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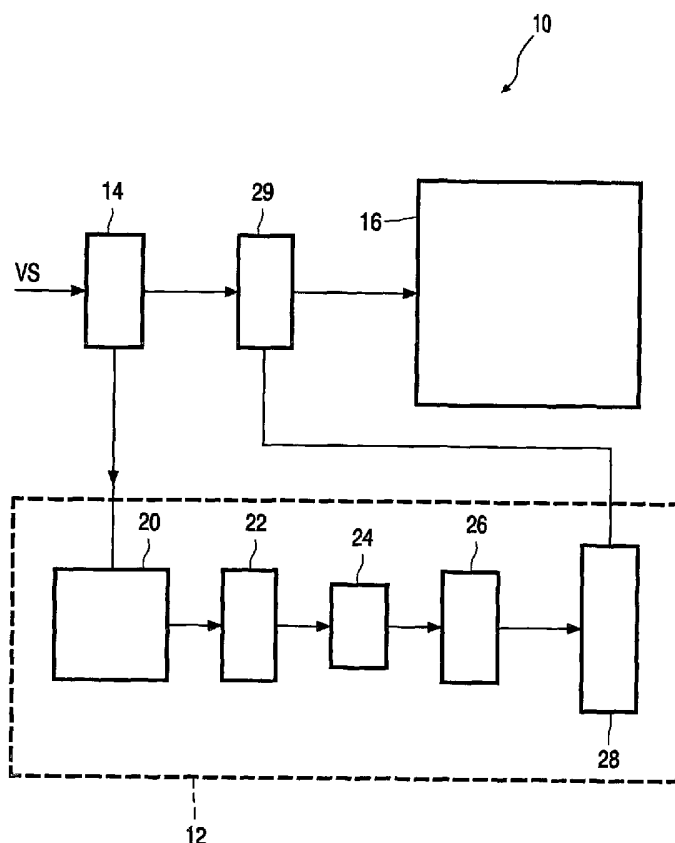
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(54) Title: METHOD AND APPARATUS FOR DISCRIMINATING BETWEEN DIFFERENT REGIONS OF AN IMAGE



(57) Abstract: The invention provides for a method of, and related apparatus for discriminating between synthetic and natural regions of an image composed of a matrix of rows and columns of pixels. The method comprises the steps of: dividing a matrix of luminance values of the pixels of the image into blocks, the blocks representing a block map identifying whether the blocks are of a natural image type or a synthetic image type by analysis of a gradient matrix (G) of luminance gradients of the luminance values in the block and clustering blocks of a same image type into respective natural and synthetic regions of the image. The step of identifying whether the blocks are of the natural image type or the synthetic image type comprises the step of calculating the gradient matrix (G) within each block on the basis of a first order difference value of the luminance values L of the pixels in a row and a column direction of the block.



ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK,
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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 G06K9/20 H04N1/40

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 7 G06K H04N G06T

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

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

EPO-Internal, WPI Data, PAJ, IBM-TDB, INSPEC, COMPENDEX

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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Y	abstract	2, 7
A	column 4, line 53 - line 58 column 6, line 60 - line 65 column 9, line 55 - column 15, line 51 figures 5B, 7	3-6, 8-14
Y	J.R. PARKER: "Algorithms for Image Processing and Computer Vision" 1997, JOHN WILEY & SONS, NEW YORK XP002251276 Chapter 1.2, in particular section "Template-Based Edge Detection"	2
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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INTERNATIONAL SEARCH REPORT

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