	proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.
Place Notary Seal Above	WITNESS my hand and official seal. Augustus of Notary Public
Though the information below is not required by law, it	IONAL t may prove valuable to persons relying on the document eattachment of this form to another document.
Description of Attached Document Title or Type of Document:	
Document Date:	Number of Pages:
Signer(s) Other Than Named Above:	
Capacity(ies) Claimed by Signer(s) Signer's Name: Individual Corporate Officer — Title(s): Partner — Limited General Attorney in Fact Trustee Guardian or Conservator Other:	Signer's Name: Individual Corporate Officer — Title(s): Partner — Limited General Attorney in Fact Trustee Guardian or Conservator Other:
Signer Is Representing:	Signer Is Representing:

© 2004 National Notary Association • 9350 De Soto Ave., P.O. Box 2402 • Chatsworth, CA 91313-2402

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

PATENT REEL: 047360 FRAME: 0951

Reorder: Call Toll-Free 1-800-876-6827

Item No. 5907

RECORDED: 10/30/2018