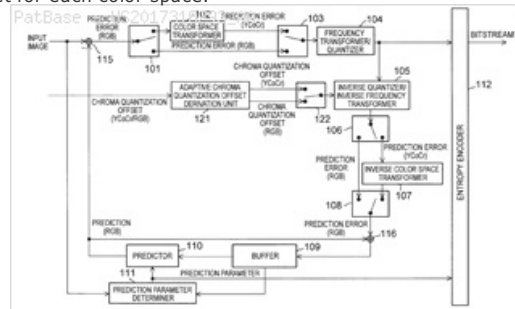


Abstract: Source: US2017318293A [EN] A video coding device is able to select, from among a plurality of color spaces, a color space of a prediction error signal in coded block units, and includes: an adaptive chroma quantization offset derivation unit for deriving a quantization offset for each color space; and an inverse quantization unit for inverse-quantizing a quantization coefficient image by using the chroma quantization offset for each color space.

International (IPC 8-9): H04N19/126 H04N19/136 H04N19/176
H04N19/186 H04N19/70 (Advanced/Invention)
CPC: H04N19/136 H04N19/70 H04N19/126 H04N19/176 H04N19/186



Publication number	Publication date	Application number	Application date
AU2015326293 AA	20160407	AU20150326293	20150812
BR112017006461 A2	20171219	BR20171106461	20150812
CA2963338 AA	20170331	CA20152963338	20150812
CL2017000781 A1	20171103	CL20170000781	20170331
CN107113431 A	20170829	CN201580053910	20150812
CO20170003030 A2	20170620	CO20170003030	20170329
EP3203739 A1	20170809	EP20150847019	20150812
ID201713738 A	20171229	ID2017P0001982	20150812
IN201717010986 A	20170915	IN201717010986	20170328
JP2016051643 A1	20170720	JP20160551481T	20150812
KR20170052624 A	20170512	KR20177009057	20150812
MX2017004088 A1	20170707	MX20170004088	20150812
PE11592017 A1	20170817	PE20170000516	20150812
PH2017500600 A	20170904	PH20170500600	20170331
SG11201702743W A1	20170629	SG201711102743	20150812
TW201631974 A	20160901	TW20150132320	20151001
US2017318293 AA	20171102	US20150516223	20150812
WO16051643 A1	20160407	WO2015JP04037	20150812

JP20140204392 20141003 WO2015JP04037 20150812

Agent(s): PIZZEYS PATENT AND TRADE MARK ATTORNEYS PTY LTD; SMART AND BIGGAR; SARGENT AND KRAHN; HUMBERTO RUBIO CAMACHO; BETTEN AND RESCH; ANNISA AM BADAR SH LLM; IWAKABE FUYUKI ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UB UG UZ VC VN ZA ZM ZA ZW

Abstract: Source: US2005259730A [EN] A video coding algorithm supports both lossy and lossless coding of video while maintaining high color fidelity and coding efficiency using an in-loop, reversible color transform. Accordingly, a method is provided to encode video data and decode the generated bitstream. The method includes generating a prediction-error signal by performing intra/inter-frame prediction on a plurality of video frames; generating a color-transformed, prediction-error signal by performing a reversible color-space transform on the prediction-error signal; and forming a bitstream based on the color-transformed prediction-error signal. The method may further include generating a color-space transformed error residual based on a bitstream; generating an error residual by performing a reversible color-space transform on the color-

space transformed error residual; and generating a video frame based on the error residual.

Classifications:

International (IPC 8-9): H04N11/04 H04N7/12 H04N7/26
H04N7/50 (Advanced/Invention);
H04N11/04 H04N7/12 H04N7/26 H04N7/50 (Core/Invention)

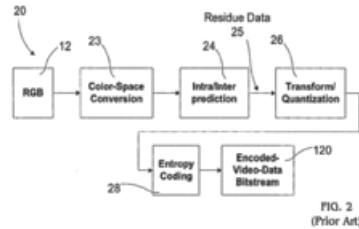
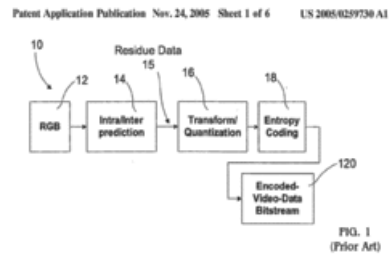
International (IPC 1-7): H04N7/12

CPC: H04N11/042 H04N19/12 H04N19/124 H04N19/147 H04N19/176
H04N19/186 H04N19/61

European: H04N11/04B H04N7/26A4K H04N7/26A4Q
H04N7/26A6C8 H04N7/26A6D H04N7/26A8B H04N7/26A8U H04N7/50

US: 375/240.03 375/240.12 375/240.18 375/E7.137 375/E7.139
375/E7.153 375/E7.166 375/E7.176 375/E7.185 375/E7.211

PatBase - US2005259730_AA



Family:

Publication number	Publication date	Application number	Application date
US2005259730 AA	20051124	US20040951929	20040927

Priority:

US20040572346P 20040518 US20040951929 20040927

Probable Assignee: SHARP LABORATORIES OF AMERICA INC

Assignee(s): (std): SHARP LAB OF AMERICA INC

Assignee(s): SHARP LABORATORIES OF AMERICA INC

Inventor(s): (std): SUN SHIJUN

Agent(s): DAVID C RIPMA PATENT COUNSEL, SHARP LABORATORIES OF AMERICA; DAVID C RIPMA PATENT COUNSEL SHARP LABORATORIES OF AMERICA

3) Family number: 32573062 (US2006018559A)

© PatBase

Title: METHOD AND APPARATUS TO TRANSFORM/INVERSE TRANSFORM AND QUANTIZE/DEQUANTIZE COLOR IMAGE, AND METHOD AND APPARATUS TO ENCODE/DECODE COLOR IMAGE USING IT

Abstract: Source: US2006018559A [EN] A method and an apparatus for transforming/inverse transforming and quantizing/dequantizing a color image and a method and an apparatus for encoding/decoding a color image using the method and the apparatus. The method of transforming and quantizing the color image includes: transforming a color image into a frequency domain image; differently applying a transformation for removing a redundancy of direct current components of the frequency domain image depending on whether the color image is residual transformed and a macroblock estimation mode; and quantizing the frequency domain image from which the redundancy has been removed.

Classifications:

International (IPC 8-9): G06K9/38 H04N7/30 H04N7/32
H04N7/50 (Advanced/Invention);
H04N7/30 H04N7/32 H04N7/50 (Advanced/Non-invention);
G06K9/38 H04N7/30 H04N7/32 H04N7/50 (Core/Invention)

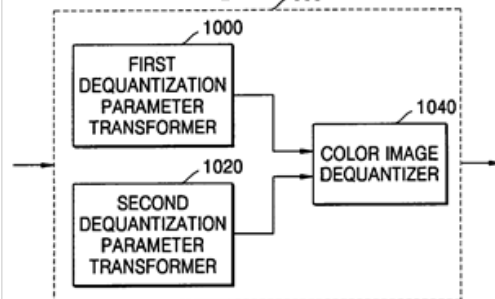
International (IPC 1-7): H04N7/30

CPC: H04N19/157 H04N19/122 H04N19/126 H04N19/186 H04N19/60
H04N19/48 H04N19/124 H04N19/159 H04N19/176 H04N19/46
H04N19/593 H04N19/61 H04N19/63

European: H04N7/26A10S H04N7/26A4Q H04N7/26A4Q2
H04N7/26A4T H04N7/26A6C8 H04N7/26A6S H04N7/26A6S2
H04N7/26A8B H04N7/26A8U H04N7/26C H04N7/26H30 H04N7/30
H04N7/34 H04N7/50

US: 375/E7.14 375/E7.143 375/E7.166 375/E7.169 375/E7.185
375/E7.226 375/E7.140S 375/E7.143S 375/E7.166S 375/E7.169S
375/E7.185S 375/E7.26S 382/251 382/251P

PatBase - US2006018559_AA



Family:

Publication number	Publication date	Application number	Application date
KR100723408 B1	20070530	KR20050065435	20050719
KR20060053910 A	20060522	KR20050065435	20050719
US2006018559 AA	20060126	US20050186817	20050722
WO06009400 A1	20060126	WO2005KR02354	20050721

Priority:

KR20050065435 20050719 US20040589846P 20040722 US20050186817 20050722

Probable Assignee: SAMSUNG ELECTRONICS CO LTD

Assignee(s): (std): SAMSUNG ELECTRONICS CO LTD
Assignee(s): SAMSUNG ELECTRONICS CO
Inventor(s): (std): KIM HYUN M ; KIM HYUN MUN ; KIM WOO SHIK ; KIM WOOSHIK
Inventor(s): KIM HYUN
Agent(s): STAAS AND HALSEY LLP
Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KP KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW

4) Family number: 62118386 (US2016261864A)

© PatBase

Title: CODING AND DERIVING QUANTIZATION PARAMETERS

Abstract: Source: US2016261864A [EN] QP control information valid for a block of samples is parsed. A QP to use for the block of samples is derived according to a first QP derivation process independent on the QP control information if residual data of the block of samples is not color transformed and according to a second QP derivation process dependent on the QP control information if the residual data of the block of samples is color transformed. The embodiments thereby decouple QP parameters for blocks of samples that are coded with color transform and those that are coded without color transform. This decoupling achieves better flexibility during encoding and results in better visual quality.

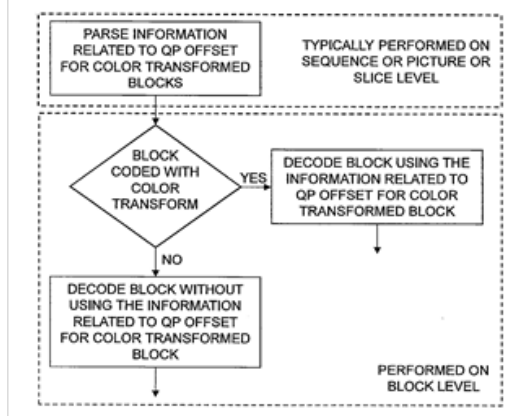
Classifications:

International (IPC 8-9): H04N19/124 H04N19/126 H04N19/134 H04N19/157 H04N19/176 H04N19/186 H04N19/44 H04N19/46 H04N19/60 H04N19/61 H04N19/70 (Advanced/Invention); H04N19/70 (Advanced/Non-invention)

CPC: H04N19/44 H04N19/157 H04N19/176 H04N19/186 H04N19/70 H04N19/46 H04N19/124 H04N19/174 H04N19/184 H04N19/60 H04N19/61

US: 375/240.03

PatBase - US2016261864_AA



Family:

Publication number	Publication date	Application number	Application date
EP3205098 A1	20170816	EP20150848181	20151002
EP3205098 A4	20171018	EP20150848181	20151002
JP2017505015 T2	20170209	JP20160538085T	20151002
JP6194427 B2	20170906	JP20160538085T	20151002
TW201620303 A	20160601	TW20150132913	20151006
TWI590647 B	20170701	TW20150132913	20151006
US2016261864 AA	20160908	US20150891821	20151002
US2017150151 AA	20170525	US20170426689	20170207
US9609362 BB	20170328	US20150891821	20151002
WO16056977 A1	20160414	WO2015SE51042	20151002

Priority:

US20140060071P 20141006 US20150891821 20151002 WO2015SE51042 20151002
US20170426689 20170207 US20150891821 20151117

Probable Assignee: TELEFONAKTIEBOLAGET L M ERICSSON PUBL

Assignee(s): (std): ERICSSON TELEFON AB L M ; ERICSSON TELEFON AB L M PUBL ; TELEFONAKTIEBOLAGET L M ERICSSON PUBL ; TELEFONAKTIEBOLAGET LM ERICSSON PUBL

Inventor(s): (std): SAMUELSSON JONATAN ; SJOBERG RICKARD ; SJOEBERG RICKARD

Agent(s): ERICSSON; MYERS BIGEL PA; EGRELIUS FREDRIK

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW