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- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

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(54) Title: VIDEO CODING USING SPATIO-TEMPORAL TEXTURE SYNTHESIS

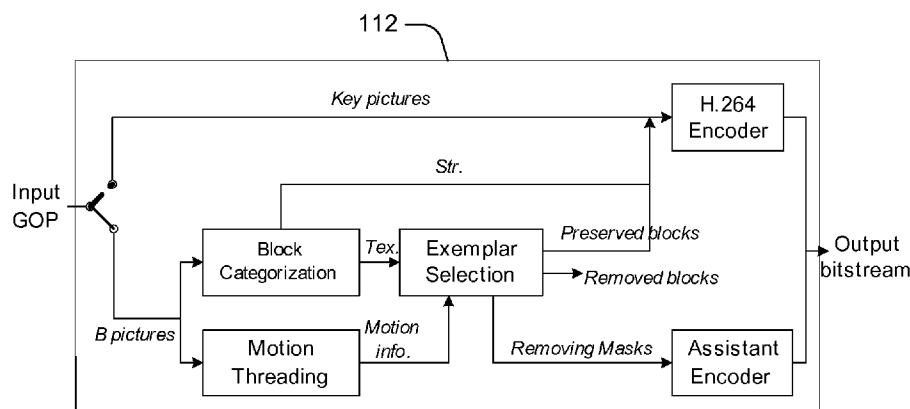


Fig. 2

(57) Abstract: Systems and methods for video coding using spatio-temporal texture synthesis are described. In one aspect, a video data coding pipeline portion of the codec removes texture blocks from the video data to generate coded video data. The removed texture blocks are selected based on an objective determination that each of the remove texture blocks can be synthesized from spatio-temporal neighboring samples during decoding operations. The objective determinations are made using local block-based motion information independent of global motion models. An indication of which texture blocks were removed is provided to a decoder in addition to the coded video data. Decoding logic of the codec decodes the video data using a standard decoding algorithm. The decoding logic also restores the removed texture blocks via spatio-temporal texture synthesis to generate synthesized video data. The decoded and synthesized video data is presented to a user.



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INTERNATIONAL SEARCH REPORT

International application No.
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A. CLASSIFICATION OF SUBJECT MATTER

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According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 8 : G09G 5/00, G06K 9/36, G06K 9/52

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean Utility models and applications for Utility Models since 1975
Japanese Utility Models and application for Utility Models since 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKIPASS (KIPO internal) "spatial", "temporal", "texture", "synthesis"

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 20050243099 A1 (AT&T CORP.) 03 November 2005 See abstract; claims 1 to 6; fig. 1	1-20
A	US 20060039617 A1 (BELA MAKAI et al.) 23 February 2006 See abstract; claim 1; fig. 1	1-20
A	US 5533140 A (U.S. PHILIPS CORP.) 02 July 1996 See abstract; claim 1; fig. 1	1-20

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

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"&" document member of the same patent family

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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