504509143 08/17/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4555848

SUBMISSION TYPE:		NEW ASSIGNMENT						
IATURE OF CONVEYAN	NCE:	ASSIGNMENT						
CONVEYING PARTY DA	ΑΤΑ							
		Name Execution Da						
MARVELL WORLD TRA	DE LTD.	06/08/2017						
RECEIVING PARTY DA	ТА							
Name:	1	ternational Ltd.						
Street Address:	Canon's C	anon's Court, 22 Victoria Street						
City:	Hamilton							
State/Country:	BERMUD	A						
Postal Code:	HM12							
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PROPERTY NUMBERS	Total: 1							
Property Type		Number						
Application Number:	11	803535						
CORRESPONDENCE D	ΛΤΛ							
		18)222-2755						
Fax Number:	(40	08)222-2755 The e-mail address first: if that is unsuccessful, it will be sent						
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ASSIGNMENT AND CANCELLATION OF EXCLUSIVE LICENSE MWTL to MIL

WHEREAS, Marvell World Trade Ltd., a corporation of Barbados, having a place of business at L'Horizon, Gunsite Road, Brittons Hill, St. Michael, Barbados BB14027 (hereafter the "ASSIGNOR"), is the owner by respective Assignment of patents and patent applications identified in <u>Exhibit A</u> (hereafter the "ASSIGNED PATENTS"), attached hereto and incorporated herein by reference, and has granted an exclusive license for some or all of the ASSIGNED PATENTS to Marvell International Ltd., a corporation of Bermuda, having a place of business at Canon's Court, 22 Victoria Street, Hamilton, HM12, Bermuda (hereafter the "ASSIGNEE"); and

WHEREAS, ASSIGNOR and ASSIGNEE desire to cancel the exclusive licenses to the ASSIGNED PATENTS (if applicable), and ASSIGNEE desires to acquire the entire right, title, and interest of ASSIGNOR in, to and under said ASSIGNED PATENTS and all inventions and improvements described and claimed therein or entitled to the benefit thereof.

THEREFORE, for good and valuable consideration paid by ASSIGNEE, the receipt of which is hereby acknowledged, ASSIGNOR and ASSIGNEE hereby cancel the exclusive licenses to the ASSIGNED PATENTS (if applicable), and the ASSIGNOR does hereby sell, assign and transfer to the ASSIGNEE, ASSIGNOR's entire right, title and interest in and to the ASSIGNED PATENTS including all inventions and improvements disclosed therein and the right to sue for past, present and future infringement thereof, in the U.S. and every foreign country, and all patent rights, including extensions or derivations thereof, both foreign and domestic, that exist and may issue on the ASSIGNED PATENTS, and in any continuation, continuation-in-part, divisional, re-examination, priority application, reissue or extension of the ASSIGNED PATENTS, and further assigns to the ASSIGNEE the priority right provided by the International Convention. This assignment includes assignment to ASSIGNEE of the right to make application in its own behalf for protection of the ASSIGNED PATENTS and any patents issued on the ASSIGNED PATENTS, in the U.S. and countries foreign to the U.S., and to claim under the Patent Cooperation Treaty, the International Convention and/or other international arrangement for any such application the date of any earlier U.S. application (or any other application on the invention) to gain priority with respect to other applications. The ASSIGNED PATENTS and all patents that issue on the ASSIGNED PATENTS shall be held and enjoyed by the ASSIGNEE, its successors and assigns as fully and entirely as the same would have been held and enjoyed by the ASSIGNOR had this assignment not been made, including all rights therein provided by international conventions and treaties, and the right to sue for past, present and future infringement thereof.

Pegy 1 of 38

By its undersigned representative, the ASSIGNOR agrees

a. to execute all papers necessary in connection with the ASSIGNED PATENTS and any continuing, divisional, reissue, reexamination or corresponding application thereof and also to execute separate Assignment in connection with such application as the ASSIGNEE may deem necessary or expedient;

b. to execute all papers necessary in connection with any interference which may be declared concerning the ASSIGNED PATENTS or any continuation, division, reissue or reexamination thereof and to cooperate with the ASSIGNEE in every way possible in obtaining evidence and going forward with such interference; and

c. to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent to the ASSIGNEE on any of the ASSIGNED PATENTS and on any continuation, division, reissue or reexamination of any of the ASSIGNED PATENTS.

IN WITNESS WHEREOF, executed by the ASSIGNOR's undersigned representative on the date following the undersigned's name.

MARV By:	ELL WORLD TRADE LTD
Name:	STEVEN PARKER
Title:	DIRECTOR
Date:	JUNE 8, 2017
	ed on behalf of: I International Ltd.
By:	Suther Suther

• لا منه		
Name:	Sherman	masia
Title:	General	Malager
	<u> Luni 9,</u>	i di setta d

Page 2 of 18

	<u>Exhibit A</u>									
in setter	STRANSFIRM		515.54% 223.538		25399 241-32	*23755	707	17369 1935-1113 1935-1113		
US	MP1081 C1	12642440	12/18/2009	US7889940 B2	2/15/2011	lsswed	Film Grain Generation And Addition	MP1081		
CN	MP1081CN	2006100644502	12/20/2006	21,200610064450.2	¥1/3/2010	issueri	Film Grain Generation and Addition	MP1081		
EP	MP1081EP	6026494-2	12/20/2006	1801751	6/25/2014	issued	Film Grain Generation and Addition	MP1081		
DE	MP1081EPDE	6026494.2	12/20/2505	602006042010.2	6/25/2014	issued	Film Grain Generation und Addition	N4F1081		
FR	MP1081EPFR	6026494.2	12/20/2006	1801751	6/25/2014	Issued	Film Grain Generation and Addition	MP1081		
GB	MP108(EPGB	6026494.2	12/20/2006	1801751	6/25/2014	issueri	Film Grain Generation and Addition	MP1081		
нк	MP1081HK	8104663	(2/20/2006	1114987	8/12/2011	isrued	Film Grain Generation and Addition	MP1081		
N	MP10811N	2090MUM2006	12/20/2006			Filed	Film Grain Generation and Addition	MP1081		
JP	MP1081JP	2005-343185	(2/20/2006	5236182	4/5/2013	lssued	FILM GRAIN GENERATION AND ADDITION	MP1081		
JP	MP10813PD1	2012-159585	12/20/2006	5301716	6/28/2013	issued	film Grain Generation and Addition	MP1083		

Exhibit A

Page 3 of 18

**********************	US	MP1083	11400505	4/7/2006	US7821578 B2	10/26/2010	lorued	Reconfigurable Self-Colibrating Adaptive Noise Reducer	MP1083
	ĊN	MP1083CN	2007890126417	4/5/2007	21.200780012641.7	4/15/2015	Issued	Reconfigurable Self-Colibrating Video Noise Reducer	MP1083
	EP	MP1083EP	7755026.7	4/5/2007	2011328	1/18/2017	issued	Reconfigurable Self-Collbrating Video Noise Reducer	MP1083
	DE	MP1083EPDE	7755026.7	4/5/2007	602007049579.2	1/18/2017	issued	Reconfigurable Self-Calibrotiny Video Noise Reducer	MP1083
	FR	MP 1083EFFR	7735026.7	4/5/2007	2011328	1/18/2017	issned	Reconfigurable Self-Calibrating Video Noise Reducer	MP1083
	G8	MP1083EPFGE	7755026.7	4/5/2007	2011328	1/18/2017	Issued	Reconfigurable Self-Colibrating Video Noise Reducer	MP1083
	N	MP10831N	2321MJMNF2008	4/5/2007 _.			Filed	RECONFIGURABLE SELF- CAUBRATING VIDEO NOISE REDUCER	MP1083
	JP	MP1083J9	2009-504322	4/5/2007	5186712	2/1/2013	lassed	AFPARATUS, METHOD AND VIDEO NOISE REDUCER	MP1083
	KR	MP1083KR	KR20087027425	4/5/2007	KR101339997 81	12/4/2013	Issued	RECONFIGURABLE SELF- CALIBRATING VIDEO NOISE REDUCER	MP1083
	WO	MP1083WO	PCTU\$07008514	4/5/2007	N/A	N/A	Expired	RECONFIGURABLE SELF- CALIBRATING VIDEO NOISE REDUCER	MP1083
	US	MP1085	11736542	4/37/2007	US8264610 D2	9/11/2012	Issued	Shared Memory Multi Video Channel Display Apparatus And Methods	MP1085
	US	MP1085.C1	13570985	8/9/2012	US\$804040 B2	8/12/2014	lssued	Shared Memory Multi Video Channel Display Apparatus And Methods	MP1085

Page 4 of 38

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CN	MPIORSCIN	200780014086.1	4/18/2007	21.200780014086.1	\$/8/2012	issued	Shared Memory Multi Video Channel Display Apparatus and Methads	MP1085
CN	MP1085CND1	2012102093410	4/18/2007	ZL2012102093410	6/1/2016	issund	Shared Memory Multi Video Channel Display Apporatus and Methods	MP1085
RP	MP1085EP	7775782.1	4/18/2007	2016765	7/22/2015	lssued	DUAL VIDEO CHANNEL APPARATUS AND METHOD	MP1085
DE	MPIORSEPDE	7775782.1	4/18/2007	602007042262	7/22/2015	lonued	DUAL VIDEO CHANNEL APPARATUS AND METHOD	MP1085
FR	MP1085EPFR	7775782.1	4/18/2007	2016765	7/22/2015	lssued	DUAL VIDEO CHANNEL APPARATUS AND METHOO	MP1085
GB	MP1085EPGB	7775782.1	4/18/2007	2016765	7/22/2015	Issued	DUAL VIDEO CHARINEL APPARATUS AND METNOD	MP1085
IN .	MP1085IN	2246MUMNP2008	4/18/2007			Filed	Shared Memory Multi Video Channel Display Apparatus and Methods	MP1085
jp	MP1085JP	2009-506585	4/18/2007	5220726	3/15/2013	Issued	Shared Memory Multi Video Channel Display Apparatus and Methods	MP1085
JP	MP108519D1	2013-044729	4/18/2007	5582429	7/25/2014	Issued	Shared Memory Multi Video Channel Display Apporatus and Methads	MP1085
KR	MP1085KR	20087026713	4/18/2007	10-1366200	2/17/2014	Issued	SHARED MEMORY MULTI VIDEO CHANNEL DISPLAY APPARATUS AND METHODS	MP1085
KR	MP1085KRD1	20137012071	4/18/2007	10-1366203	2/17/2014	Issued	Shared memory Multi Video Chunnel Display Apparatus and Methods	MP3085
US	MP1085PR	60793276	4/18/2006	N/A	N/A	Expired	Areo-Efficient Method To Sove DDR Access Bondwidth Requirement On A Digital Video Frocessor Chip	MP1085

Page 5 of 18

W0	MP1085WO	PCTUS07009583	4/18/2007	N/A	N/A	Expired	Shored Memory Multi Video Channel Display Apparatus and Methods	MP1085
US	MF1087	11736561	4/37/2007	US8284322 B2	10/9/2012	issued	Shored Memory Multi Video Channel Display Apparatus And Methods	MP1087
US	MP1087.C1	13619196	9/14/2012	US\$754991 B2	6/17/2014	Issued	Shured Memory Multi Video Channel Display Apparatus And Methods	MP1087
CN	MP1087CN	2007800141807	4/18/2007	21,200780014180 7	1/18/2012	Issued	Shared Memory Multi Video Channel Display Apparatus and Methods	MP1087
CN	MP1087CND1	201110394193	4/18/2007	ZL201110394193 X	12/24/2014	issued	Shored Memory Multi Video Channel Display Apparatus And Methods	MP1087
EP	MP1087E9	7775783.9	4/18/2007	2016758	3/29/2017	Issued	SHARED MUMORY MULTI VIDEO CHANNEL DISPLAY APPARATUS AND METHODS	M91087
DE	MF1087EPIXE	7775783,9	4/18/2007	602007050400.7	3/29/2017	İsrued -	SHARED MEMORY MULTI VIDEO CHANNEL OISPLAY APPARATUS AND METHODS	3893087
FR	MP1087EPFR	7775783.9	4/18/2007	2016758	3/29/2017	Issued	SHARED MEMORY MULTI VIDEO CHANNEL DISPLAY APPARATUS AND METHODS	MP1087
CB	MP1087EPGB	7775783.9	4/18/2007	2016758	3/29/2017	Issued	SHARED MEMORY MULTI VIDEO CHANNEL DISPLAY APPARATUS AND METHODS	MP2087
EP	MP1087EPD1	11000786.1	4/18/2007	2337334	4/16/2014	Issued	Shared Memory Multi Viden Channel Display Apparatus and Methods	MP1087
IN	MP108718	2428MUMNP2608	4/18/2007	281371	3/16/2017	insued	Dhared Memory Multi Video Channel Display Apparatus and Methods	MP1087
IN «	MF1087IND1	3666MUMNP2015	4/18/2007			Filed	Shared Memory Multi Video Channel Display Apparatus and Methods	MP1087

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JP	MP1087JP	2009-506586	4/18/2007	5095725	9/28/2012	Issued	Shared Memory Multi Video Channel Display Apparatus and Methods	MF1087
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US	MP1087PR	60793277	4/18/2005	N/A	N/A	Expired	Adapthre Video Converters	MP1087
DE	MP1087OADE	11000786.1	a 4/18/2007	602007036185 0	4/16/2014	issued	Shared Memory Multi Video Channel Display Apparatus and Methods	M91087
FR	MP1087UAFR	11000786.1	4/18/2007	2337334	4/16/2014	Insteed	Shared Memory Multi Video Channel Display Apparatus and Methods	M91087
GB	MP1087UAGB	11000786.1	4/18/2007	2337334	4/16/2014	Issued	Shared Memory Multi Video Channel Display Apparatus and Methods	MP1087
WO	MP1087WO	PCTU807009584	4/18/2007	N/A	N/A	Expired	SHARED MEMORY MULTI VIDEO CHANNEL DISPLAY APPARATUS AND METHODS	MP1087
us	MP1023PR	60793275	4/18/2006	N/A	N/A	Expired	Duai 3-D Architecture	MP1085
US	MF 1088	11736564	4/17/2007	158218091 55	7/10/2012	Issued	Shared Memory Multi Video Channel Display Apparatus And Methods	MP1088
US	MP1088.D1	13524353	6/15/2012	U88736757 B2	5/27/2014	Issund	Shared Memory Multi Video Chunnel Display Apparatus And Methods	MP1088
CN	MP1088CN	200780014058×	4/18/2007	21.200780014058.X	2/8/2012	Issued	Shared memory Multi Video Channel Disploy Apparatus and Methods	MP1088

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CN	MP1088CND1	2011104379422	4/18/2007	21,201110437942.2	2/4/2015	iasuerl	Shared memory Multi Videa Channel Display Apparatus and Methods	MP1088
EP	MP1088EP	7755739.5	4/18/2007	N/A	N/A	Abundoned	SHARED MEMORY MULTI VIDEO CHANNEL DISPLAY APPARATUS AND METHODS	MP1088
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IN	MP1088(ND)	3708MUMNP2015	4/18/2007			Filed	Shared Memory Multi Video Channel Display Apparatus and Methods	MP1088
35-	MF 1088JP	2009-506584	4/18/2007	5217037	3/15/2013	lexued	Shared Memory Multi Video Channel Display Apparatus and Methods	MF1088
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KK	MP1088KRD1	10-2013-7012070	4/18/2007	10-13662.02	2/17/2014	lssund	SHARED MEMORY MULTI VIDEO CHANNEL DISPLAY APPARATUS AND METHODS	\$4910E8
WO	MP1088WO	PCTU507009580	4/18/2007	N/A	N/A	Expired	SHARED MEMORY MULTI VIDEO CHANNEL DISPLAY APPARATUS AND METHODS	MP1088
US	MP 1089)1803535	5/14/2007	US\$340185 B2	12/25/2012	Iseved	System: And Methods For A Matkon Compensated Picture Rate Converter	MP1089
EÞ	MP1089EP	7809823.3	6/22/2607			Filed	Systems and Methods for o Motion Compensated Picture Rate Converter	MP1089

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JP	MP10893P	2009-518177	6/22/2007			Abundoned	Systems and Methods for a Motion Compensated Picture Rate Converter	M91089
319	MP (089JPD)	2012-231573	6/22/2007	5740690	5/15/2015	Isrued	Systems und Methuds for a Mation Compensated Picture Rate Converter	MP1089
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US .	MP1089PR	60817061	6/27/2006	R/A	N/A	Expired	Mation Compensated Picture Rate Converter	MP1089
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US	MP1357	11932686	10/31/2007	U\$\$233087 B2	7/31/2012	issued	Systems And Methods For Deinterlocing High-Definition And Stondard- Definition Video	MP1357
CN	MP1357CN	2007800416759	11/6/2007	21,200780041675.9	2/18/2015	Issued	Advanced Deinterlacer for High-Definition and Standurd- Definition Video	MP1357
5P	MP1357EP	7839978.9	11/6/2007	2095630	10/10/2012	Insued	Advanced Deinterlacer for High-Definition and Standurd- Definition Video	MP1357
DE	MP1357EPDB	7839978.9	31/6/2007	602007026053.1	10/10/2012	Issued	Advanced Deinterlacer for High-Definition and Standurd- Definition Video	MP1357
۶ŝ	MP1357E95R	7839978.9	3376/2887	2095630	10/11/2012,	issund	Advanced Deinterlacer for High-Definition and Standard- Definition Video	MP1357

Page 9 of 18

69	MP1357EPG8	7835978.9	11/6/2007	2095630	10/10/2012	israed	Advanced Deinterlacer for High-Definition and Standard- Definition Video	MP1357
ſ₽	MP1357JP	2009-536284	11/6/2007	5205621	3/1/2013	Issued	Advonced Deinterlacer for High-Definition and Standord- Definition Video	MP1357
US	MP1357PR	60864881	11/8/2006	N/A	N/A	Expired	ADVANCED DEWTERLACER FOR HIGH- DEFINITION AND STANDARD- DEFINITION VIDEO	MP1357
ŤŴ	MP1357TW	96142262	11/8/2007	1466543	12/21/2014	Issued	Advanced Deinterlocer for High-Definition and Standard- Definition Video	MP1357
WO	MP1357WO	PCTU507023450	11/6/2007	N/A	N/A	Expired	ADVANCED DEINTERLACER FOR MIGH- DEPINITION AND STANDARD- DEFINITION VIDEO	MP1357
US	MP1587	11969705	1/4/2008	US8269886 82	9/18/2012	Issned	Methods And Systems For Improving Low- Resolution Video	MP1587
US	MP1587.C1	13599459	8/30/2012	US8819760 B2	8/26/2014	issund	Methods And Systems For Improving Low- Resolution Viden	MP1587
US	MP1587PR	60878967	1/5/2007	N/A	N/A	Expired	Methods And Systems For Improving Low- Resolution Video	MP1587
TW	MP15877W	97100393	1/4/2008	1 466547	12/21/2014	lssued	Methods And Systems For Improving Low- Resolution Video	MP1587
wo	MP1587WO	PCTU508000100	1/4/2008	N/A	N/A	Expired	Methods And Systems For Improving Low- Resolution Video	MP1587
US	MP 1705	12013490	2/19/2008	U88885099 B2	11/11/2014	Issued	Methods And Systems For Improving Low Resolution And Low Frame Rate Video	MP1705

Page 18 of 18

								ALCIN A	
	CN	MP1705CN	2008800123343	2/19/2008	ZL200880012334.3	9/25/2013	lssued	Methods and Systems for Improving Low Resolution and Low Frame Rate Video	MP1705
	US	MP1705P&	60902027	2/16/2007	N/A	N/A	Expired	METHODS AND SYSTEMS FOR IMPROVING LOW FRAME RATE VIDED	MP1705
······································	US	MF2251	12254289	10/20/2008	US\$804048 B2	8/12/2014	Issued	Motion-Aduptive Alternute Gamma Drive For LCD	SAP2253
	US	MP2251PR	60982580	10/25/2057	N/A	N/A	Espired	Abtion-Adaptive Alternate Gamma Drive For LCD	MP2251
	TW	MP2251TW	97140735	10/23/2008	14502 38	8/21/2014	lssued	Motion-Adaptive Alternate Gamma Drive for a Liquid Crystal Display	MP2251
	wo	MP2251WO	PCTUS08080459	10/20/2008	N/A	N/A	Expired	MOTION- ADAPTIVE ALTERNATING GAMMA DRIVE FOR A LIQUID CRYSTAL DISPLAY	MP2251
·····	CN	MP2251WOCN	200880117197×	10/20/2008	2.1.200880117197.X	6/)8/2014	Issued	Motion-Aduptive Alternata Gamma Drive for a Liquid Crystal Display	MP2253
*******	VS	MP2622	12476930	6/2/2009	US\$264615 82	9/11/2012	Insued	Split Edge Enhancement Architecture	MP2622
	NS.	MP2622.C1	13608694	9/10/2012	U08879002-82	11/4/2014	issued	Spht Edge Enhancement Architecture	MP2622
	US	MP2622PR	61073949	6/19/2008	N/A	N/A	Expired	Split Edge Enhancement Architecture	MP2622
*******	WO	MP2622WO	PCTUS0945993	6/2/2009			Published	SPUT EDGE ENHANCEMENT ARCHITECTURE	MP2622
***************************************	CN	MP2622WOCN	200980122358.9	6/2/2009	ZL260980122358 9	2/13/2013	lssned	Split Edge Enhancement Architecture	MP2622

Fage 11 of 18

₽P	MP2622WOJP	2011-511906	6/2/2009	5095860	9/28/2012	Isrued	Split Erige Enhancement Architecture	MP2622
KR	MP2622WOKR	16-7028533	6/2/2009	10-1587196	1/14/2016	Issund	SPUT EDGE ENHANCEMENT ARCHITECTURE	MP2622
US	MP2629	12555960	9/9/2009	US8571347 B2	10/29/2013	issued	Reducing Digital Image Noise	MP2629
US	MP2629 C1	14054753	10/28/2013	U\$9092855 132	7/28/2015	lssued	Method And Apparatus For Reducing Noise Introduced Into A Digital Image By A Video Compression Encoder	MP2629
US	MP26259PR	61095466	9/9/2008	N/A	N/A	Expired	Compression Artifact Reduction In Digital Video	NAP2629
wo	MP2629WO	PCT1B0906932	5. 9/9/2009	N/A	N/A	Expired	REDUCING DIGITAL IMAGE NDISE	N4P2629
CN	MP2629WOCN	980135127.1	9/9/2009	ZL200960135127.1	10/29/2014	Issued	Reducing Olgital Image Noise	MP2629
EP	MP2629WOEP	9752466,4	9/9/2009	2327219	11/9/2016	Issued	Reducing Digital Image Noise	MP2629
3P	мр2629WOJP	2011-525643	9/9/2009	5233014	4/5/2013	Issued	Reducing Digital Image Noise	MP2629
US	MP2633	12457841	7/6/2009	US\$311116 B2	33/13/2012	iszued	Method And Apparatus For Periodic Structure Handling For Motion Compensation	MP2633
US	MP2633.C1	13650375	10/12/2012	US9210445 B2	12/8/2015	Issued	Method And Apparatus For Periodic Structure Handling For Motion Compensation	MP2633

Page 12 of 18

JP	MP26331P	2009-162010	7/8/2009	5534299	5/9/2014	Insteed	Method und Apporatos for Periodic Structure Handling for Motion Compensation	MP2533
US	MP2633PR	61079269	7/9/2008	N/A	N/A	Expired	Periodic Structure Handling For Motion Compensated Frome Converter	MP2633
us	MP2842	12542519	8/17/2009	\$232226	1/5/2016	Issued	Systems And Methods For Perceptually Lossless Video Comprezsion	MP2842
US	MP2842PR	\$1090106	8/19/2008	N/A	N/A	Expired	Perceptualiy Lossless Hybrid Video Codec Using Wavelet Transform	MP2842
wo	MP2842WO	PCTU80954072	8/17/2009			National Phase (PCT)	SYSTEMS AND METHODS FOR PERCEPTUALLY LOSSLESS VIDEO COMPRESSION	MP2842
US	MP2938	12615594	11/10/2009	US9007395 B2	4/14/2015	Issued	Bit Resolution Enhancement	MP2938
ŪS	MP2938PR	61118735	12/1/2008	N/A	N/A	Expired	BIT RESOLUTION ENHANCEMENT USING ADAPTIVE FILTER WITH IMPROVED CONTOUR SEGMENTATION	MP2938
wo	MP2938WO	PCTU80963827	11/10/2009	N/A	R/A	Expired	BIT RESOLUTION ENHANCEMENT	MP2938
CN	MP2938WOCN	980145239.5	11/10/2009			Abandoned	BR Resolution Enhancement	MP2938
EP	MP2938WOEP	9793364.2	(1710/2009			Abandoned	Bit Resolution Enhancement	MP2938
JP	MP2938WOJP	2011-538620	U/∩0/2009	5540253)1/7/2014	lexued	Bit Resolution Unhancement	MP2938
US	MP2965	12748598	372972010	US\$619187 B2	12/31/2013	Issued	Cadence Detection in Progressive Video	MP2965

20ge 13 of 38

US	MP2965PR	61165612	4/1/2009	ШA	Ń/A	Expired	CADENCE DETECTION IN PROGRESSIVE VIDEO	MP2965
wo	MP2965WO	PCTUS1029003	3/29/2010	N/A	N/A	Expired	CADENCE CADENCE DETECTION IN PROGRESSIVE VIDED	MP2965
CN	MP2965WOCN	201080014184.7	3/29/2010	ZL 2010800141847	12/16/2015	Issued	Codence Detection in Progressive Video	MP2965
EP	MP2965WOEP	10725536.6	3/29/2010	2415259	9/16/2015	Issued	Cadence Detection in Progressive Video	MP2965
3P	MP2965WQJP	2012-503545	3/29/2010	5709319	3/13/2015	Issued	Codence Detection in Progressive Video	MP2965
DE	MP2965WUDE	10725536.6	3/20/2010	602016027566.3	9/16/2015	Issued	Codence Detection in Progressive Video	MP2965
FR	MP2965WUFR	10725536.6	3/29/2010	2415259	9/16/2015	Issued	Cadence Detection in Progressive Video	MP2965
08	MP2965WUGB	10725536 6	3/29/2010	24) 5259	9/16/2015	Issued	Cadence Detection in Progressive Video	MP2965
US	MP3223	12764214	4/21/2010	US8579438 82	10/29/2013	issund	Automatic Adjustments For Video Post- Processor Based On Estimated Quality Of Internet Video Content	MP5223
US	MP3223 C1	14062372	10/24/2013	US8922714 B2	12/30/2014	lsswed	System And Methads For Adjusting Settings Of A Video Post- Processor	MP3223
US	MP3223PR	6117)234	4/21/2009	N/A	N/A	Expired	AUTOMATIC ADJUSTMENTS FOR VIDEO POST- PROCESOR BASED ON ESTIMATED QUALITY OF INTERNET VIDEO CONTENT	MP3223

Page 18 of 18

wo	MP3223WO	PCTU81031911	4/21/2009			National Phaze (PCT)	Automotic Adjustments for Video Post- Processor Based On Estimated Quality Of Internet Video Content	MP3223
CN	MP3223WOCN	2010800176460	4/21/2010	800176460	9/10/2014	izsued	Automatik Adjustments for Video Fost- Fracessor Based On Estimated Quality Of Internet Video Contem	MP3223
EP	MP3223WOEP	(0717360.1	10/21/2011			Filed	Automatic Adjustments for Video Post- Processor Based On Estimated Quality Of Internet Video Content	NAP3223
US	MP3260	12815884	s 6/18/2010	US8537177 B2	9/17/2013	Issued	System And Methods For Comut Bounded Saturation Adoptive Color Enhancement	мр3260
US	MP3260.C1	14016918	9/3/2013	US8860747 B2	10/14/2014	losued	System And Methods For Gamut Baunded Saturation Adaptive Color Etiliancement	MP3260
US	MP3260PR	61187049	6/15/2009	N/A	N/A	Expired	VIDEO THROUGH ADAPTIVE COLOR ENHANCEMENT	MP3260
wo	MP3260WO	PCTUS 10038608	6/15/2010	N/A	N/A	Expired	System and Methods for Comut Bounded Saturation Adaptive Color Enhancement	MP3260
US	MP3264	12783123	5/19/2010	US8711083-812	4/29/2014	issued	Liquid Crystal Display Backlight Control	MP3264
US	MP3264.D1	14228544	3/28/2014	US\$860657 82	10/14/2014	lesued	Liquid Crystal Display Bocklight Control	- MP3254
US	MP3264PR	61180622	5/20/2009	N/A	N/A	Expired	METHOD TO CONTROL LED BACKLIGHT FOR LOCAL DIMMING	MP3264

Page 35 of 18

								R1438	
***********************	CN	MP3264WCNA	2015100846467	5/19/2010			Allowed (Grant fees pairl)	LIQUID CRYSTAL DISPLAY BACKLIGHT CONTROL	NAP3254
	wo	MP3264WO	PCTUS1035425	s/19/2010	N/A	N/A	Expired	Liquid Crystol Display Backlight Control	MP3264
	CN	MP3264WOCN	2010800220622	5/19/2010	21.2010800220672	9/9/2015	Issued	LIQUID CRYSTAL DISPLAY BACKLIGHT CONTROL	MPB264
	EP	MP3264WOEP	10725316.3	5/19/2010			Filed	UQUID CRYSTAL DISPLAY BACKUGHT CONTROL	MP3264
	jp	MP3264WOJP	2012-511995	5/19/2010	5495279	3/14/2014	Issued	LIQUID CRYSTAL OISPLAY BACKLIGHT CONTROL	MP3264
	KR	MP3264WOKR	10-20)1-7026228	5/19/2010			Filed	LIQUID CRYSTAL DISPLAY BACKLIGHT CONTROL	MP3264
	US	MP3702	13023769	2/9/2011	US9077990 B2	7/7/2015	lssued	Black Noise Detection in Digital Video	MP3702
	US	MP3702PR	61368491	7/28/2010	N/A	N/A	Expired	BLOCK NOISE DETECTION IN DISITAL VIDED	MP3702
	₹W	M93702TW	100104627	2/11/2011	1511545	12/1/2015	lssund	Block Noise Detection in Digital Video	MP3702
	wo	MP3702WO	PCT1811090413	2/9/2011	N/A	N/A	Expired	BLOCK COMPRESSION ARTIFACT DETECTION IN DIGITAL VIDEO SIGNALS	N#P3702
	CN	MP3702WOCN	2011890368249	2/9/2011			Piled	BLOCK COMPRESSION ARTIFACT DETECTION IN DIGITAL VIDEO SIGNALS	MP3702
	EP	MP3762WOEP	11713514.5	2/9/2011			Filed	BLOCK COMPRESSION ARTIFACT DETECTION IN DIGITAL VIDEO SIGNALS	MP3702

Page 16 of 18

US N	MP4605	13766830	2/14/2013	US9152807 B2	10/6/2015	Issued	Method And Appartitus For Providing Audio Or Video Capture Functionality According To A Security Policy METHOD AND	MP4605
US	MP4605PR	61608336	3/8/2012	N/A	N/A	Expired	APPARATUS FOR IMPLEMENTING A PROTECTED AV CAPTURE	MP4605
US	MP4605PR2	61702490	9/18/2012	N/A	N/A	Expired	METHOD AND APPARATUS FOR IMPLEMENTING A PROTECTED AV CAPTURE	MP4605
wo	MP4605WO	PCTUS1326078	2/14/2013	N/A	N/A	Expired	METHOD AND AFPARATUS FOR PROVIDING AUDIO OR VIDEO CAFTURE FUNCTIONAUTY ACCORDING TO A SECURITY POLICY	MP4605
US	MP2744	12511238	7/29/2009	US847714682	7/2/2013	tssued	Processing Solar S	MF2744
US	MP2744PR	61084406	772972008	N/A	N/A	Expired	Two-Dimensional Tiling Structure For Video Frame	MP2744
WO	MP2744WO	PCTUS0952089	7/29/2009	N/A	N/A	Expired	PROCESSING RASTERIZED DATA	NAP2744
JP	MP3524WOJP	2012-549(11	1/14/2011	5751679	5/29/2015	lasued	Use of Film Groin to Mask Compression Artifacts	NAP3524
CN	MP3824WOCN	201180005043.3	1/14/2011	ZL2011800650433	2/3/2016	issued	Use of Film Grain to Mask Compression Artifacts	барв524
US	MF3524	13006805	1/14/2011	N/A	N/A	Abandoned	USE OF FILM GRAIN TO MASK COMPRESSION ARTIFACTS	NAP3524
US	MP3524PR	61295340	1/15/2010	N/A	N/A	Expired	USE OF FILM GRAIN TO MASK COMPRESSION ARTIFACTS	MP3524

Fage 17 of 18

wo	MP3524WO	PCTUS1121299	. 1/14/2011	N/A	N/A	Expired	USE OF FILM GRAIN TO MASK COMPRESSION ARTIFACTS	MP3524
US	MP5070	14101918	12/10/2013	U88830395B2	o 9/9/2014	lssued	Systems And Methods For Adaptive Scoling Of Digital Images	MP5070
US	MP5070PR	61739428	12/19/2012	N/A 	N/A	Expired	ADAPTIVE SCALER	-MP\$070
wo	MP5070WO	PCTUS1374103	12/10/2013	N/A	N/A	Expired	SYSTEMS AND METHODS FOR ADAPTIVE SCAUNG OF DIGITAL IMAGES	MP5070
US	MP5103	US14/220528	3/20/2014	U39241093 B2	1/19/2016	Issued	GUIDED FILTER- BASED DETAIL ENHANCEMENT	MP5103
CN	MP5163WOCN	2014800172608	3/20/2014			Filed	GUIDED FILTER- BASED DETAIL ENHANCEMENT	MP5108
EP	MP5103WOEP	14769741.1	3/18/2014			Filed	GUIDED FILTER- BASED DETAIL ENHANCEMENT	MP5303
312	MP5103WOIP	2016-50439	3/22/2013			Filed	GUIDED FILTER- BASED DETAIL ENHANCEMENT	MP5103
KR	MP\$103WOKR	10-2015-7030412	3/20/2014			Filed	Guided Filter- Based Detail Enhancament	MP5103
US	MP5103PR	61804522	3/22/2013	N/A	N/A	Expired	Guided Filter Bused Detail Enhancement	MPS103
wo	MP5103WO	PCTUS1431311	3/20/2014	NVA	N/A	Expired	GUIDED FILTER- BASED DETAIL ENHANCEMENT	MP5103

Page 18 of 18

PATENT REEL: 043325 FRAME: 0415

RECORDED: 08/17/2017