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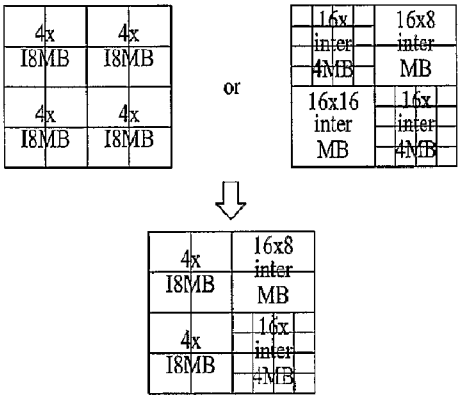
*[Continued on next page]*

(54) Title: A METHOD AND AN APPARATUS FOR DECODING A VIDEO SIGNAL

FIG. 23




(57) Abstract: The present invention relates to a video signal decoding method for adding an intra prediction mode as a sub-macroblock type to prediction of a macroblock in coding a video signal. The present invention includes obtaining a macroblock type, checking whether a macroblock includes a intra prediction coded sub-macroblock and a inter prediction coded sub-macroblock when a macroblock includes a plurality of coded sub-macroblocks according the macroblock type, when the macroblock includes the intra prediction coded sub-macroblock and the inter prediction coded sub-macroblock, obtaining prediction mode flag information indicating whether the sub-macroblock is the intra prediction coded or the inter prediction coded, when the sub-macroblock is the intra prediction coded based on the prediction mode flag information, obtaining prediction direction information from a block adjacent to the sub-macroblock and a prediction value of the sub-macroblock based on the prediction direction information, and when the sub-macroblock is inter prediction coded based on the prediction mode flag information, obtaining motion information from the block adjacent to the sub-macroblock and a prediction value of the sub-macroblock based on the motion information. Accordingly, the present invention is able to raise coding efficiency of video signal by adding an intra prediction mode as a sub-macroblock type in predicting a macroblock.

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**A. CLASSIFICATION OF SUBJECT MATTER**

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**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

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eKOMPASS(KIPO internal) & Keywords: Transform, DC, Macroblock, Prediction direction

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|---|---|---|
| A | US 2005-0276493 A1 (JUN XIN et al.) 15 December 2005<br>See abstract, Paragraph[0026] - Paragraph[0031], Paragraph[0034] - Paragraph [0085], Figures 1-3. | 1-9 |
| A | US 2007-0036224 A1 (SRINIVASAN et al.) 15 February 2007<br>See abstract, Paragraph[0017] - Paragraph[0020], Paragraph[0036] - Paragraph [0087], Figures 2,3. | 1-9 |
| A | US 2008-0056355 A1 (JIUN-IN GUO et al.) 06 March 2008<br>See abstract, Paragraph[0007] - Paragraph[0013], Paragraph[0023] - Paragraph [0041], Figures 1A-1C. | 1-9 |

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

☒ See patent family annex.

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| | | WO 2007-021613 A2 | 22.02.2007 |
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| US 2008-0056355 A1 | 06.03.2008 | None | |