

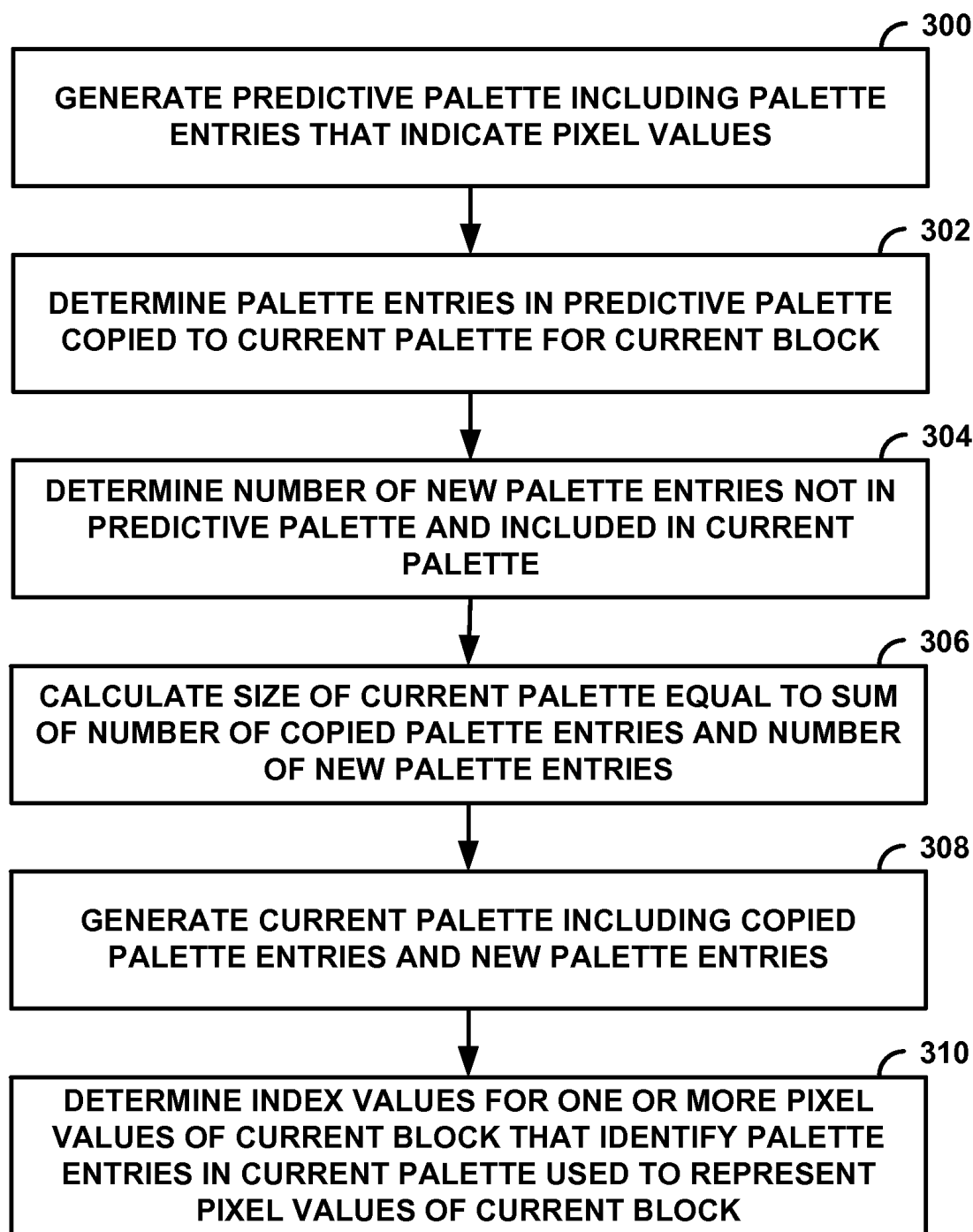
22 Documents

Publication numbers	Title	Current assignees
CA2913615 A1	Palette prediction in palette -based video coding	QUALCOMM
US20160345030 A1	Grouping palette index at the end and index coding using palette size and run value	QUALCOMM
US20160227226 A1	Video coding with palette prediction residual encoding	QUALCOMM
US20150264405 A1	Color-space inverse transform both for lossy and lossless encoded video	QUALCOMM
US20170078683 A1	Palette predictor initialization and merge for video coding	QUALCOMM
CA2952629 A1	Method for palette mode coding	QUALCOMM
CA2942903 A1	Method and apparatus for the signaling of lossless video coding	VID SCALE
WO2016197314 A1	Robust encoding/decoding of escape-coded pixels in palette mode	MICROSOFT TECHNOLOGY LICENSING
WO2015194187 A1	Harmonized palette coding	SHARP
CA2953505 A1	Advanced screen content coding with improved palette table and index map coding methods	HUAWEI TECHNOLOGIES
US20170302951 A1	Conformance constraint for collocated reference index in video coding	QUALCOMM
US20160100189 A1	Intra bc and inter unification	QUALCOMM
CA2917631 A1	Disabling intra prediction filtering	QUALCOMM
WO201484109 A1	Image processing device and method	SONY
CA2948011 A1	Block adaptive color-space conversion coding	QUALCOMM
US20170034526 A1	Methods and systems of restricting bi-prediction in video coding	QUALCOMM
WO2018129322 A1	Multi-type-tree framework for video coding	QUALCOMM
US20160234498 A1	Methods and systems for palette table coding	SHARP LABORATORIES OF AMERICA
US20160345014 A1	Systems and methods for coding a number of palette indices	SHARP LABORATORIES OF AMERICA
WO2018200960 A1	Gradient based matching for motion search and derivation	QUALCOMM
CA2949542 A1	Block adaptive color-space conversion coding	QUALCOMM
US20120114039 A1	Video coding methods and apparatus	SONY INTERACTIVE ENTERTAINMENT

Family 1/22 - FAMPAT - ©Questel

Title

(EP3020198)

Palette prediction in **palette**-based **video** coding**Images****Publication data including kind & date**

CA2913615	A1	2015-01-15	CA2913615
US20150016501	A1	2015-01-15	US20150016501
WO2015006724	A2	2015-01-15	WO201506724
WO2015006724	A3	2015-03-26	WO201506724
BR112016000465	A1	2016-01-19	BR112016000465
SG11201509667T	A	2016-01-28	SG11201509667T



AU2014286986	A1	2016-02-11	AU2014286986				
KR20160031495	A	2016-03-22	KR20160031495				
PH12016500079	A1	2016-04-18	PH12016500079				
PH12016500079	B1	2016-04-18	PH12016500079				
CN105556974	A	2016-05-04	CN105556974				
MX2016000358	A	2016-05-05	MX2016000358				
EP3020198	A2	2016-05-18	EP3020198				
VN47133	A	2016-05-25	VN--47133				
CL2016000057	A1	2016-08-19	CL0057201600				
IN7715/CHENP/2015	A	2016-08-31	IN2015CN07715				
JP2016529783	A	2016-09-23	JP2016529783				
US9558567	B2	2017-01-31	US9558567				
HK1219372	A1	2017-03-31	HK1219372				
EP3020198	B1	2017-04-26	EP3020198				
DK3020198	T3	2017-06-06	DK3020198T				
RU2016104535	A	2017-08-16	RU2016104535				
HUE032104	T2	2017-08-28	HUE032104				
SI3020198	T1	2017-08-31	SI3020198T				
ES2633947	T3	2017-09-26	ES2633947				
JP6246920	B2	2017-12-13	JP6246920				
RU2641252	C2	2018-01-16	RU2641252				
KR101821069	B1	2018-01-22	KR101821069				
MX353756	B	2018-01-26	MX-353756				
AU2014286986	B2	2018-03-15	AU2014286986				
BR112016000465	A2	2018-11-06	BR112016000465				

Abstract

(EP3020198)

In **palette**-based coding, a **video** coder may form a so-called "**palette**" as a table of colors representing the **video** data of a given block. The **video** coder may code index values for one or more pixels values of a current block of **video** data, where the index values indicate entries in the **palette** that represent the pixel values of the current block. According to the techniques, a **video** coder determines one or more **palette** entries in a predictive **palette** that are copied to the current **palette**, and a number of new **palette** entries not in the predictive **palette** that are included in the current **palette**. The **video** coder calculates a size of the current **palette** equal to the sum of the number of the copied **palette** entries and the number of the new **palette** entries, and generates the current **palette** including the copied **palette** entries and the new **palette** entries.

Inventors

GUO LIWEI

KARCZEWICZ MARTA

SOLE ROJALS JOEL

JOSHI RAJAN LAXMAN

KIM WOO-SHIK

PU WEI

Latest standardized assignees - inventors removed

QUALCOMM

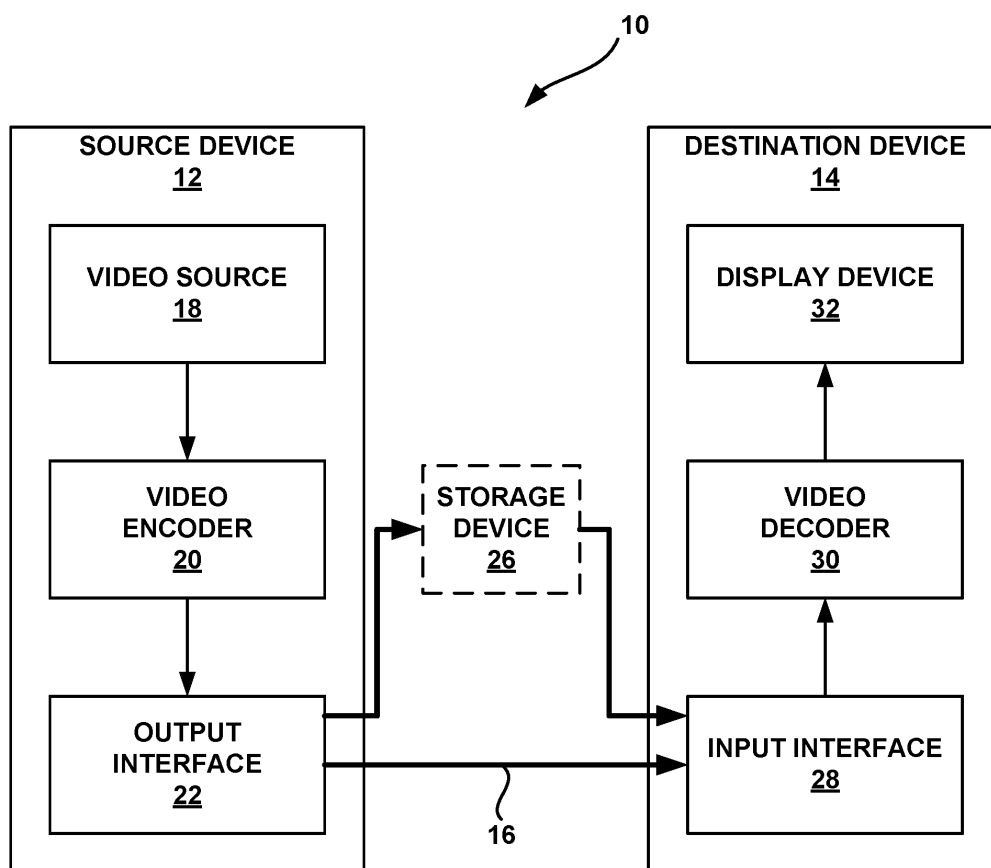
Family 2/22 - FAMPAT - ©Questel

Title

(EP3298778)

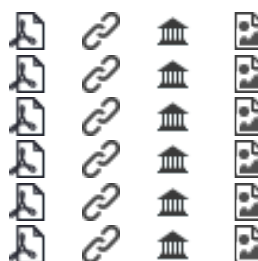
Grouping **palette** index at the end and index coding using **palette** size and run value

Images



Publication data including kind & date

US20160345030	A1	2016-11-24	US20160345030
WO2016187567	A2	2016-11-24	WO2016187567
WO2016187567	A3	2017-02-09	WO2016187567
CN107637080	A	2018-01-26	CN107637080
EP3298778	A2	2018-03-28	EP3298778
JP2018520562	A	2018-07-26	JP2018520562



Abstract

(EP3298778)

A device for decoding **video** data is configured to determine, based on first entropy encoded data in the **bitstream**, a set of run-related **syntax** element groups for a current block of a current picture of the **video** data; determine, based on second entropy encoded data the **bitstream**, a set of **palette** index **syntax** elements for the current block, the first entropy encoded data occurring in the **bitstream** before the second entropy encoded data, wherein: each respective run-related **syntax** element group of the set of run-related **syntax** element groups indicates a respective type of a respective run of identical **palette** mode type indicators and a respective length of the respective run and each respective **palette** index **syntax** element of the set of **palette** index **syntax** elements indicates an entry in a **palette** comprising a set of sample values; and reconstruct, based on the sample values, the current block.

Inventors

KARCZEWICZ MARTA

ZOU FENG

SEREGIN VADIM

PU WEI

JOSHI RAJAN LAXMAN

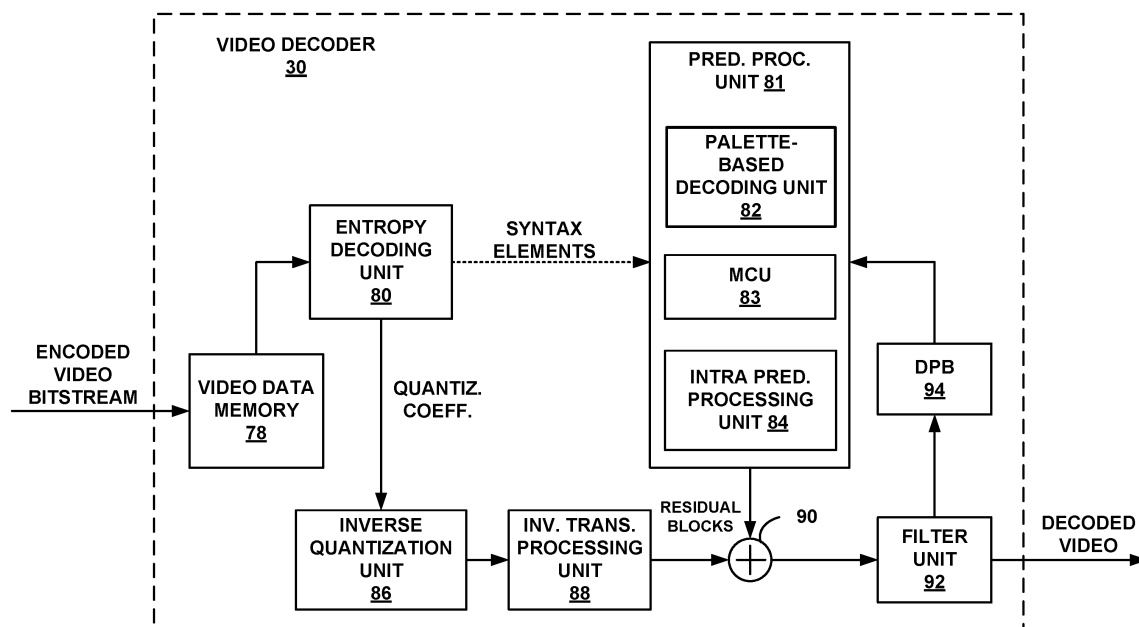
Latest standardized assignees - inventors removed

QUALCOMM

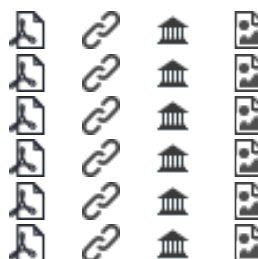
Family 3/22 - FAMPAT - ©Questel

Title

(EP3251368)

Video coding with **palette** prediction residual encoding**Images****Publication data including kind & date**

US20160227226	A1	2016-08-04	US20160227226
WO2016123519	A1	2016-08-04	WO2016123519
IN201727021308	A	2017-08-11	IN201727021308
CN107211160	A	2017-09-26	CN107211160
EP3251368	A1	2017-12-06	EP3251368
JP2018507613	A	2018-03-15	JP2018507613

**Abstract**

(EP3251368)

A device for coding **video** data includes a memory storing **video** data and a **video** coder including one or more processors configured to determine a current coding unit of the **video** data is coded in a **palette** mode; determine a **palette** for the coding unit by, for a first entry of the **palette**, choosing a predictor sample from a reconstructed neighboring block of the coding unit and coding a difference between one or more color values of the first entry and one or more color values of the predictor sample.

Inventors

RAPAKA KRISHNAKANTH
 JOSHI RAJAN LAXMAN
 SEREGIN VADIM
 KARCZEWICZ MARTA

Latest standardized assignees - inventors removed

QUALCOMM

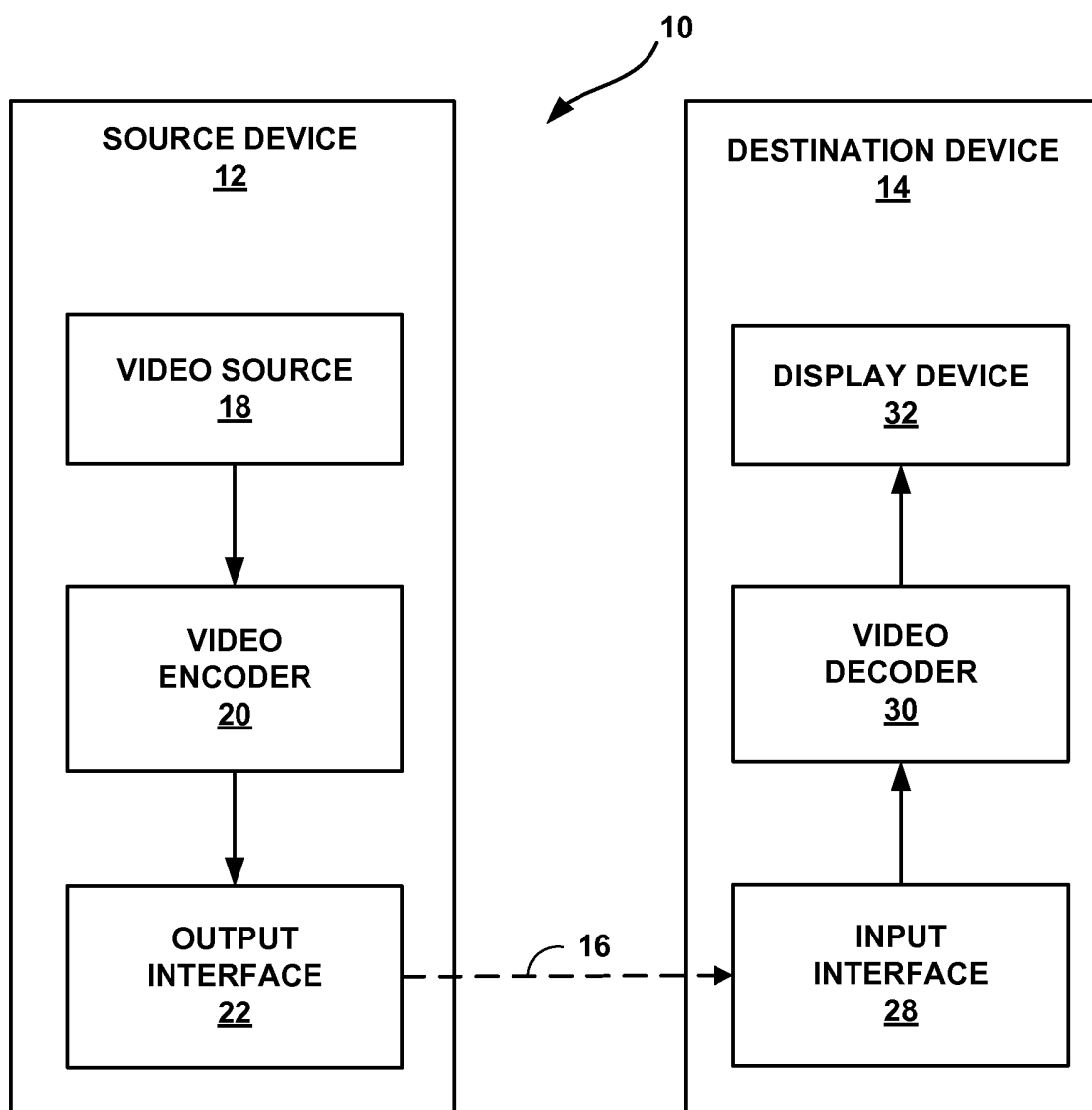
Family 4/22 - FAMPAT - ©Questel

Title

(EP3117614)

Color-space inverse transform both for lossy and lossless encoded video

Images



Publication data including kind & date

US20150264405	A1	2015-09-17	US20150264405
US20150264402	A1	2015-09-17	US20150264402
US20150264354	A1	2015-09-17	US20150264354
US20150264363	A1	2015-09-17	US20150264363
US20150264364	A1	2015-09-17	US20150264364
WO2015138954	A1	2015-09-17	WO2015138954
WO2015138957	A2	2015-09-17	WO2015138957
WO2015138962	A1	2015-09-17	WO2015138962
WO2015138943	A2	2015-09-17	WO2015138943
WO2015138927	A1	2015-09-17	WO2015138927
WO2015138957	A3	2015-11-05	WO2015138957
WO2015138943	A3	2015-11-26	WO2015138943
TW201545543	A	2015-12-01	TW201545543



IN201627026446	A	2016-08-26	IN201627026446				
IN201647027217	A	2016-08-31	IN201647027217				
IN201647027222	A	2016-08-31	IN201647027222				
IN201647027215	A	2016-08-31	IN201647027215				
IN201627029258	A	2016-10-07	IN201627029258				
BR112016021153	A1	2016-11-01	BR112016021153				
BR112016021146	A1	2016-11-01	BR112016021146				
BR112016021151	A1	2016-11-01	BR112016021151				
BR112016021144	A1	2016-11-01	BR112016021144				
BR112016021142	A1	2016-11-01	BR112016021142				
CN106105205	A	2016-11-09	CN106105205				
CN106105204	A	2016-11-09	CN106105204				
CN106105203	A	2016-11-09	CN106105203				
CN106105202	A	2016-11-09	CN106105202				
CN106105200	A	2016-11-09	CN106105200				
KR20160132925	A	2016-11-21	KR20160132925				
KR20160132870	A	2016-11-21	KR20160132870				
KR20160132869	A	2016-11-21	KR20160132869				
KR20160132867	A	2016-11-21	KR20160132867				
KR20160132866	A	2016-11-21	KR20160132866				
MX2016011596	A	2016-12-12	MX2016011596				
MX2016011210	A	2016-12-16	MX2016011210				
CR20160421	A	2016-12-20	CR20160421				
MX2016011591	A	2016-12-20	MX2016011591				
MX2016011589	A	2016-12-20	MX2016011589				
DOP2016000247	A	2016-12-30	DO201600247				
DOP2016000245	A	2016-12-30	DO201600245				
EP3117609	A2	2017-01-18	EP3117609				
EP3117611	A1	2017-01-18	EP3117611				
EP3117610	A2	2017-01-18	EP3117610				
EP3117613	A1	2017-01-18	EP3117613				
EP3117614	A1	2017-01-18	EP3117614				
CR20160422	A	2017-01-19	CR20160422				
MX2016011211	A	2017-02-23	MX2016011211				
SV2016005276	A	2017-04-24	SV201605276				
JP2017513324	A	2017-05-25	JP2017513324				
JP2017513322	A	2017-05-25	JP2017513322				
JP2017513321	A	2017-05-25	JP2017513321				
JP2017513323	A	2017-05-25	JP2017513323				
JP2017513315	A	2017-05-25	JP2017513315				
SV2016005275	A	2017-07-20	SV201605275				
BR112016021153	A2	2017-08-15	BR112016021153				
BR112016021146	A2	2017-08-15	BR112016021146				
BR112016021151	A2	2017-08-15	BR112016021151				
BR112016021144	A2	2017-08-15	BR112016021144				
BR112016021142	A2	2017-08-15	BR112016021142				
US9736481	B2	2017-08-15	US9736481				
US9826242	B2	2017-11-21	US9826242				

MX354578	B	2018-03-12	MX-354578
US9948933	B2	2018-04-17	US9948933
TWI624172	B	2018-05-11	TWI624172
EP3117614	B1	2018-09-26	EP3117614



Abstract

(EP3117614)

In general, this disclosure describes techniques for coding **video** blocks using a color-space conversion process. A **video** coder, such as a **video** encoder or a **video** decoder, may determine a coding mode used to encode the **video** data. The coding mode may be one of a lossy coding mode or a lossless coding mode. The **video** coder may determine a color-space transform process dependent on the coding mode used to encode the **video** data. The **video** coder may apply the color-space transform process in encoding the **video** data. In decoding the **video** data, independent of whether the coding mode is the lossy coding mode or the lossless coding mode, the **video** coder may apply the same color-space inverse transform process in a decoding loop of the encoding process.

Inventors

ZHANG LI

CHEN JIANLE

KARCZEWICZ MARTA

Latest standardized assignees - inventors removed

QUALCOMM

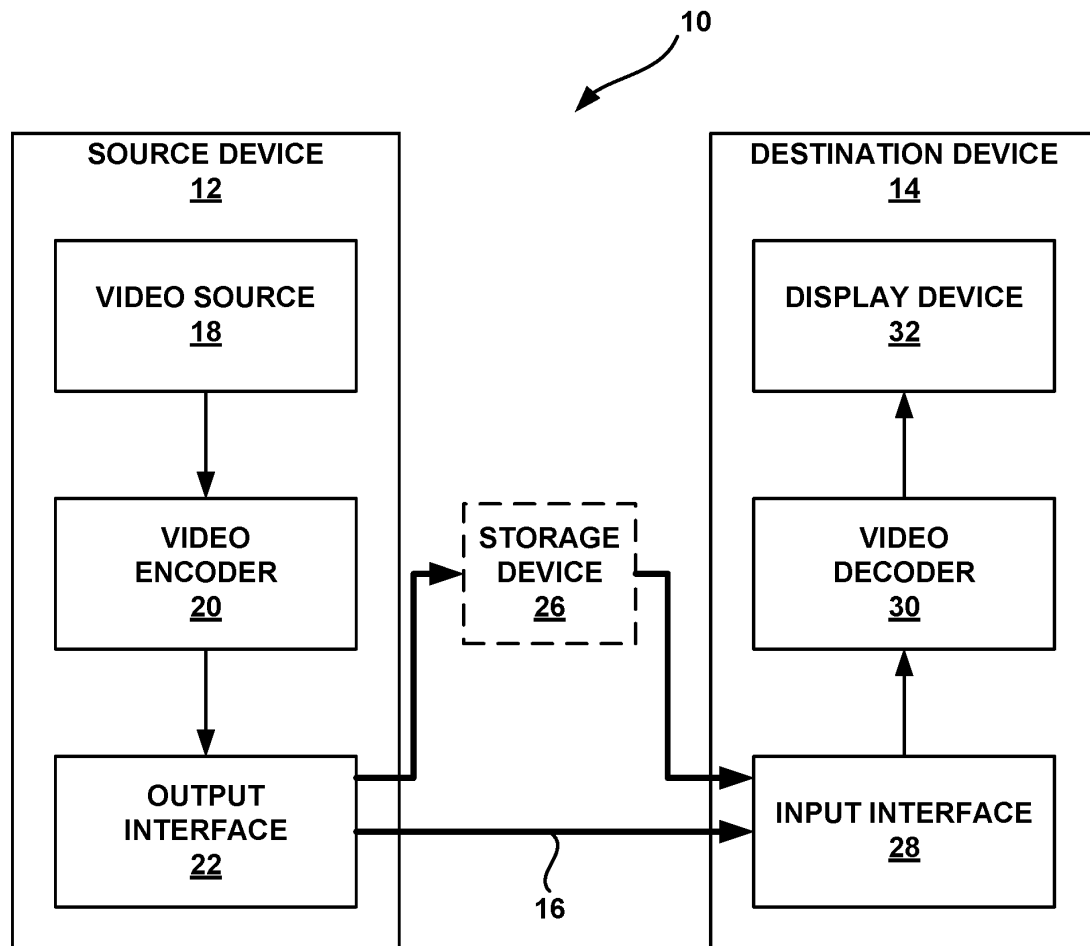
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Title

(EP3350995)

Palette predictor initialization and merge for **video** coding

Images



Publication data including kind & date

US20170078683	A1	2017-03-16	US20170078683
WO2017048849	A1	2017-03-23	WO201748849
TW201720150	A	2017-06-01	TW201720150
BR112018004934	A1	2018-04-03	BR112018004934
IN201847011950	A	2018-04-06	IN201847011950
AU2016323040	A1	2018-04-26	AU2016323040
CN108028932	A	2018-05-11	CN108028932
KR20180053702	A	2018-05-23	KR20180053702
EP3350995	A1	2018-07-25	EP3350995
BR112018004934	A2	2018-10-09	BR112018004934
JP2018530962	A	2018-10-18	JP2018530962



Abstract

(EP3350995)

A device for decoding **video** data includes a memory configured to store the **video** data; and one or more processors configured to receive, in a picture parameter set (PPS), a first **syntax** element indicating that a **palette** predictor is to be generated using PPS-level **palette** predictor initializers; receive, in the PPS, a second **syntax** element indicating a number of the PPS-level **palette** predictor initializers included in the PPS is equal to zero; and decode a block of **video** data based on the first **syntax** element and the second **syntax** element.

Inventors

SEREGIN VADIM

JOSHI RAJAN LAXMAN

KARCZEWICZ MARTA

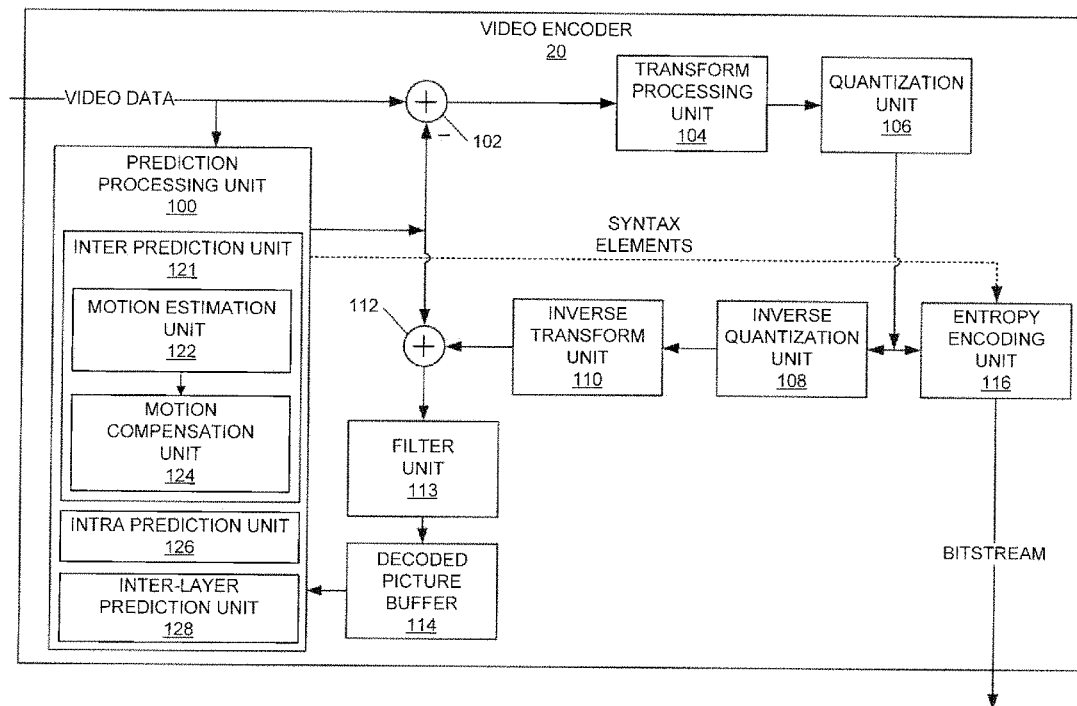
Latest standardized assignees - inventors removed

QUALCOMM

Family 6/22 - FAMPAT - ©Questel

Title

(EP3164993)

Method for **palette** mode coding**Images****Publication data including kind & date**

CA2952629	A1	2016-01-07	CA2952629
US20160007042	A1	2016-01-07	US20160007042
WO2016004086	A1	2016-01-07	WO2016004086
BR112016030530	A1	2017-01-17	BR112016030530
KR20170028905	A	2017-03-14	KR20170028905
IN201647040768	A	2017-04-28	IN201647040768
CN106664428	A	2017-05-10	CN106664428
EP3164993	A1	2017-05-10	EP3164993
JP2017525316	A	2017-08-31	JP2017525316
US9860560	B2	2018-01-02	US9860560
BR112016030530	A2	2018-10-09	BR112016030530
EP3164993	B1	2018-10-17	EP3164993

**Abstract**

(EP3164993)

A method for decoding **video** data provided in a **bitstream**, where the **bitstream** includes a coding unit (CU) coded in **palette** mode, includes: parsing a **palette** associated with the CU provided in the **bitstream**; parsing one or more run lengths provided in the **bitstream** that are associated with the CU; parsing one or more index values provided in the **bitstream** that are associated with the CU; and parsing one or more escape pixel values provided in the **bitstream** that are associated with the CU. The escape pixel values may be parsed from consecutive positions in the **bitstream**, the consecutive positions being in the **bitstream** after all of the run lengths and the index values associated with the CU. The method may further include

decoding the CU based on the parsed **palette**, parsed run lengths, parsed index values, and parsed escape values.

Inventors

PU WEI

JOSHI RAJAN LAXMAN

CHEN JIANLE

KARCZEWICZ MARTA

HSIEH CHENG-TEH

ZOU FENG

SOLE ROJALS JOEL

Latest standardized assignees - inventors removed

QUALCOMM

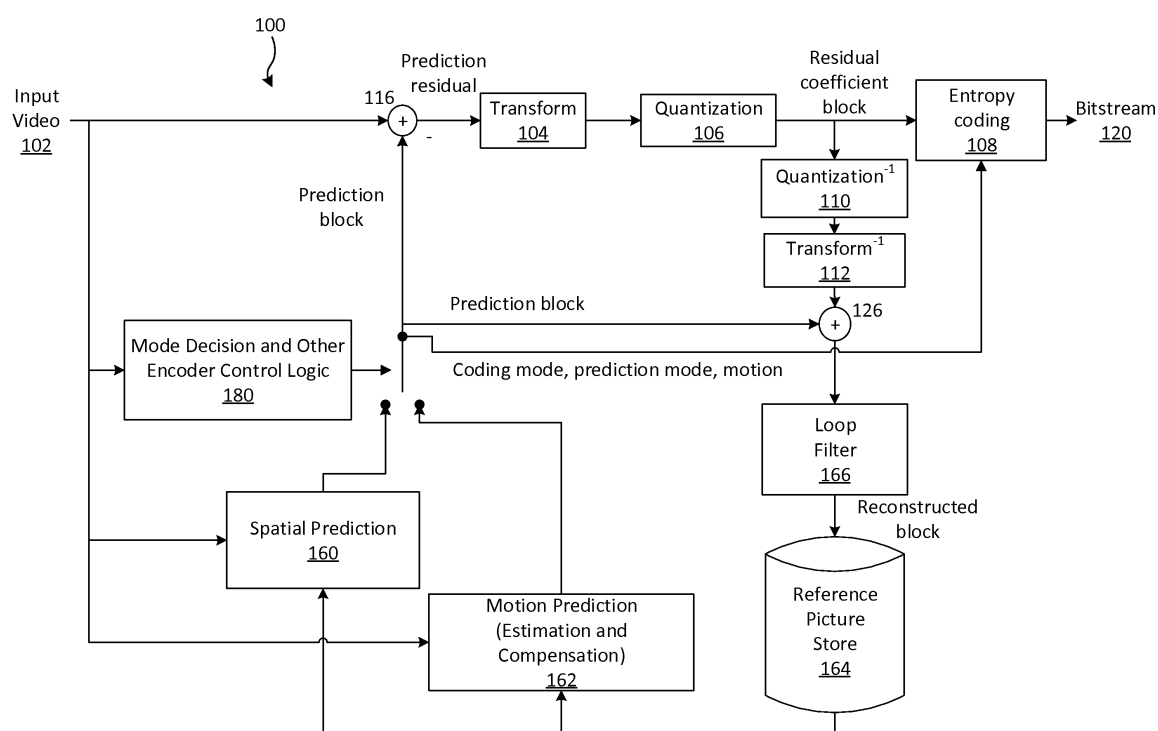
Family 7/22 - FAMPAT - ©Questel

Title

(EP3120561)

Method and apparatus for the signaling of lossless video coding

Images



Publication data including kind & date

CA2942903	A1	2015-09-24	CA2942903
WO2015142556	A2	2015-09-24	WO2015142556
WO2015142556	A3	2015-11-26	WO2015142556
AU2015231883	A1	2016-10-06	AU2015231883
CN106105227	A	2016-11-09	CN106105227
KR20160135262	A	2016-11-25	KR20160135262
EP3120561	A2	2017-01-25	EP3120561
JP2017515339	A	2017-06-08	JP2017515339
US20170180737	A1	2017-06-22	US20170180737



Abstract

(EP3120561)

Systems and methods are described for generating and decoding a **video** data bit stream containing a high-level signaling lossless coding **syntax** element indicating that lossless coding is used. The high-level signaling **syntax** is one of a **Video** Parameter Set (VPS), Sequence Parameter Set (SPS), Picture Parameter Set (PPS), or slice segment header. The lossless coding **syntax** element may be used as a condition for generating one or more SPS, PPS and slice segment header **syntax** elements related to the quantization, transform, transform skip, transform skip rotation, and in-loop filtering processes.

Inventors

YE YAN

XIU XIAOYU

HE YUWEN

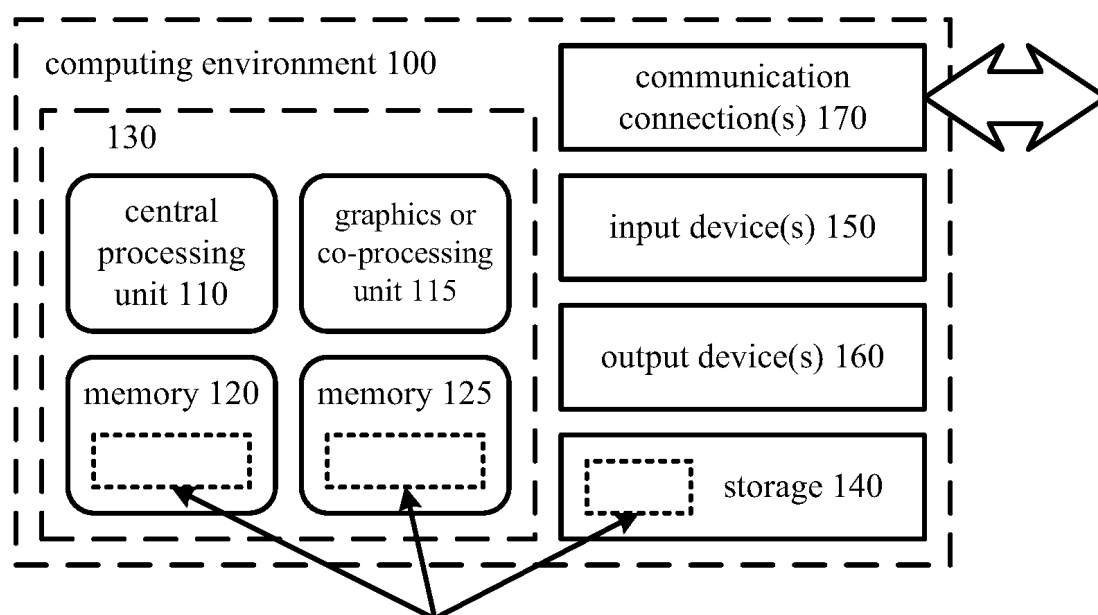
Latest standardized assignees - inventors removed

VID SCALE

Family 8/22 - FAMPAT - ©Questel

Title

(EP3308540)

Robust encoding/decoding of escape-coded pixels in **palette** mode**Images**

software 180 implementing one or more innovations for robust encoding/decoding of escape-coded pixels in palette mode

Publication data including kind & date

WO2016197314	A1	2016-12-15	WO2016197314
CN106664405	A	2017-05-10	CN106664405
IN201717043138	A	2018-03-02	IN201717043138
EP3308540	A1	2018-04-18	EP3308540
US20180288415	A1	2018-10-04	US20180288415

**Abstract**

(EP3308540)

Approaches to robust encoding and decoding of escape-coded pixels in a **palette** mode are described. For example, sample values of escape-coded pixels in **palette** mode are encoded/decoded using a binarization process that depends on a constant value of quantization parameter ("QP") for the sample values. Or, as another example, sample values of escape-

coded pixels in **palette** mode are encoded/decoded using a binarization process that depends on sample depth for the sample values. Or, as still another example, sample values of escape-coded pixels in **palette** mode are encoded/decoding using a binarization process that depends on some other fixed rule. In example implementations, these approaches avoid dependencies on unit-level QP values when parsing the sample values of escape-coded pixels, which can make encoding/decoding more robust to data loss.

Inventors

LI BIN

XU JIZHENG

Latest standardized assignees - inventors removed

MICROSOFT TECHNOLOGY LICENSING

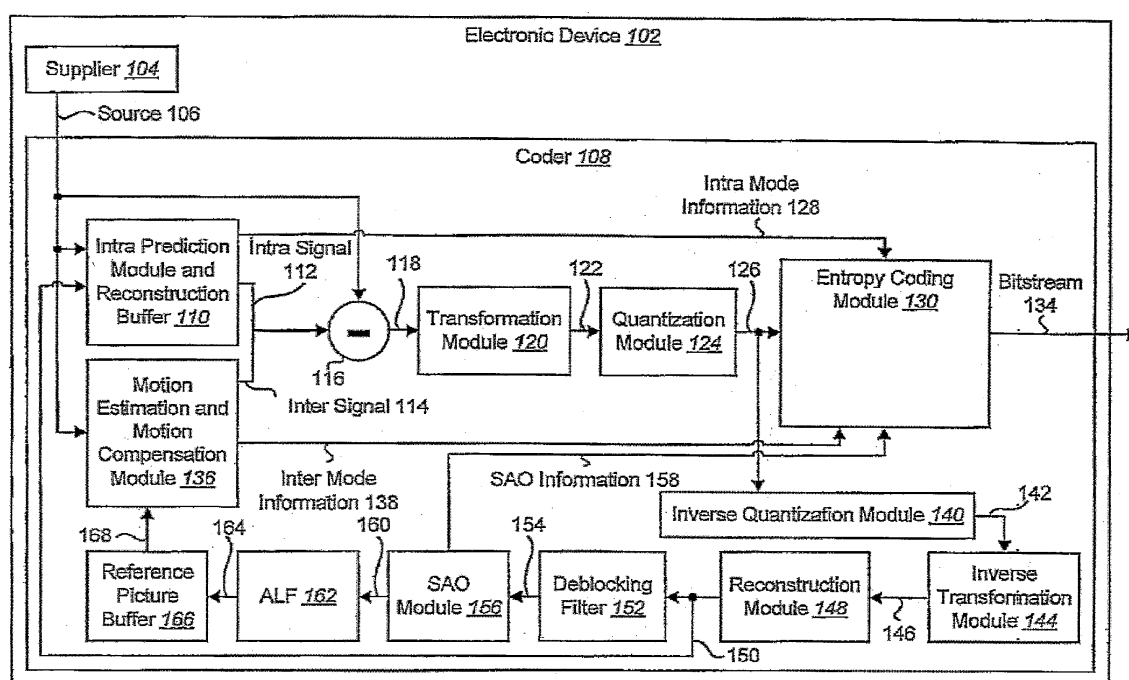
Family 9/22 - FAMPAT - ©Questel

Title

(WO2015194187)

Harmonized **palette** coding

Images



Publication data including kind & date

WO2015194187	A1	2015-12-23	WO2015194187
US20170127058	A1	2017-05-04	US20170127058
JP2017522839	A	2017-08-10	JP2017522839



Abstract

(WO2015194187)

The invention is : A method for decoding a **bitstream** comprising: (a) decoding at least one pictures from the **bitstream**; and (b) partitioning each of the at least one pictures into a plurality of slices, wherein each of the plurality of slices includes at least one coding units, wherein (c) **palette** table predictor size of a coding unit of the at least one coding units is set equal to 0 at start of a slice of the plurality of slices.

Inventors

MISRA KIRAN MUKESH

KIM SEUNG-HWAN

ZHAO JIE

IKAI TOMOHIRO

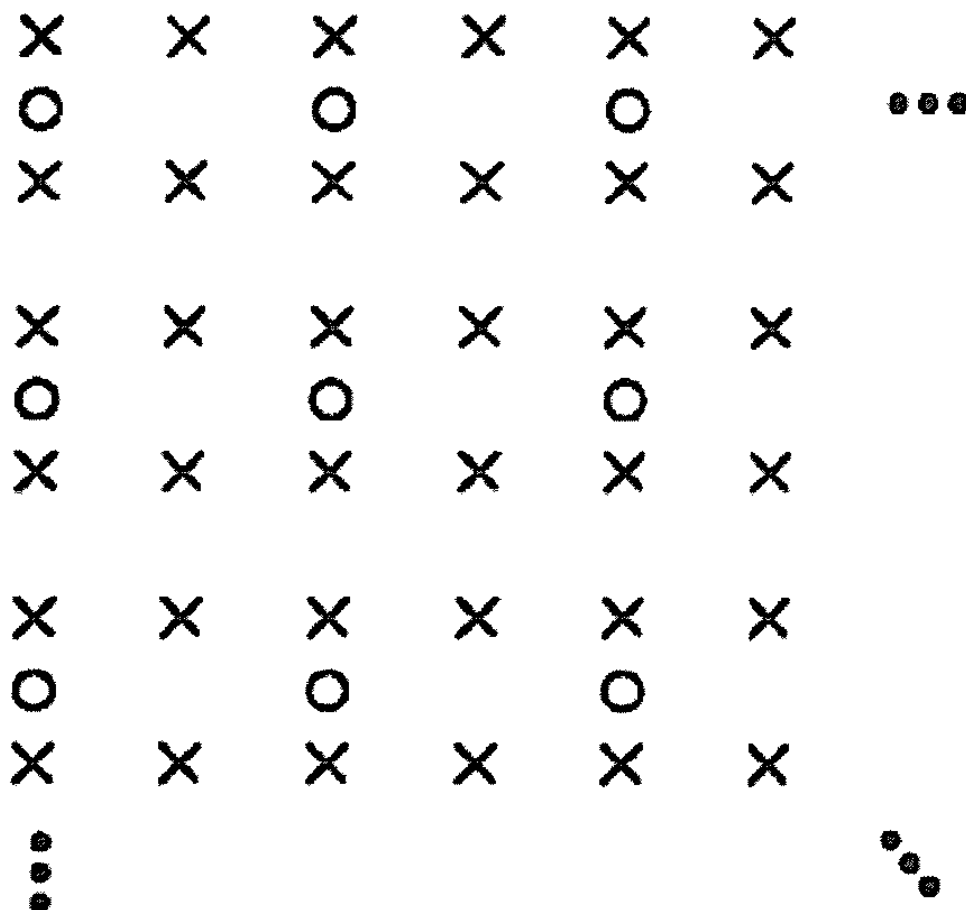
SHARP

Title

(EP3143766)

Advanced screen content coding with improved **palette** table and index map coding methods

Images



Guide:

X = Location of luma sample

○ = Location of chroma sample

Publication data including kind & date

CA2953505	A1	2015-12-30	CA2953505
WO2015200690	A1	2015-12-30	WO2015200690
US20150381994	A1	2015-12-31	US20150381994
AU2015279791	A1	2017-01-12	AU2015279791
KR20170016958	A	2017-02-14	KR20170016958
EP3143766	A1	2017-03-22	EP3143766



VN51507	A	2017-03-27	VN--51507				
IN201617044226	A	2017-04-14	IN201617044226				
EP3143766	A4	2017-05-17	EP3143766				
CN106797457	A	2017-05-31	CN106797457				
JP2017525204	A	2017-08-31	JP2017525204				
TH167676	A	2017-09-07	TH-167676				
RU2654200	C1	2018-05-17	RU2654200				
BR112016030696	A1	2018-06-26	BR112016030696				
BR112016030696	A2	2018-07-17	BR112016030696				
KR101906740	B1	2018-10-10	KR101906740				
CN106797457	B	2018-10-30	CN106797457B				

Abstract

(EP3143766)

An apparatus (100) is configured to perform a method (1700) for screen content coding. The method includes deriving (1701) a color index map (31 1, 601, 1301, 1600) based on a current coding unit (CU) (101, 213, 401, 501). The method also includes encoding (1703) the color index map, wherein at least a portion of the color index map is encoded using a first coding technique, wherein a first indicator indicates a significant distance of the first coding technique. The method further includes combining (1705) the encoded color index map and the first indicator for transmission to a receiver (200).

Inventors

YU HAOPING

MA ZHAN

WANG WEI

XU MENG

Latest standardized assignees - inventors removed

HUAWEI TECHNOLOGIES

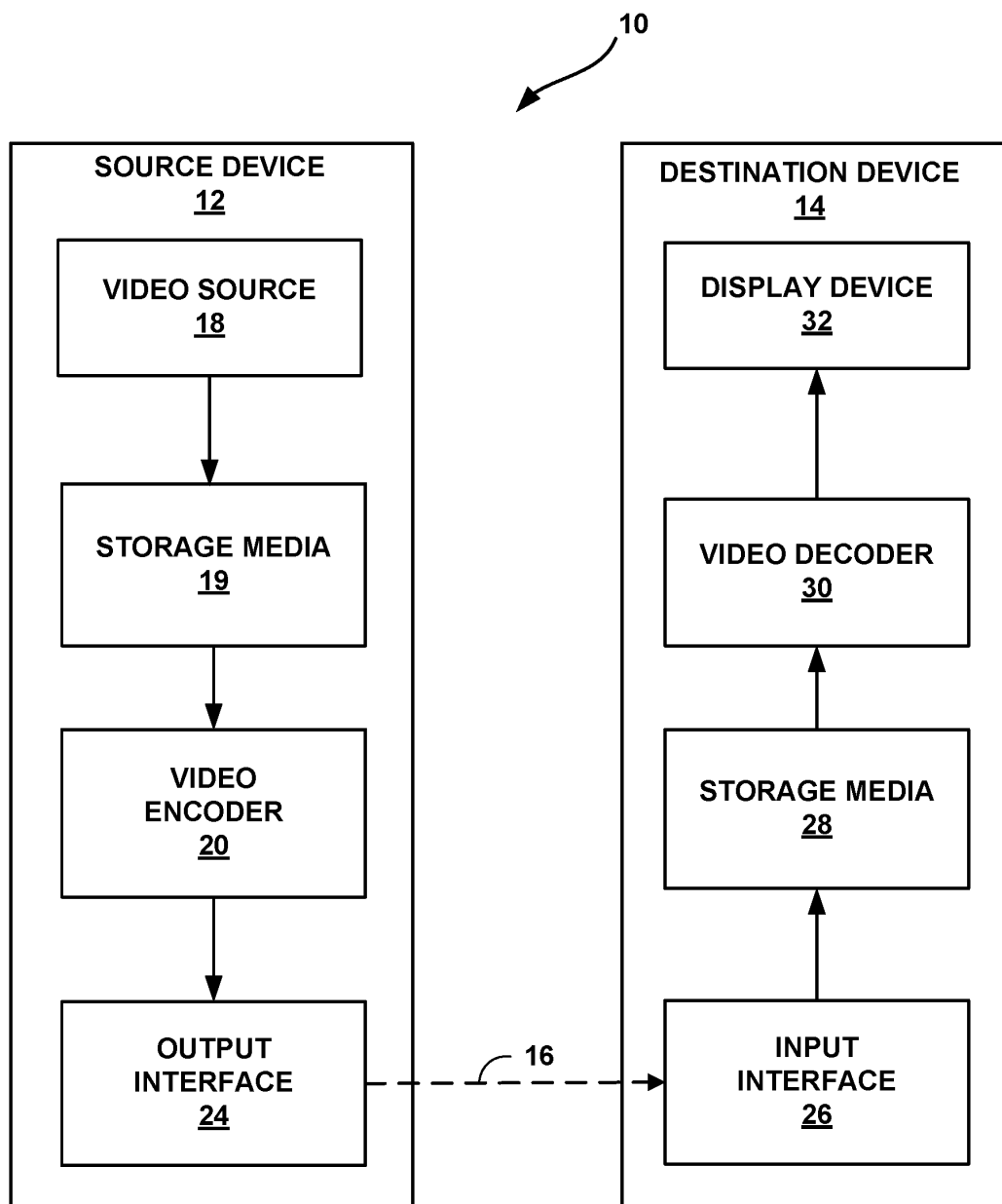
Family 11/22 - FAMPAT - ©Questel

Title

(WO2017180766)

Conformance constraint for collocated reference index in **video** coding

Images



Publication data including kind & date

US20170302951	A1	2017-10-19	US20170302951
WO2017180766	A1	2017-10-19	WO2017180766
TW201803348	A	2018-01-16	TW201803348
IN201847033775	A	2018-10-19	IN201847033775
BR112018070983	A1	2018-10-23	BR112018070983



Abstract

(WO2017180766)

A method of encoding **video** data comprising encoding a current picture of **video** data, generating a respective collocated reference picture index **syntax** element for one or more slices of the current picture, and performing a **bitstream** conformance check only for slices of the one or more slices that do not have an intra slice type and for which a temporal motion vector predictor is enabled, the **bitstream** conformance check constraining the values of the respective collocated reference picture index **syntax** elements such that each respective collocated reference picture index **syntax** element points to the same picture and does not reference the current picture itself.

Inventors

JOSHI RAJAN LAXMAN
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WANG YE-KUI
RAPAKA KRISHNAKANTH
KARCZEWICZ MARTA

Latest standardized assignees - inventors removed

QUALCOMM

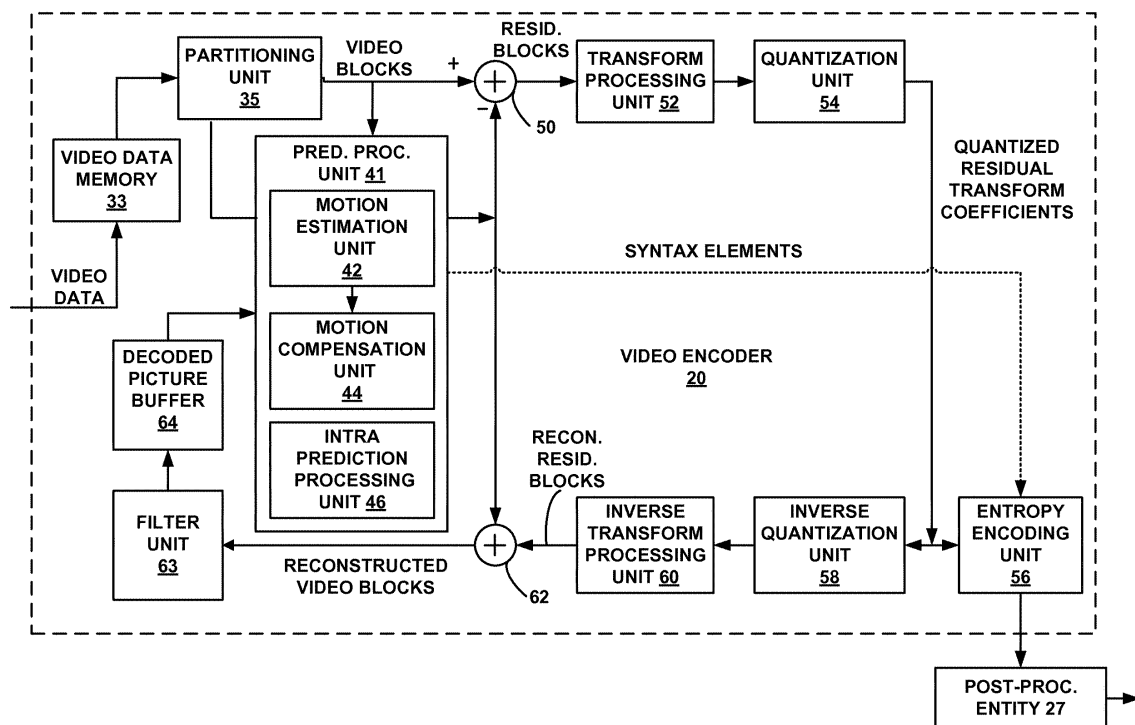
Family 12/22 - FAMPAT - ©Questel

Title

(EP3205103)

Intra bc and inter unification

Images



Publication data including kind & date

US20160100189	A1	2016-04-07	US20160100189
WO2016057701	A1	2016-04-14	WO201657701
AU2015328124	A1	2017-03-16	AU2015328124
BR112017007006	A1	2017-04-18	BR112017007006
CN106797476	A	2017-05-31	CN106797476
KR20170068466	A	2017-06-19	KR20170068466
EP3205103	A1	2017-08-16	EP3205103
IN201747007972	A	2017-09-08	IN201747007972
JP2017535163	A	2017-11-24	JP2017535163
BR112017007006	A2	2017-12-12	BR112017007006
US9918105	B2	2018-03-13	US9918105



Abstract

(EP3205103)

In general, the disclosure describes techniques related to block vector coding for Intra Block Copy and Inter modes. In one example, the disclosure is directed to a video coding device comprising a memory configured to store video data and one

or more processors. The **video** coding device is configured to determine a reference picture used for coding the current **video** block and determine a picture order count (POC) value for the reference picture. In response to the POC value for the reference picture being equal to a POC value for a current picture that includes the current **video** block, the **video** coding device sets a value of a **syntax** element to indicate that a reference picture list includes the current picture. Otherwise, the **video** coding device sets the value of the **syntax** element to indicate that the reference picture list does not include the current picture.

Inventors

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Latest standardized assignees - inventors removed

QUALCOMM

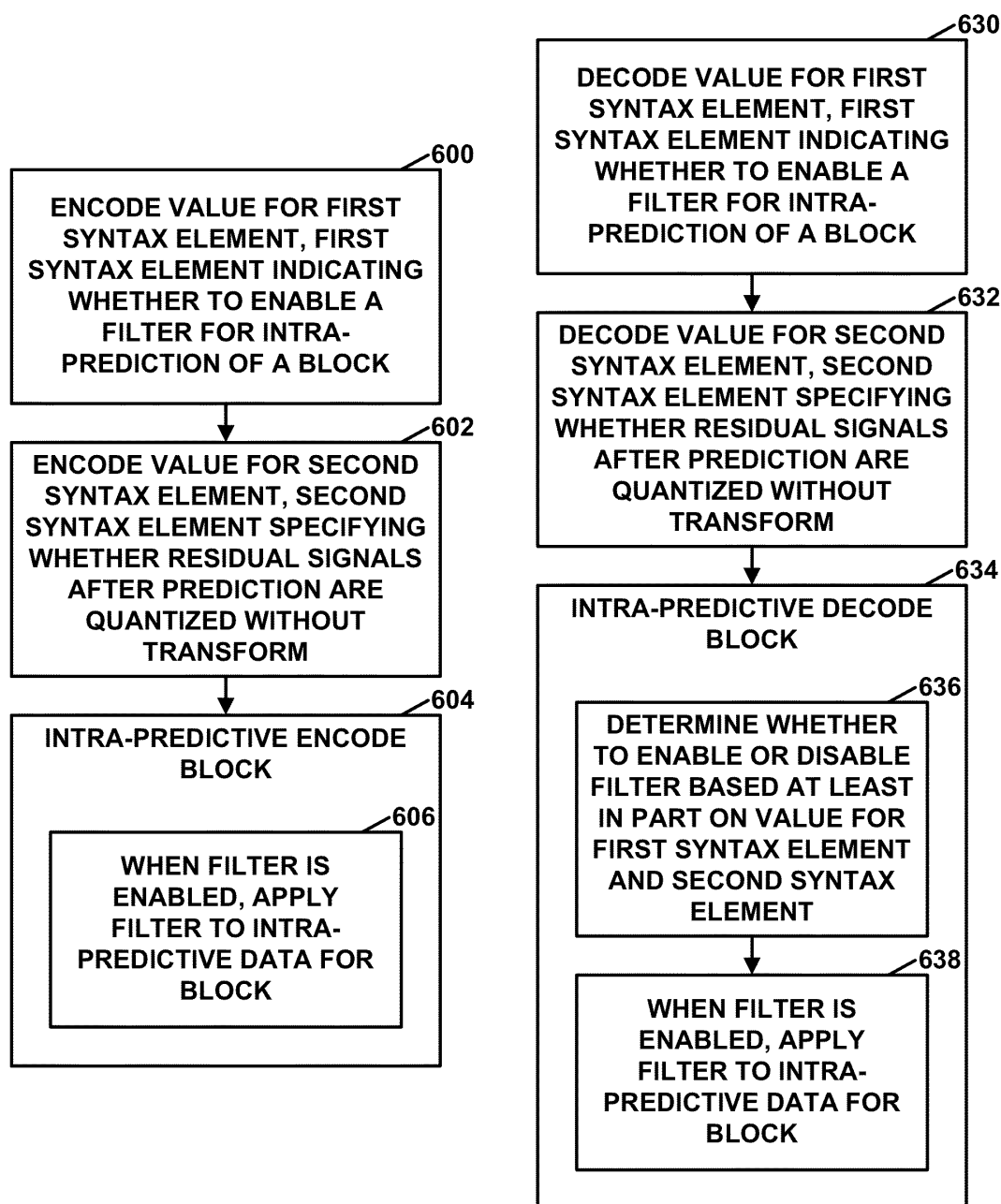
Family 13/22 - FAMPAT - ©Questel

Title

(EP3022910)

Disabling intra prediction filtering

Images



Publication data including kind & date

CA2917631	A1	2015-01-22	CA2917631
US20150023405	A1	2015-01-22	US20150023405
WO2015010037	A1	2015-01-22	WO201510037
BR112016001129	A1	2016-02-02	BR112016001129
CN105379266	A	2016-03-02	CN105379266
KR20160034923	A	2016-03-30	KR20160034923
EP3022910	A1	2016-05-25	EP3022910
IN8011/CHENP/2015	A	2016-08-26	IN2015CN08011
US9451254	B2	2016-09-20	US9451254
JP2016530779	A	2016-09-29	JP2016530779
KR101743893	B1	2017-06-05	KR101743893
CA2917631	C	2018-04-03	CA2917631
CN105379266	B	2018-08-07	CN105379266B
BR112016001129	A2	2018-11-06	BR112016001129



Abstract

(EP3022910)

A **video** decoder may adaptively disable, based on a **syntax** element, one or more filters used for intra-prediction. In addition, the **video** decoder may perform intra-prediction to generate prediction data for a current block of a current **video** slice. Furthermore, a **video** encoder may adaptively disable one or more filters used for intra-prediction. Furthermore, the **video** encoder may signal a **syntax** element that controls the one or more filters. In addition, the **video** encoder may perform intra prediction to generate prediction data for a current **video** block of the **video** data.

Inventors

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KANG JEWON

KIM WOO-SHIK

Latest standardized assignees - inventors removed

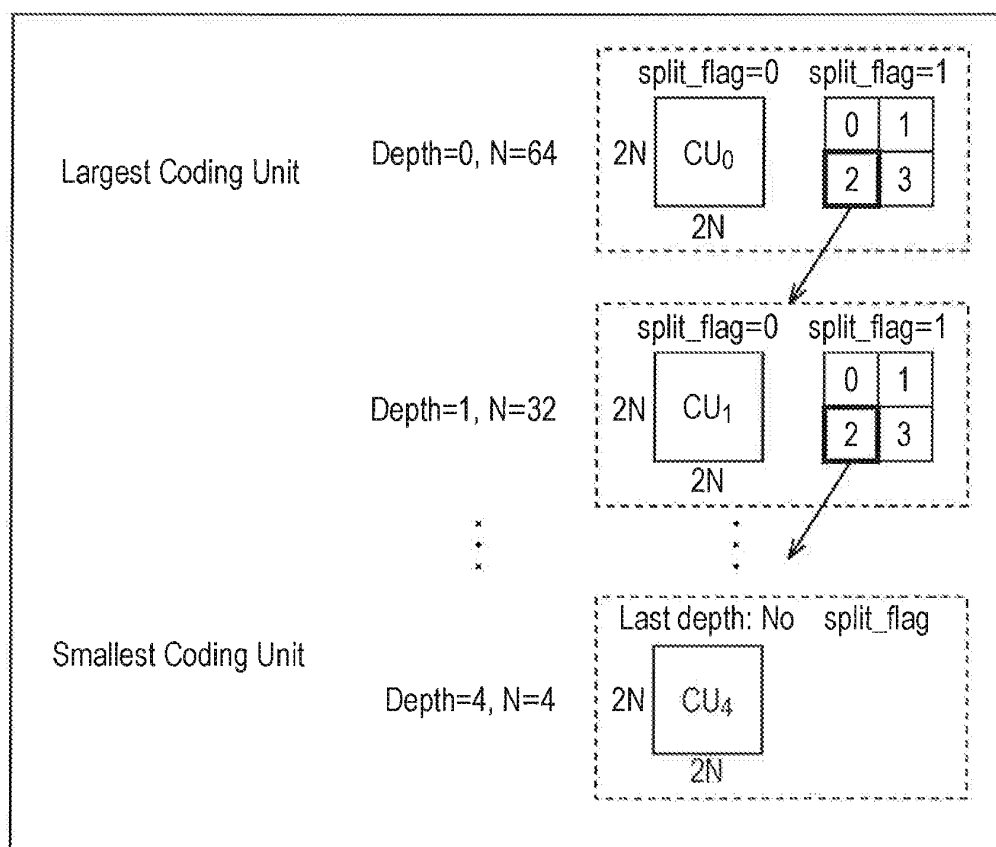
QUALCOMM

Family 14/22 - FAMPAT - ©Questel

Title

(EP2942966)

Image processing device and method

Images**Publication data including kind & date**

WO2014084109	A1	2014-06-05	WO201484109
WO2014084108	A1	2014-06-05	WO201484108
BR112015011914	A1	2015-06-02	BR112015011914
BR112015011913	A1	2015-06-02	BR112015011913



CN104813670	A	2015-07-29	CN104813670				
KR20150092119	A	2015-08-12	KR20150092119				
KR20150092120	A	2015-08-12	KR20150092120				
CN104838659	A	2015-08-12	CN104838659				
MX2015006474	A	2015-08-14	MX2015006474				
MX2015006473	A	2015-08-14	MX2015006473				
EP2928195	A1	2015-10-07	EP2928195				
EP2942966	A1	2015-11-11	EP2942966				
IN4390/DELNP/2015	A	2015-11-27	IN2015DN04390				
IN4389/DELNP/2015	A	2015-11-27	IN2015DN04389				
EP2942966	A4	2016-05-25	EP2942966				
EP2928195	A4	2016-06-01	EP2928195				
US20160286238	A1	2016-09-29	US20160286238				
US20160286239	A1	2016-09-29	US20160286239				
RU2015119571	A	2016-12-10	RU2015119571				
RU2015119570	A	2016-12-10	RU2015119570				
JPWO2014084108	A1	2017-01-05	JP2014084108W				
JPWO2014084109	A1	2017-01-05	JP2014084109W				
BR112015011914	A2	2017-07-11	BR112015011914				
BR112015011913	A2	2017-07-11	BR112015011913				
MX353544	B	2018-01-18	MX-353544				
RU2651201	C2	2018-04-18	RU2651201				
JP2018121336	A	2018-08-02	JP2018121336				
RU2663341	C2	2018-08-03	RU2663341				

Abstract

(EP2942966)

The present disclosure relates to an image processing device and method which are capable of suppressing a reduction in an increase in coding efficiency. A receiving unit that receives an encoded **bitstream** including a **syntax** element related to an inter-image process and an analyzing unit that analyzes the **syntax** element received by the receiving unit in a state in which a value of the **syntax** element is restricted when the **bitstream** is a **bitstream** encoded based on a profile for encoding a still image are provided. For example, the present disclosure can be applied to an image processing device.

Inventors

SATO KAZUSHI

Latest standardized assignees - inventors removed

SONY

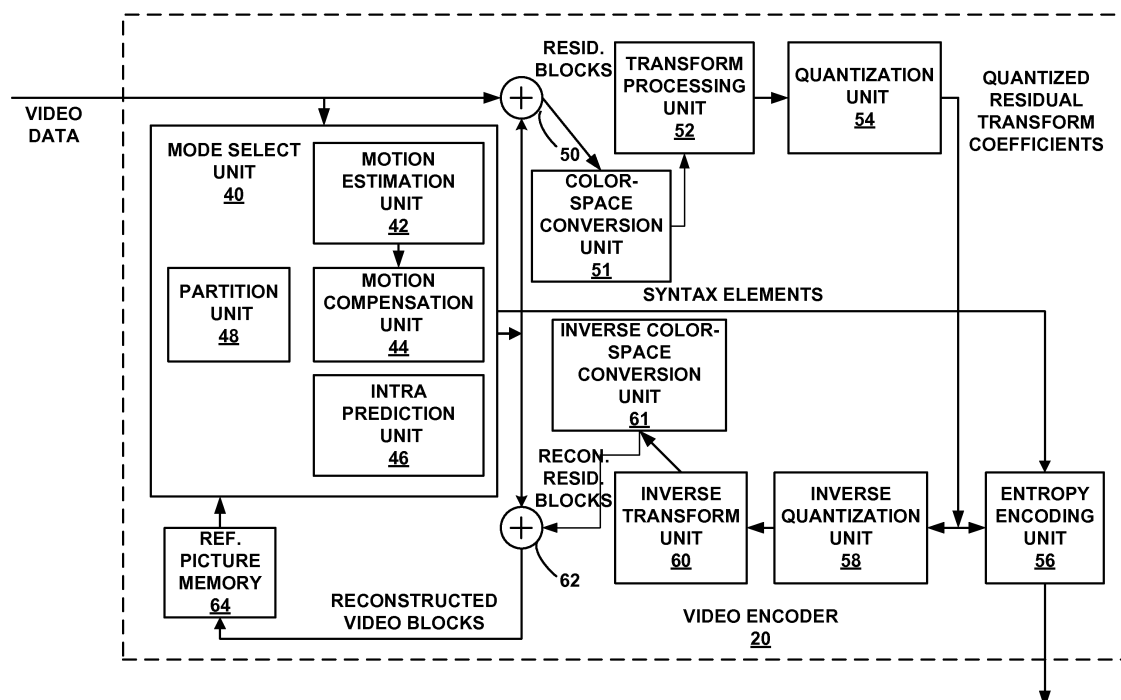
Family 15/22 - FAMPAT - ©Questel

Title

(EP3152902)

Block adaptive color-space conversion coding

Images



Publication data including kind & date

CA2948011	A1	2015-12-10	CA2948011
US20150358631	A1	2015-12-10	US20150358631
WO2015187978	A1	2015-12-10	WO2015187978
TW201611578	A	2016-03-16	TW201611578
AU2015269334	A1	2016-11-17	AU2015269334
IN201647036706	A	2016-11-25	IN201647036706
BR112016028547	A1	2016-12-20	BR112016028547
SG11201608822Y	A	2016-12-29	SG11201608822Y
KR20170013274	A	2017-02-06	KR20170013274
PH12016502373	A1	2017-02-20	PH12016502373
CN106464881	A	2017-02-22	CN106464881
VN51010	A	2017-02-27	VN--51010
EP3152902	A1	2017-04-12	EP3152902
MX2016015649	A	2017-04-25	MX2016015649
JP2017520991	A	2017-07-27	JP2017520991
BR112016028547	A2	2017-08-22	BR112016028547
TH166417	A	2017-08-24	TH-166417
CL2016003118	A1	2017-10-06	CL3118201600
RU2016147170	A	2018-07-16	RU2016147170



Abstract

(EP3152902)

A **video** coder decodes a coding unit (CU) of **video** data. In decoding the **video** data, the **video** coder determines that the CU was encoded using the color space conversion. The **video** coder determines the initial quantization parameter (QP), determines the final QP that is equal to a sum of the initial QP and a QP offset, and inverse quantizes, based on the final QP, a coefficient block, then reconstructs the CU based on the inverse quantized coefficient blocks.

Inventors

ZHANG LI

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Latest standardized assignees - inventors removed

QUALCOMM

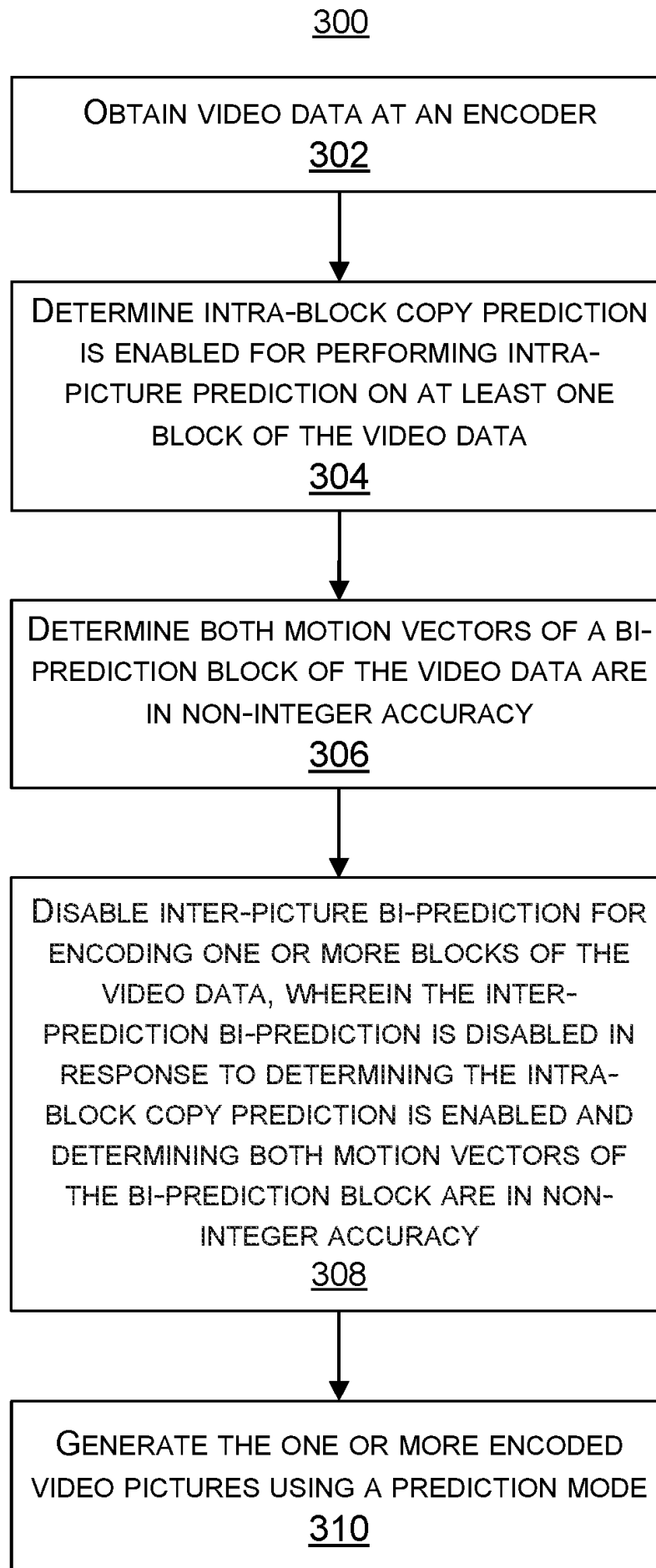
Family 16/22 - FAMPAT - ©Questel

Title

(EP3329675)

Methods and systems of restricting bi-prediction in video coding

Images



Publication data including kind & date

US20170034526	A1	2017-02-02	US20170034526				
WO2017019656	A1	2017-02-02	WO201719656				
TW201709731	A	2017-03-01	TW201709731				
AU2016298172	A1	2018-01-18	AU2016298172				
CN107852498	A	2018-03-27	CN107852498				
BR112018001519	A1	2018-04-03	BR112018001519				
KR20180035810	A	2018-04-06	KR20180035810				
EP3329675	A1	2018-06-06	EP3329675				
BR112018001519	A2	2018-09-11	BR112018001519				
JP2018526881	A	2018-09-13	JP2018526881				

Abstract

(EP3329675)

Techniques and systems are provided for encoding **video** data. For example, restrictions on certain prediction modes can be applied for **video** coding. A restriction can be imposed that prevents inter-prediction bi-prediction from being performed on **video** data when certain conditions are met. For example, bi-prediction restriction can be based on whether intra-block copy prediction is enabled for one or more coding units or blocks of the **video** data, whether a value of a **syntax** element indicates that one or more motion vectors are in non-integer accuracy, whether both motion vectors of a bi-prediction block are in non-integer accuracy, whether the motion vectors of a bi-prediction block are not identical and/or are not from the same reference index, or any combination thereof. If one or more of these conditions are met, the restriction on bi-prediction can be applied, preventing bi-prediction from being performed on certain coding units or blocks.

Inventors

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Latest standardized assignees - inventors removed

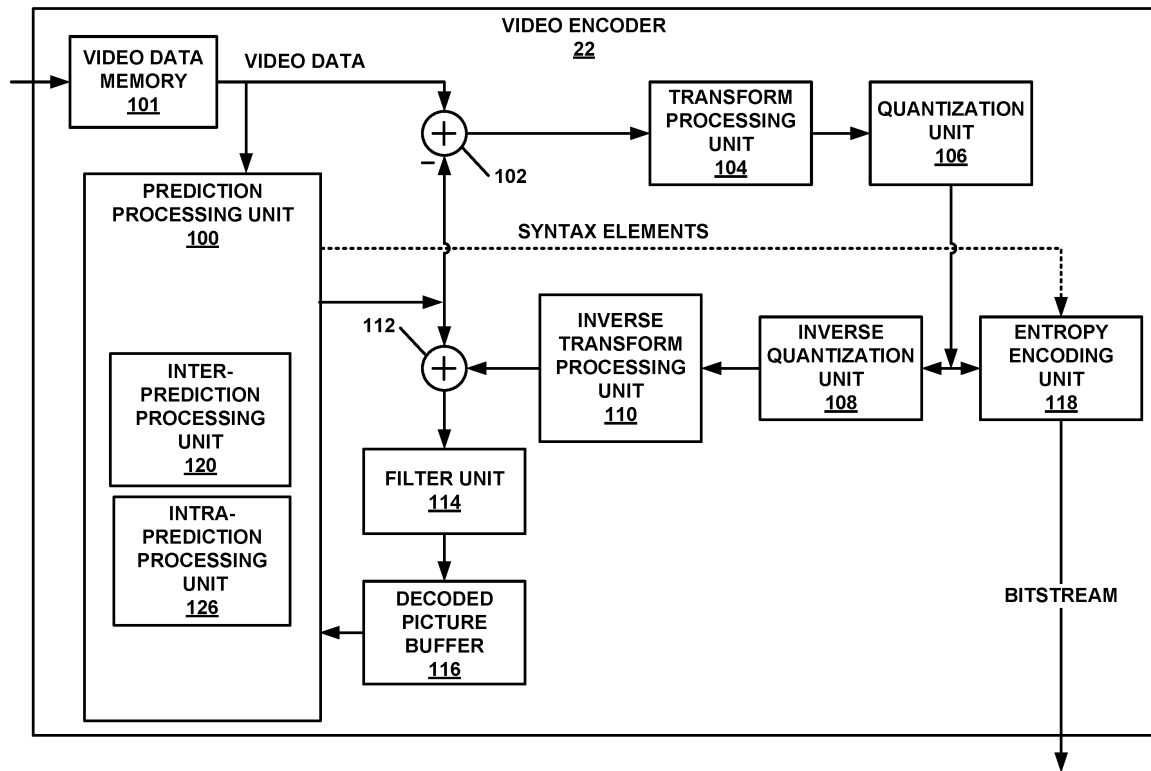
QUALCOMM

Family 17/22 - FAMPAT - ©Questel

Title

(WO2018129322)

Multi-type-tree framework for **video** coding**Images**



Publication data including kind & date

US20180199072 A1 2018-07-12 US20180199072
 WO2018129322 A1 2018-07-12 WO2018129322



Abstract

(WO2018129322)

A method of decoding **video** comprising: receiving an encoded block of **video** data, determining a transform for the encoded block of **video** data, wherein the transform has a size S that is not a power of two, rounding S to a power of two creating a transform with a modified size S' , applying an inverse transform with the modified size S' to the encoded block of **video** data to create residual **video** data, and decoding the residual **video** data to create decoded block of **video** data.

Inventors

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 ZHAO XIN
 ZHANG LI
 CHEN JIANLE
 CHUANG HSIAO-CHIANG
 KARCZEWICZ MARTA

Latest standardized assignees - inventors removed

QUALCOMM

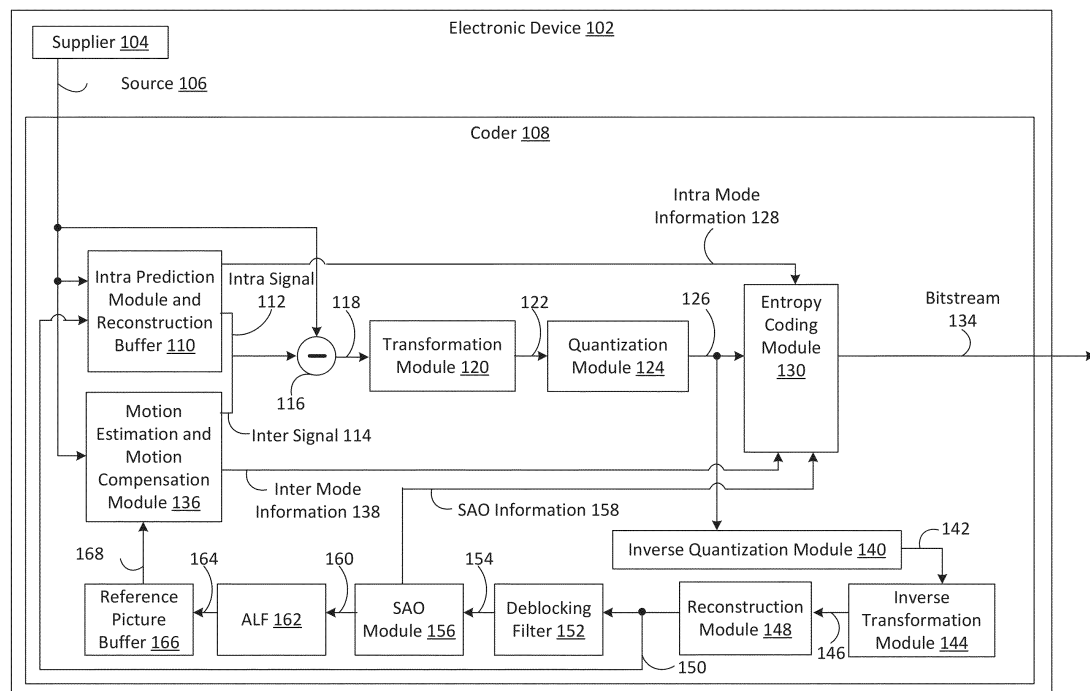
Family 18/22 - FAMPAT - ©Questel

Title

(US20160234498)

Methods and systems for **palette** table coding

Images



Publication data including kind & date

US20160234498

A1 2016-08-11

US20160234498



Abstract

(US20160234498)

Apparatuses, methods and storage medium associated with **palette** table coding are disclosed herein. In embodiments, an apparatus may include one or more processors, devices, mod/or circuitry to decode **palette** escape value present flag, to decode **palette** predictor initializer values, to decode **palette** predictor initializer present flag to decode a conforming **bitstream**, to decode **palette** predictor initializer present flag, or the like, or combinations thereof.

Inventors

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DESHPANDE SACHIN G

KIM SEUNG-HWAN

SEGALL CHRISTOPHER ANDREW

Latest standardized assignees - inventors removed

SHARP LABORATORIES OF AMERICA

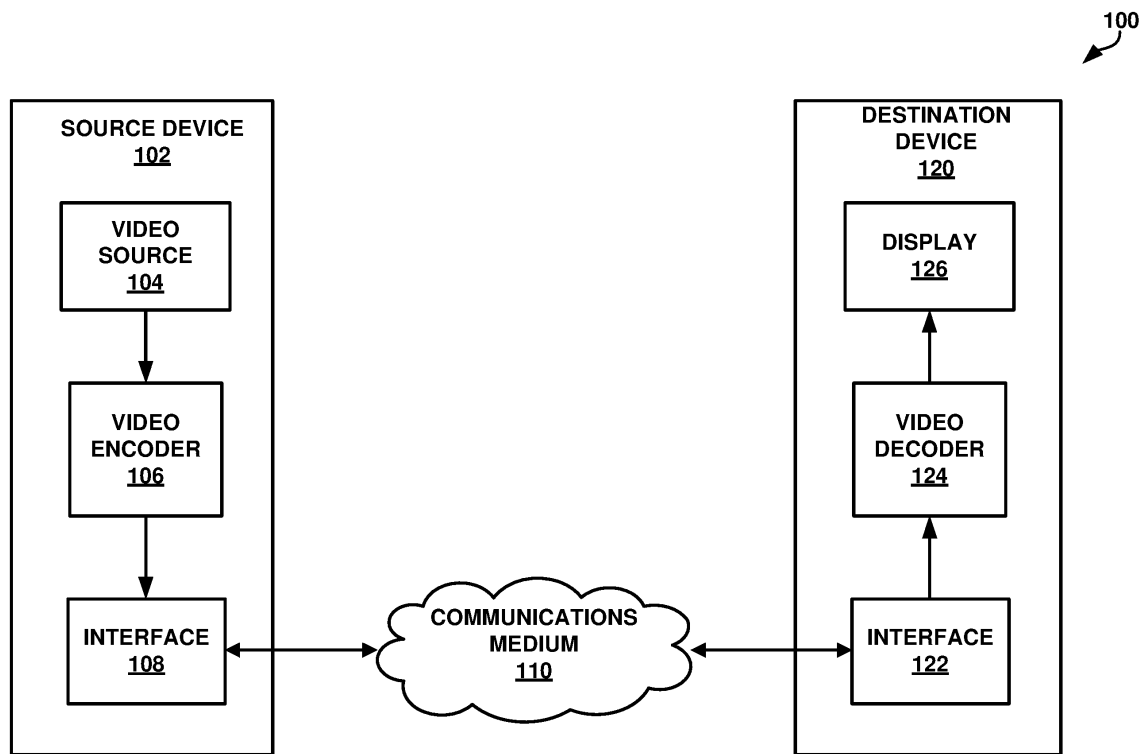
Family 19/22 - FAMPAT - ©Questel

Title

(US20160345014)

Systems and methods for coding a number of **palette** indices

Images

**Publication data including kind & date**

US20160345014

A1 2016-11-24

US20160345014

**Abstract**

(US20160345014)

A **video** coding device may be configured to determine the absolute value of the difference of the number of **palette** indices signalled for a current coding unit and a predictor term. The predictor term may be based on a maximum possible value for a **palette** index for the current coding unit. Upon determining that the absolute value of the difference of the number of **palette** indices signalled for a current coding unit and a predictor term, the **video** coding device may be configured to generate a sign value.

Inventors

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Latest standardized assignees - inventors removed

SHARP LABORATORIES OF AMERICA

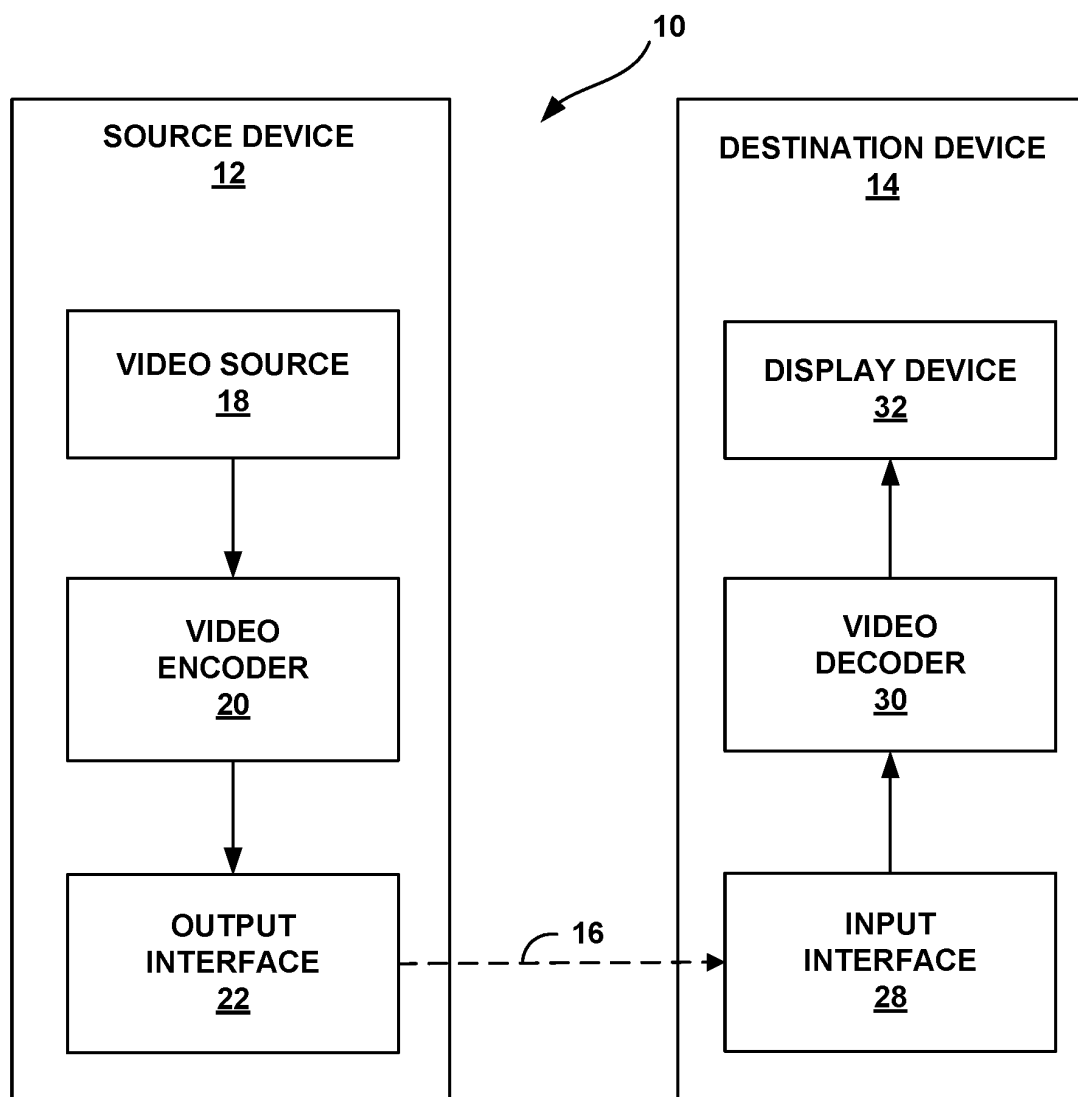
Family 20/22 - FAMPAT - ©Questel

Title

(WO2018200960)

Gradient based matching for motion search and derivation

Images

**Publication data including kind & date**

[US20180316929](#) A1 2018-11-01 US20180316929

[WO2018200960](#) A1 2018-11-01 WO2018200960

**Abstract**

(WO2018200960)

A method of decoding **video** data includes determining, by a **video** decoder implemented in circuitry, a bi-predicted MV predictor for a block of **video** data. The bi-predicted MV predictor indicates a first input reference block and a second input reference block. The method further includes refining, by the **video** decoder, the bi-predicted MV predictor using gradient information to determine a refined bi-predicted MV predictor indicating a first refined reference block that is within a search range from the first input reference block and a second refined reference block that is within the search range from the second input reference block. The method further includes generating, by the **video** decoder, a predictive block for the block of **video** data based on the refined bi-predicted MV predictor, and decoding, by the **video** decoder, the block of **video** data based on the predictive block.

Inventors

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CHEN JIANLE

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CHIEN WEI-JUNG

KARCZEWICZ MARTA

Latest standardized assignees - inventors removed

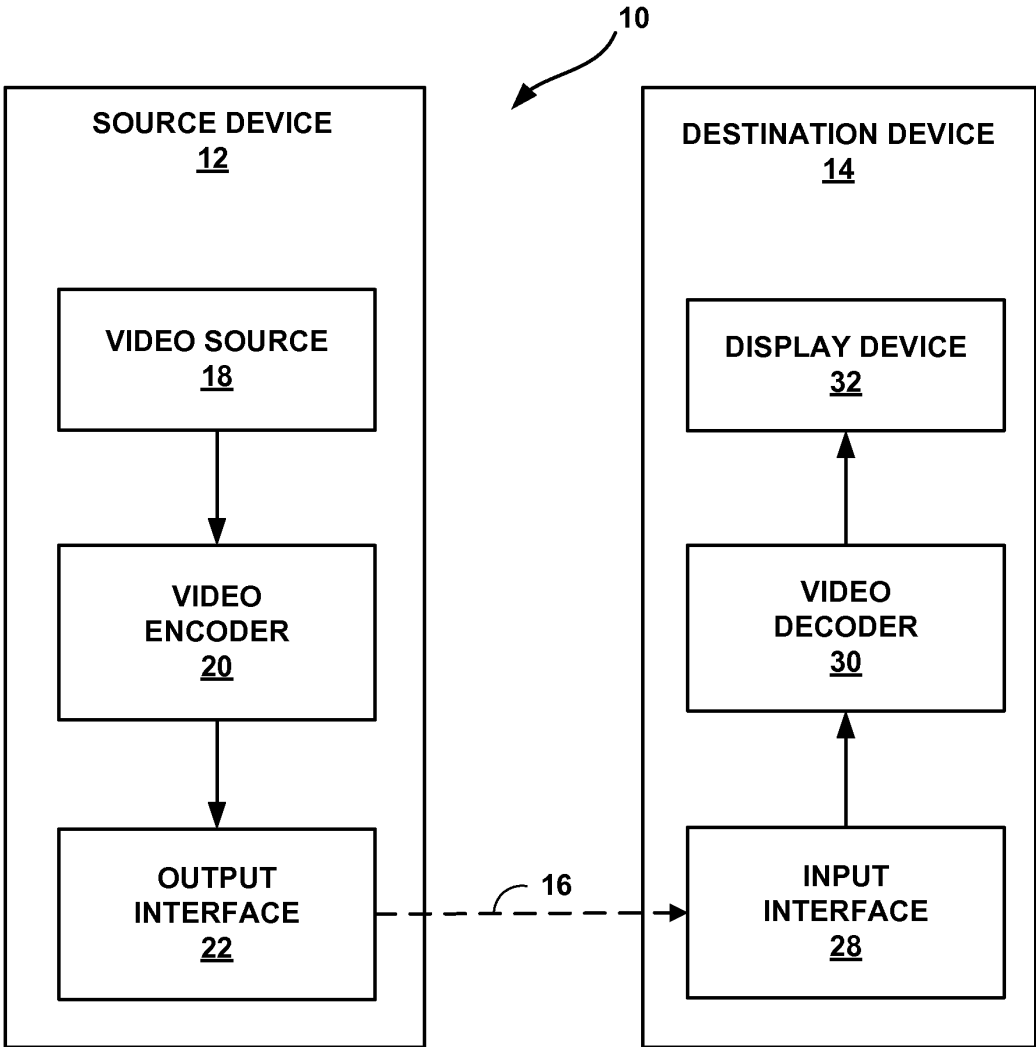
QUALCOMM

Family 21/22 - FAMPAT - ©Questel

Title
(EP3158739)

Block adaptive color-space conversion coding

Images



Publication data including kind & date

CA2949542	A1	2015-12-23	CA2949542
WO2015196126	A1	2015-12-23	WO2015196126
US20150373327	A1	2015-12-24	US20150373327
IN201647039082	A	2016-12-30	IN201647039082
BR112016029720	A1	2017-01-10	BR112016029720
CN106464885	A	2017-02-22	CN106464885
KR20170020769	A	2017-02-24	KR20170020769
EP3158739	A1	2017-04-26	EP3158739
JP2017523677	A	2017-08-17	JP2017523677
BR112016029720	A2	2017-08-22	BR112016029720



Abstract

(EP3158739)

A device for decoding **video** data includes a memory configured to store **video** data and one or more processors configured to: receive a first block of the **video** data; determine a quantization parameter for the first block; in response to determining that the first block is coded using a color-space transform mode for residual data of the first block, modify the quantization parameter for the first block; perform a dequantization process for the first block based on the modified quantization parameter for the first block; receive a second block of the **video** data; receive a difference value indicating a difference between a quantization parameter for the second block and the quantization parameter for the first block; determine the quantization parameter for the second block based on the received difference value and the quantization parameter for the first block; and decode the second block based on the determined quantization parameter.

Inventors

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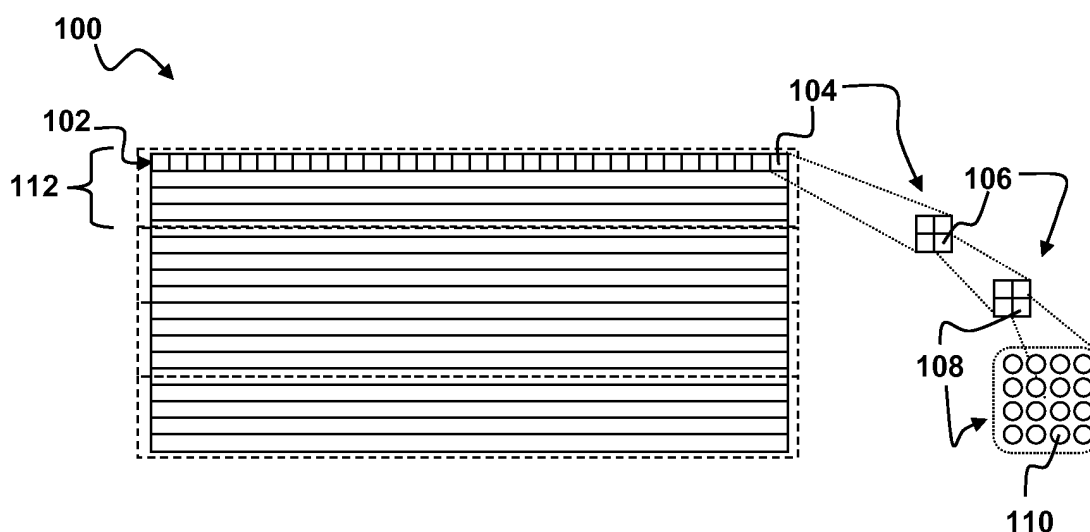
Latest standardized assignees - inventors removed

QUALCOMM

Family 22/22 - FAMPAT - ©Questel

Title

(EP2638695)

Video coding methods and apparatus**Images****Publication data including kind & date**

US20120114039	A1	2012-05-10	US20120114039
WO2012064394	A1	2012-05-18	WO201264394
EP2638695	A1	2013-09-18	EP2638695
KR20130140066	A	2013-12-23	KR20130140066
JP2013546267	A	2013-12-26	JP2013546267
US8787459	B2	2014-07-22	US8787459
EP2638695	A4	2015-02-18	EP2638695
JP5782522	B2	2015-09-24	JP5782522
KR101775936	B1	2017-09-07	KR101775936
EP2638695	B1	2017-10-18	EP2638695

**Abstract**

(EP2638695)

In methods for encoding and decoding digital pictures certain prediction parameters may be omitted from the output on the encoder side or the input on the decoder side. An encoder can identify prediction parameter values that can be omitted by determining whether a decoder emulator can reproduce the prediction parameter values from other information, such as predicted pixel and prediction error values of one or more previously decoded sections from the same or a different picture.

Inventors

WANG JASON

Latest standardized assignees - inventors removed

SONY INTERACTIVE ENTERTAINMENT