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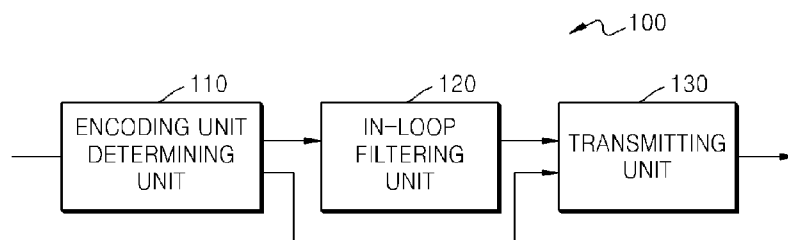
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(54) Title: METHOD AND APPARATUS FOR ENCODING VIDEO BY PERFORMING IN-LOOP FILTERING BASED ON TREE-STRUCTURED DATA UNIT, AND METHOD AND APPARATUS FOR DECODING VIDEO BY PERFORMING THE SAME

[Fig. 1]



(57) Abstract: An apparatus and method of encoding and an apparatus and method of decoding a video by performing in-loop filtering based on coding units are provided. The encoding method includes: splitting a picture into a maximum coding unit; separately determining coding units for outputting encoding results according to a coded depth for deeper coding units that are hierarchically structured according to depths; and determining a filtering unit for performing in-loop filtering so as to minimize an error between the maximum coding unit and an original picture, based on the coding units, and performing in-loop filtering based on the filtering unit.



INTERNATIONAL SEARCH REPORT

International application No.
PCT/KR2011/002382**A. CLASSIFICATION OF SUBJECT MATTER****H04N 7/24(2011.01)i**

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)

H04N 7/24; H04N 7/32; H04N 7/26; G06T 9/00

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

Japanese utility models and applications for utility models

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

eKOMPASS(KIPO internal) & Keywords: encoding, layer, depth

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	KR 10-2005-0045746 A (SAMSUNG ELECTRONICS CO., LTD.) 17 May 2005 See abstract; page 3, line 17–page 5, line 22; Figs. 1, 2a and 2b; claims 1 and 10	1-15
A	KR 10-0842558 B1 (SAMSUNG ELECTRONICS CO., LTD. et al.) See abstract; page 8, [0034]–page 11, [0082]; Figs. 1-4; claims 1-15	1-15
A	KR 10-2006-0027795 A (AMT ADVANCED MULTIMEDIA TECHNOLOGY AB) 28 March 2006 See abstract; page 6, III.–page 15, V.; Figs. 8-15c; claims 1 and 14	1-15

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

* Special categories of cited documents:

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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