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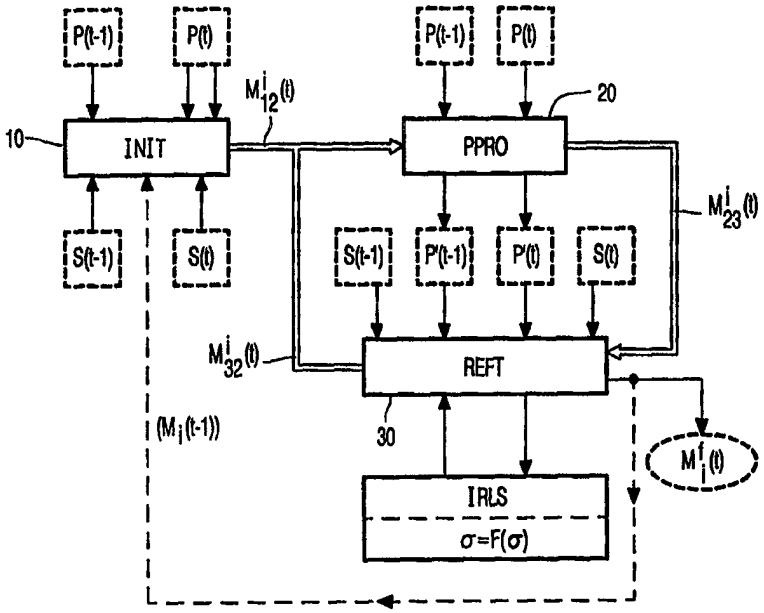
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(54) Title: METHOD OF ESTIMATION OF MOTION BETWEEN IMAGES




(57) Abstract

The invention relates to a method and device for estimating motion between images forming a sequence of segmented images or partitions composed of I regions $R_i$ identified by labels. The method comprises a step of initializing motion parameters of each region $R_i$, an intermediate processing step of the images on which the estimation of the motion is performed, and an iterative refining step for the definitive determination of said motion parameters in the form of a vector (Dx, Dy) for all the pixels of each of the regions $R_i$. This refining step, including a minimizing operation of the prediction errors over each object by means of the minimization of an associated function, allows to select the most representative points and reject the others as outliers. Application: very low bitrate coding, multimedia applications.

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# INTERNATIONAL SEARCH REPORT

International application No.
PCT/IB 98/00424

A. CLASSIFICATION OF SUBJECT MATTER

IPC6: H04N 7/26, H04N 7/36, G06T 7/20
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)

IPC6: H04N, G06T

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

SE,DK,FI,NO classes as above

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

WPIL, EDOC, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|---|---|---|
| X | Signal Processing Image Communication, Volume 7, No 1, March 1995, J-L Dugelay et al, "Differential methods for the identification of 2D and 3D motion models in image sequences" page 107 - page 108; page 115 | 1-3,5-7 |
| A | -- | 4 |
| P,X | EP 0771115 A1 (PHILIPS ELECTRONICS N.V.), 2 May 1997 (02.05.97), see the whole document | 1-3,5-7 |
| | -- | |
| A | EP 0691789 A2 (AT&T CORP), 10 January 1996 (10.01.96), see the whole document | 1-7 |
| | -- | |
| | -------- | |

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

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| 16 October 1998 | 20 -10- 1998 |
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# INTERNATIONAL SEARCH REPORT

Information on patent family members

27/07/98

International application No.
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|---|---|---|---|
| EP 0771115 A1 | 02/05/97 | JP 9182086 A | 11/07/97 |
| EP 0691789 A2 | 10/01/96 | CA 2149683 A | 07/01/96 |
| | | JP 8214316 A | 20/08/96 |
| | | US 5594504 A | 14/01/97 |