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Tasaka et al.

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(54) **INTRA PREDICTION APPARATUS**

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(51) **Int. Cl.**

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H04N 11/02 (2006.01)
H04N 11/04 (2006.01)
H04N 9/12 (2006.01)
G06K 9/46 (2006.01)

(52) **U.S. Cl.** **375/240.16; 375/240.08; 375/240.24; 375/240.26; 382/236; 348/392**

(58) **Field of Classification Search** **375/240.16, 375/240.26, 240.24, 240.08; 382/236; 348/392**
See application file for complete search history.

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Primary Examiner — King Poon

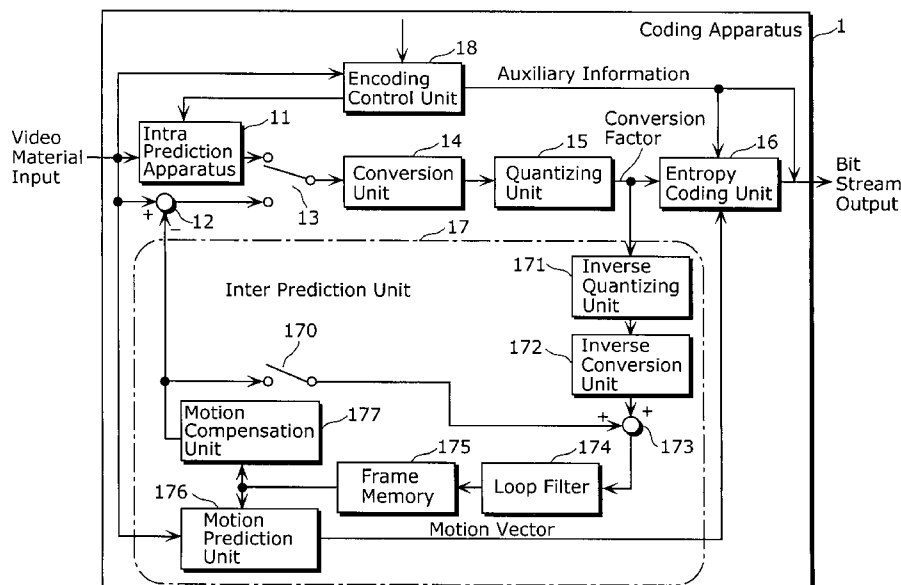
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(57) **ABSTRACT**

An intra prediction apparatus includes: a candidate narrowing-down unit which narrows down, from a plurality of intra prediction directions, an intra prediction direction candidate which is applied to a block of multiple pixels that constitutes a video in accordance with a characteristic of the video; and an intra prediction execution unit which executes intra prediction in the intra prediction direction narrowed down by said candidate narrowing-down unit. Through this, computational load can be lightened while contributing to improvement in picture quality and encoding efficiency.

24 Claims, 15 Drawing Sheets



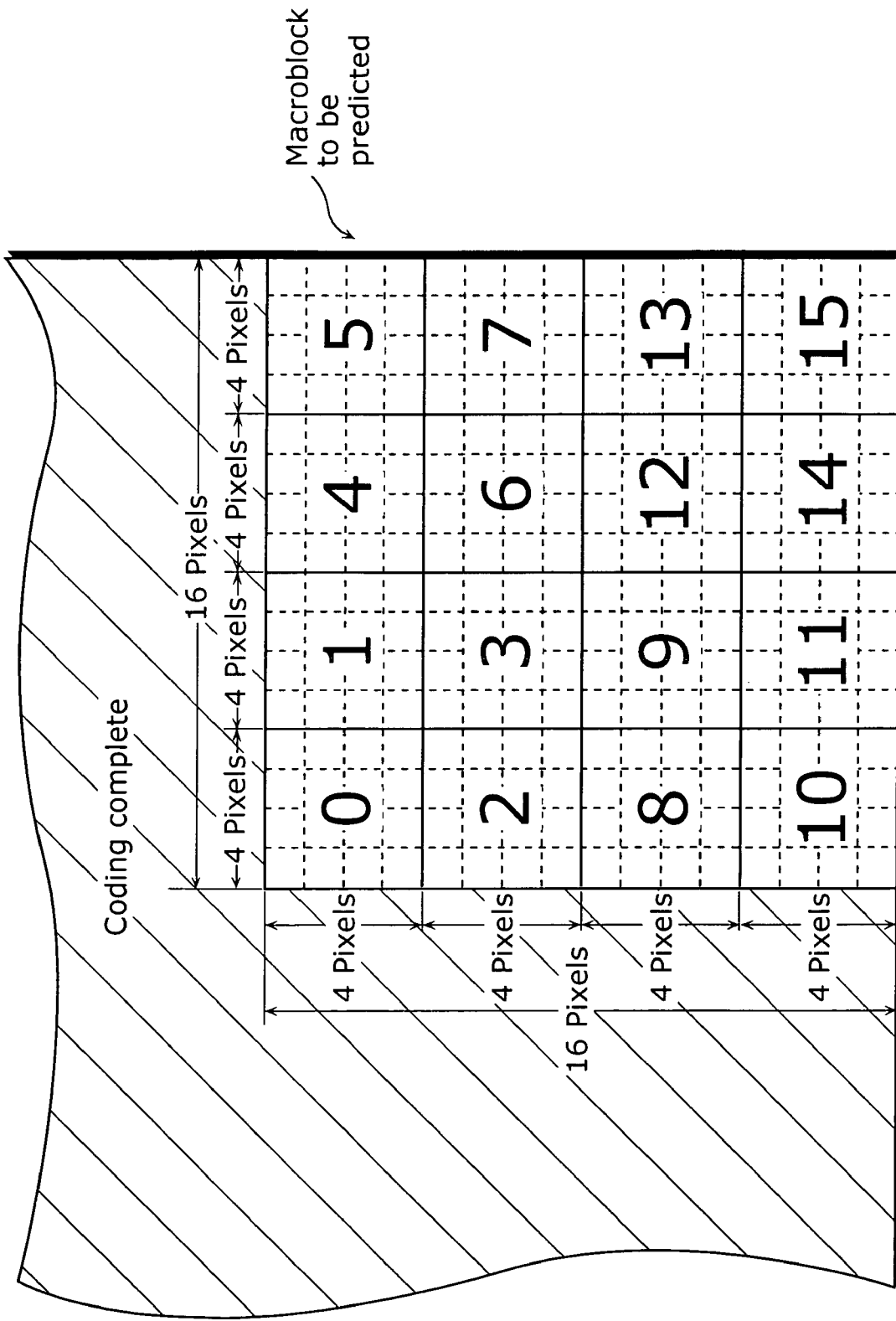


FIG. 1

FIG. 2

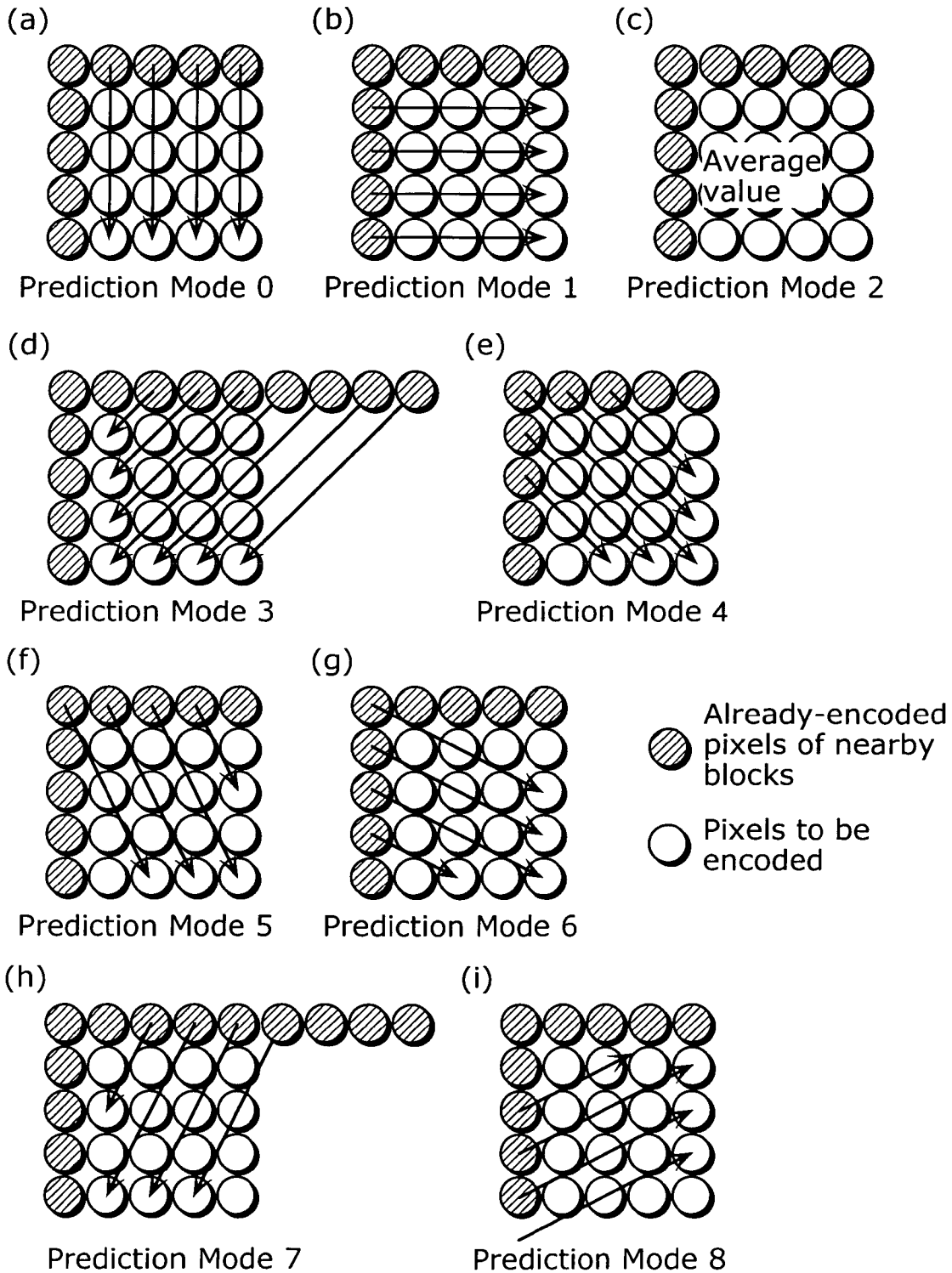


FIG. 3

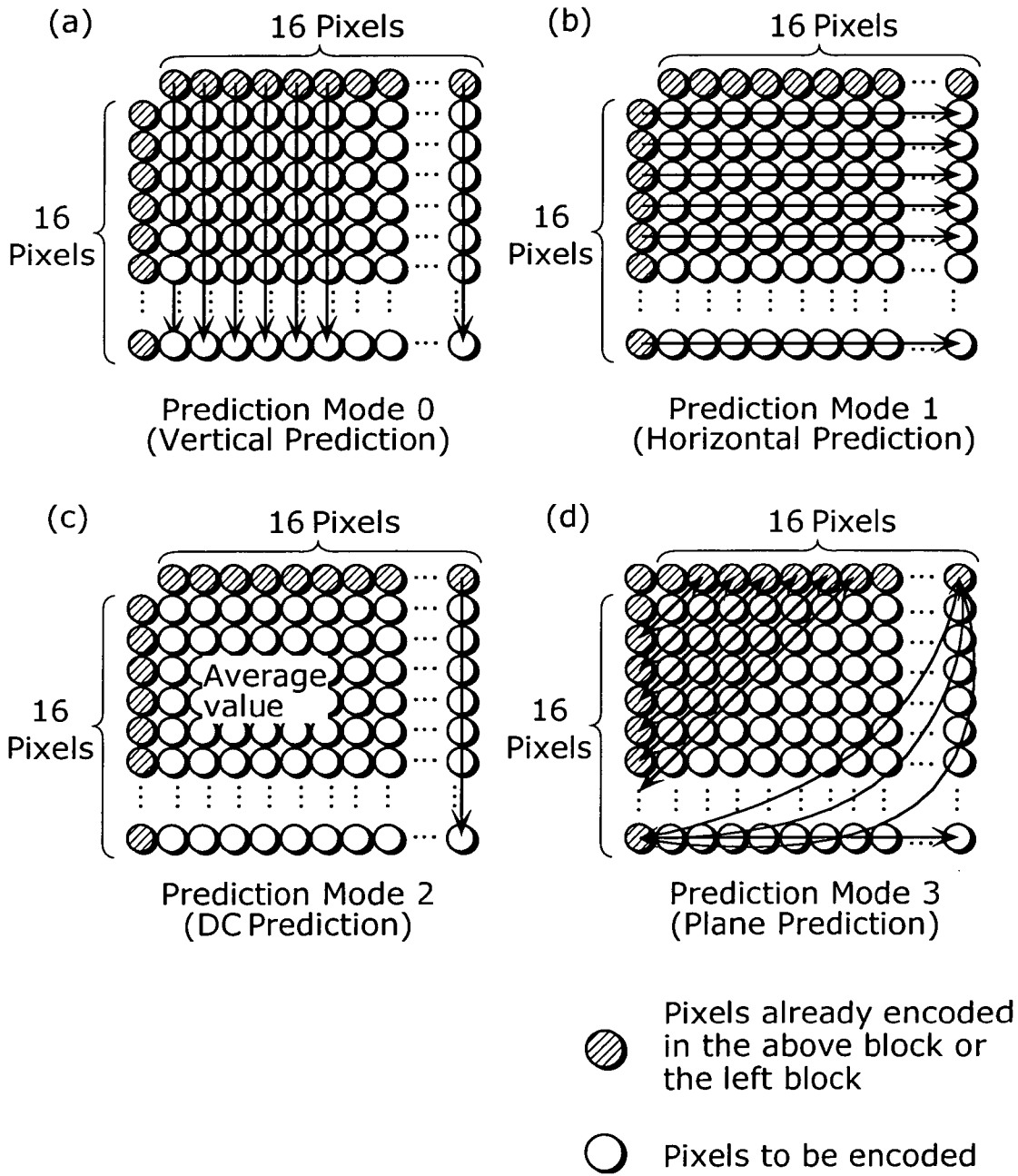
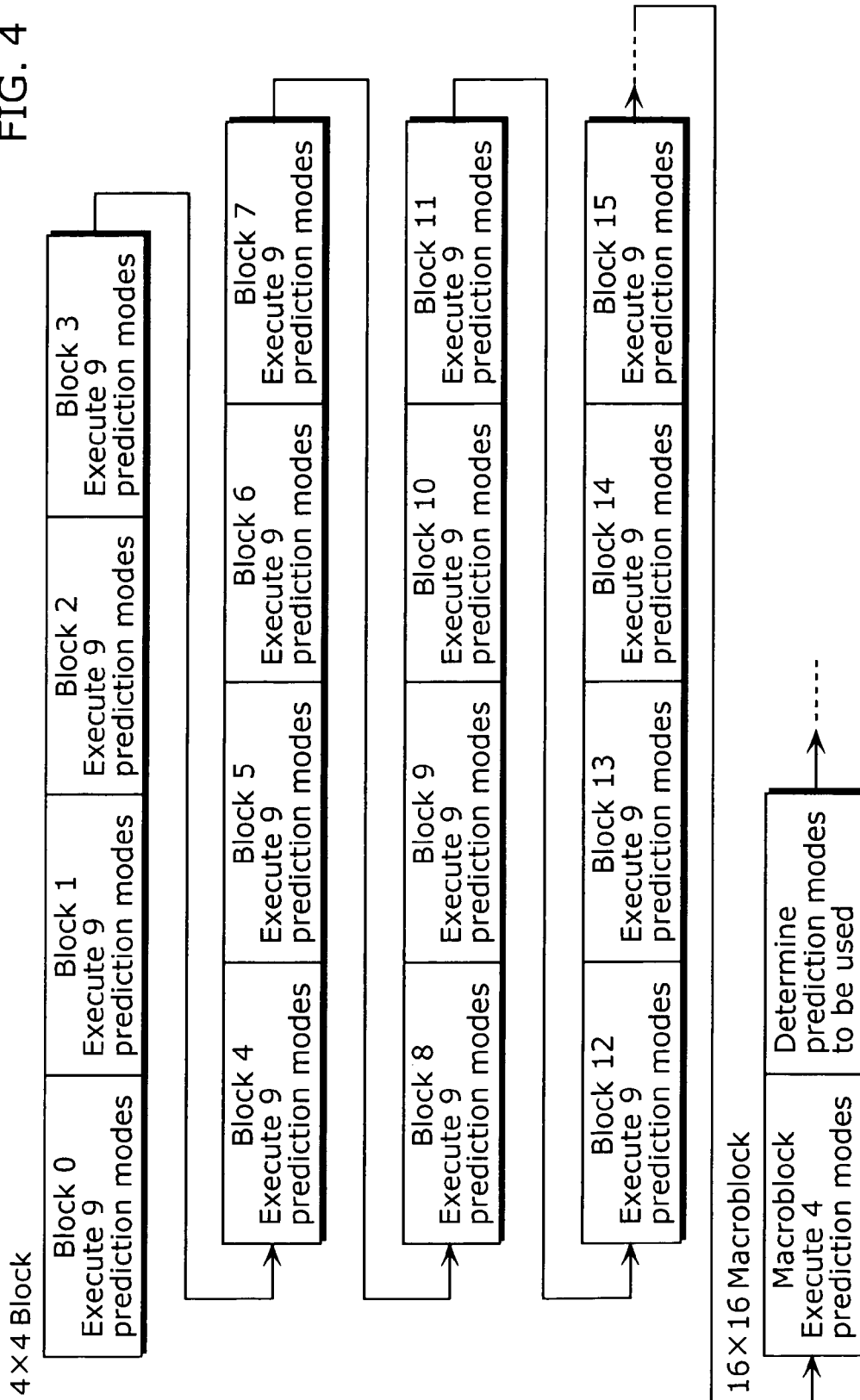


FIG. 4



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