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(54) **MOTION VECTOR PREDICTIVE ENCODING METHOD, MOTION VECTOR DECODING METHOD, PREDICTIVE ENCODING APPARATUS AND DECODING APPARATUS, AND STORAGE MEDIA STORING MOTION VECTOR PREDICTIVE ENCODING AND DECODING PROGRAMS**

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(75) Inventors: **Atsushi Shimizu**, Tokyo (JP); **Hirohisa Jozawa**, Tokyo (JP); **Kazuto Kamikura**, Tokyo (JP); **Hiroshi Watanabe**, Tokyo (JP); **Atsushi Sagata**, Tokyo (JP); **Seishi Takamura**, Tokyo (JP)

(57) **ABSTRACT**

A motion vector predictive encoding method, a motion vector decoding method, a predictive encoding apparatus, a decoding apparatuses, and storage media storing motion vector predictive encoding and decoding programs are provided, thereby reducing the amount of generated code with respect to the motion vector, and improving the efficiency of the motion-vector prediction. If the motion-compensating mode of the target small block to be encoded is the global motion compensation, the encoding mode of an already-encoded small block is the interframe coding mode, and the motion-compensating mode of the already-encoded small block is the global motion compensation, then the motion vector of the translational motion model is determined for each pixel of the already-encoded small block, based on the global motion vector (steps S1-S5). Next, the representative motion vector is calculated as the predicted vector, based on the motion vector of each pixel of the already-encoded small block (step S6). Finally, the prediction error is calculated for each component of the motion vector and each prediction error is encoded (steps S7 and S8).

Correspondence Address:
PENNIE AND EDMONDS
1155 AVENUE OF THE AMERICAS
NEW YORK, NY 100362711

(73) Assignee: **Nippon Telegraph and Telephone Corporation**, Tokyo (JP)

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Related U.S. Application Data

(63) Continuation of application No. 09/254,116, filed on Feb. 25, 1999, filed as 371 of international application No. PCT/JP98/02839, filed on Jun. 25, 1998.

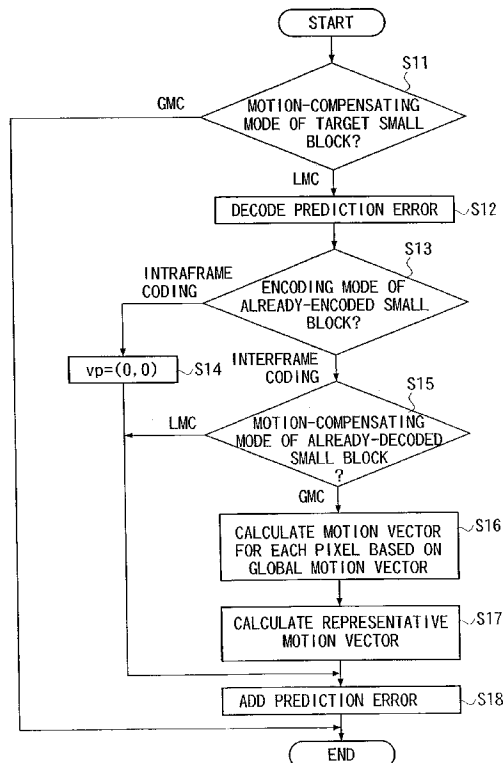


FIG. 1

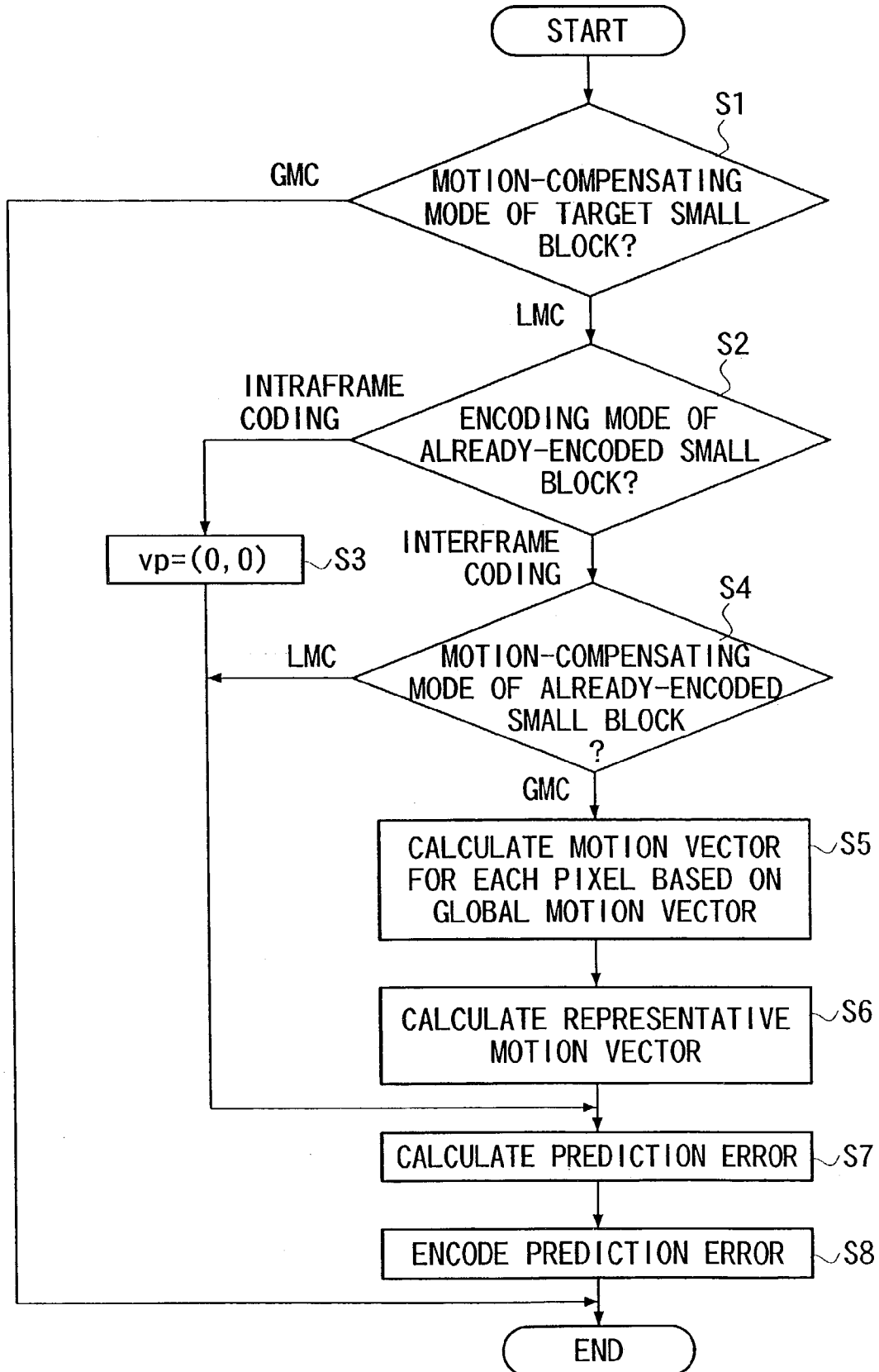


FIG. 2

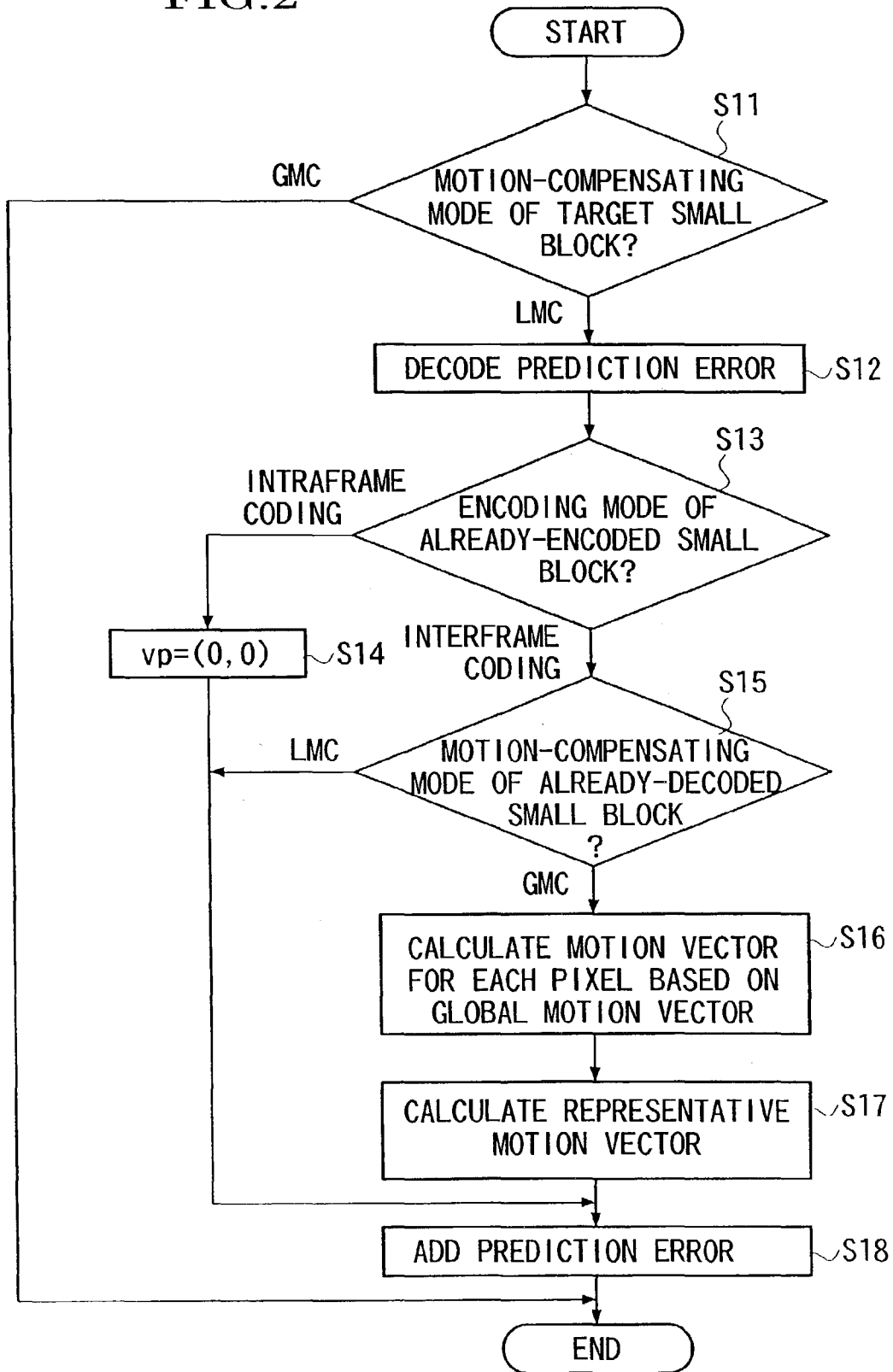
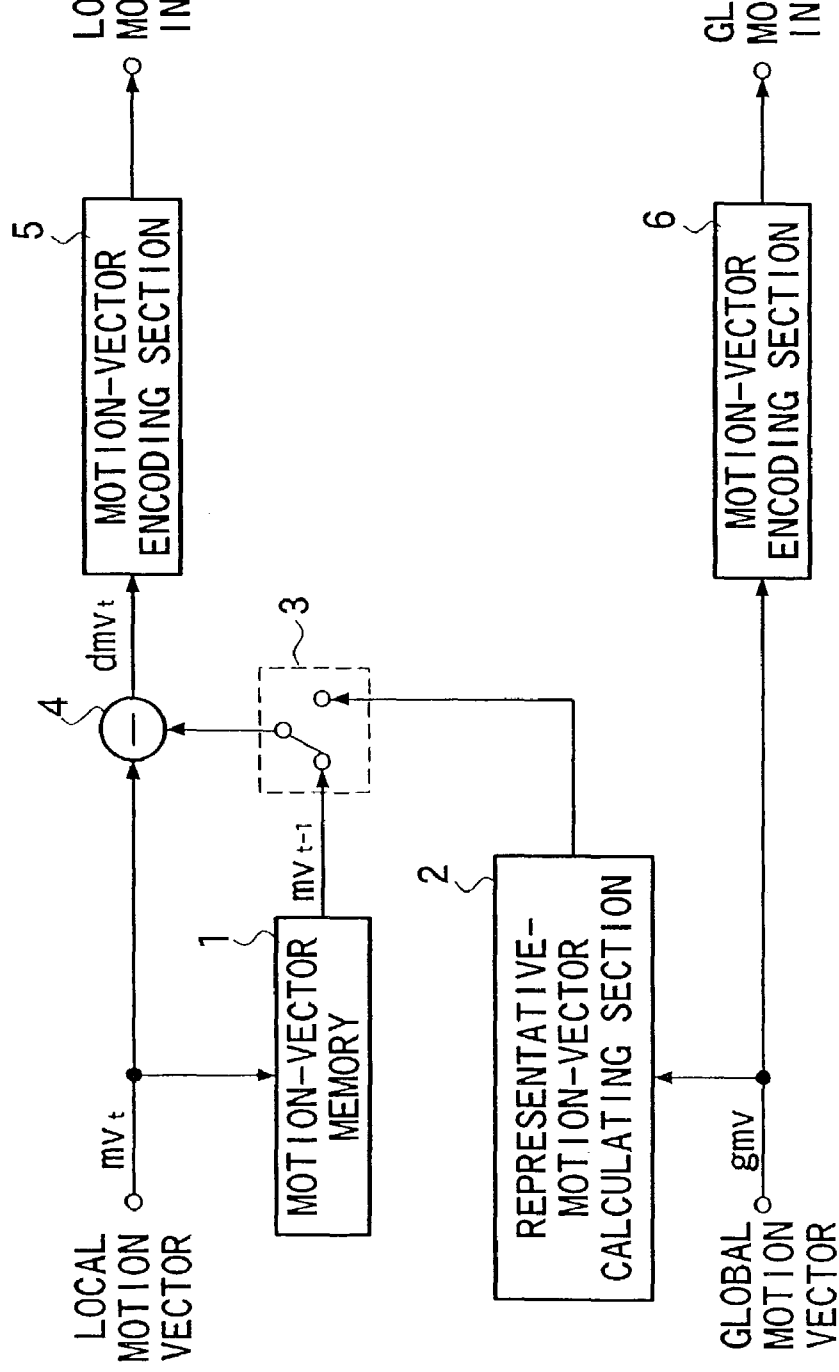


FIG. 3



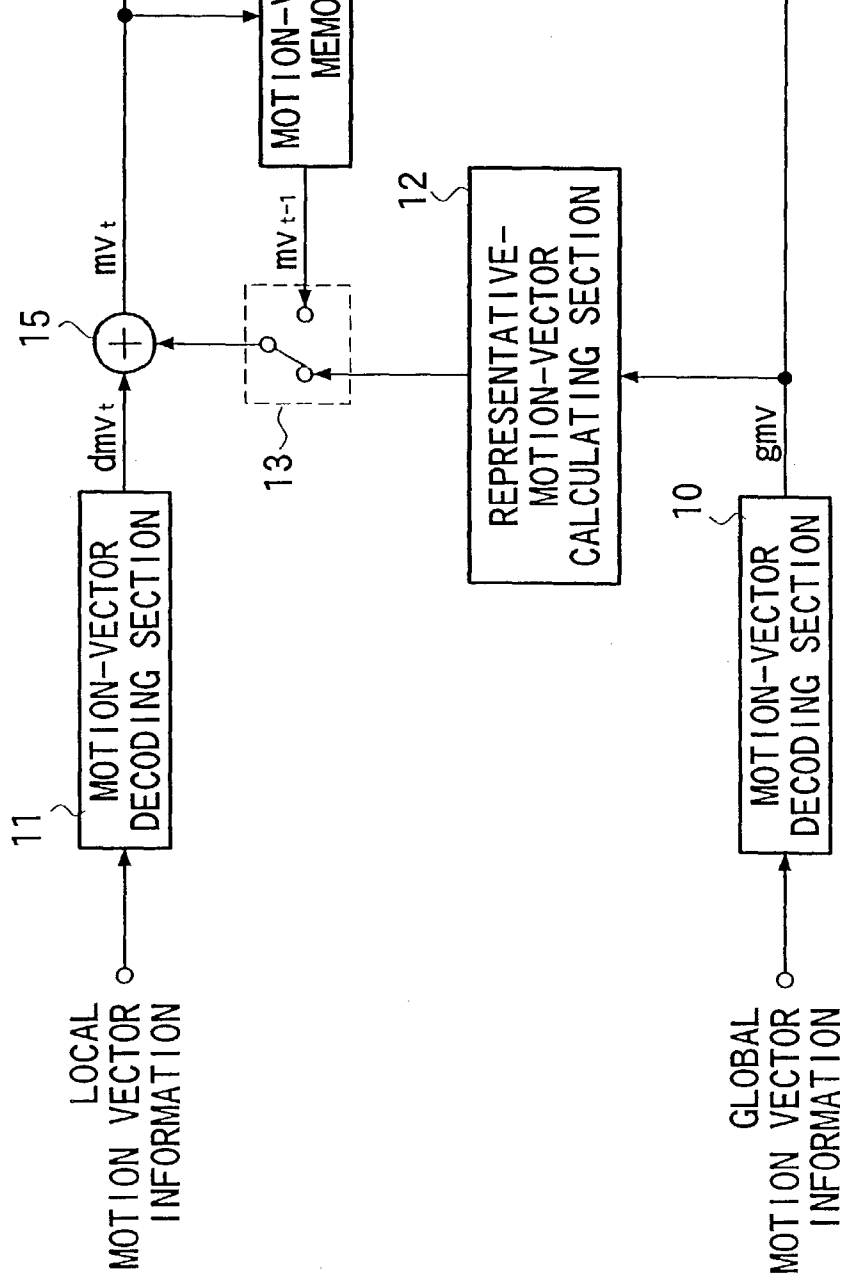


FIG. 4

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