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Haskell et al.

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(54) **USING ORDER VALUE FOR PROCESSING A VIDEO PICTURE**

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(51) **Int. Cl.**
H04B 1/66 (2006.01)

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(58) **Field of Classification Search** 375/240.23, 375/240.16, 240.12, 240.26, 240.01; 382/238, 382/246, 235, 245

See application file for complete search history.

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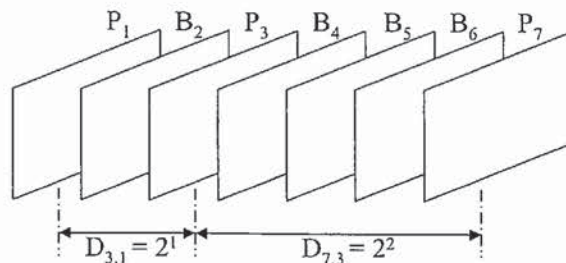
(Continued)

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(57) **ABSTRACT**

A method and apparatus for variable accuracy inter-picture timing specification for digital video encoding is disclosed. Specifically, the present invention discloses a system that allows the relative timing of nearby video pictures to be encoded in a very efficient manner. In one embodiment, the display time difference between a current video picture and a nearby video picture is determined. The display time difference is then encoded into a digital representation of the video picture. In a preferred embodiment, the nearby video picture is the most recently transmitted stored picture. For coding efficiency, the display time difference may be encoded using a variable length coding system or arithmetic coding. In an alternate embodiment, the display time difference is encoded as a power of two to reduce the number of bits transmitted.

18 Claims, 4 Drawing Sheets



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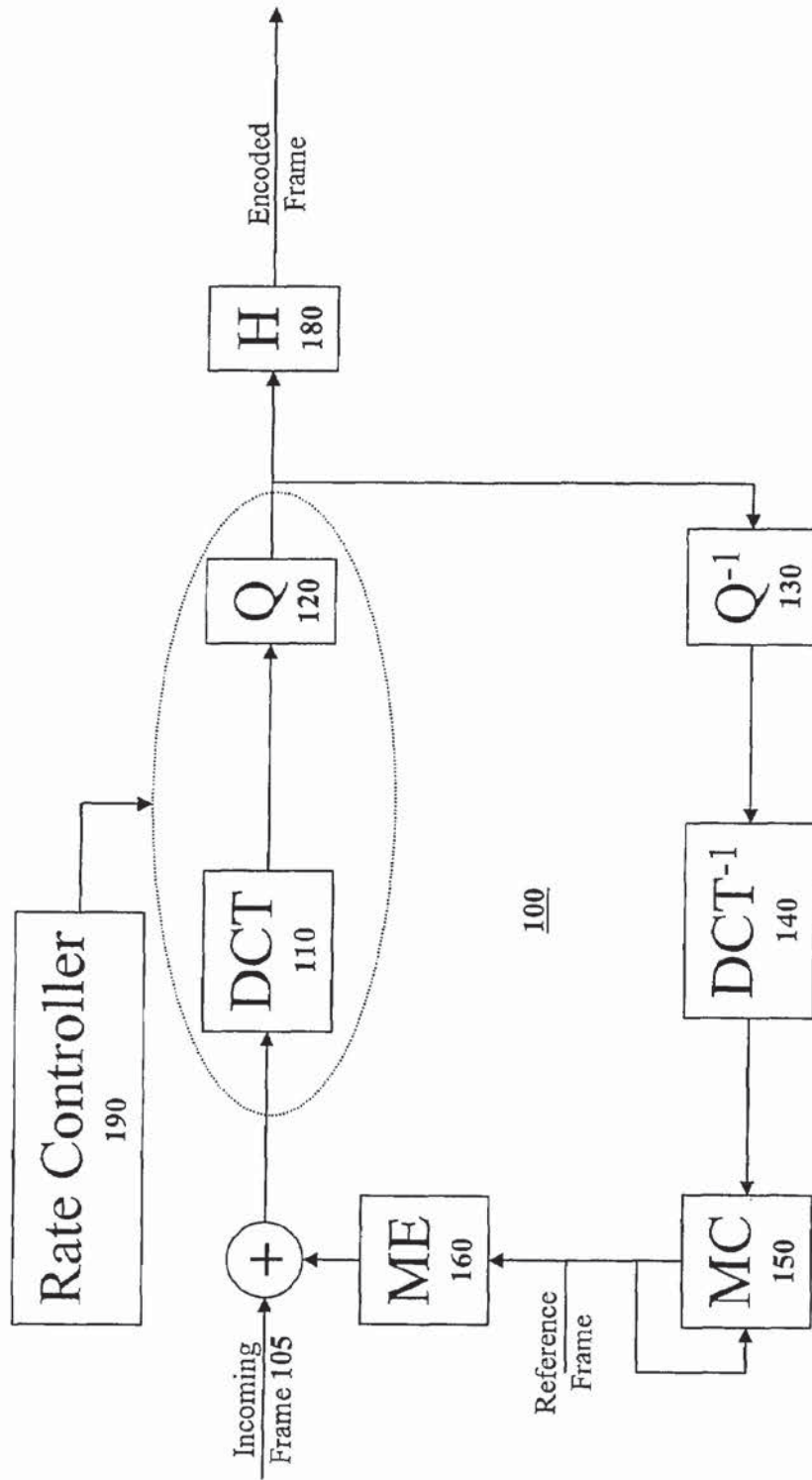


Figure 1

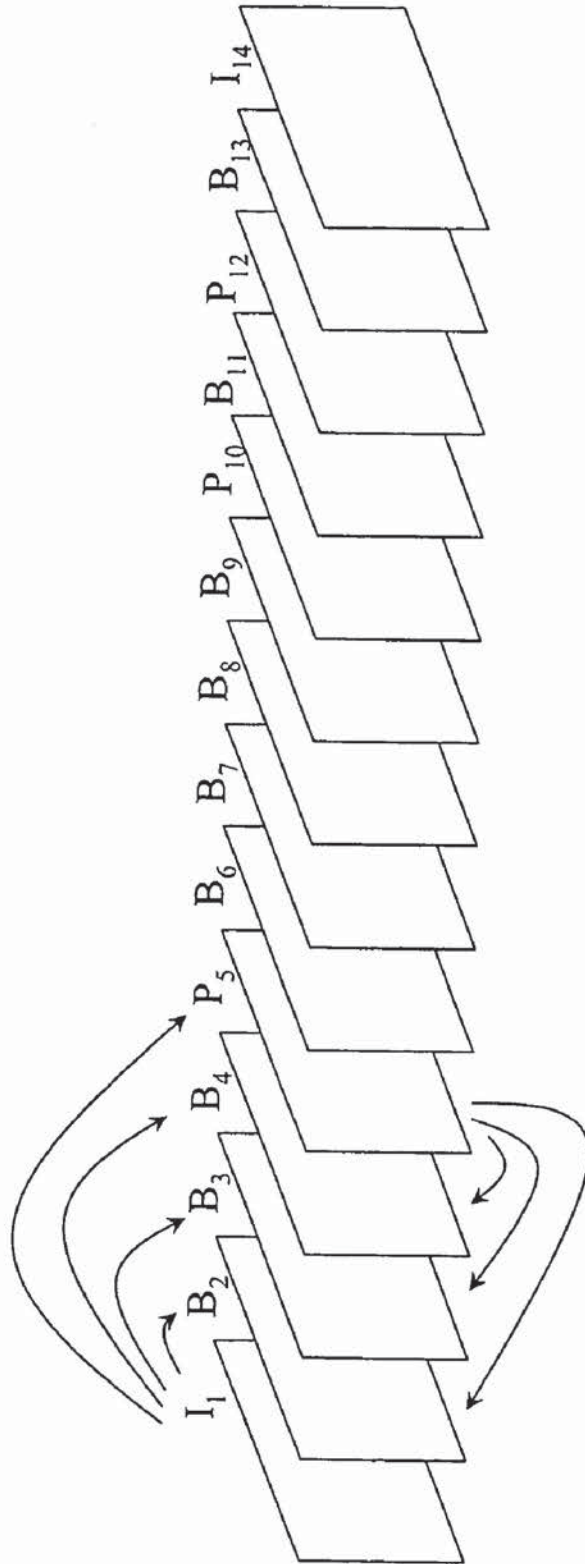


Figure 2

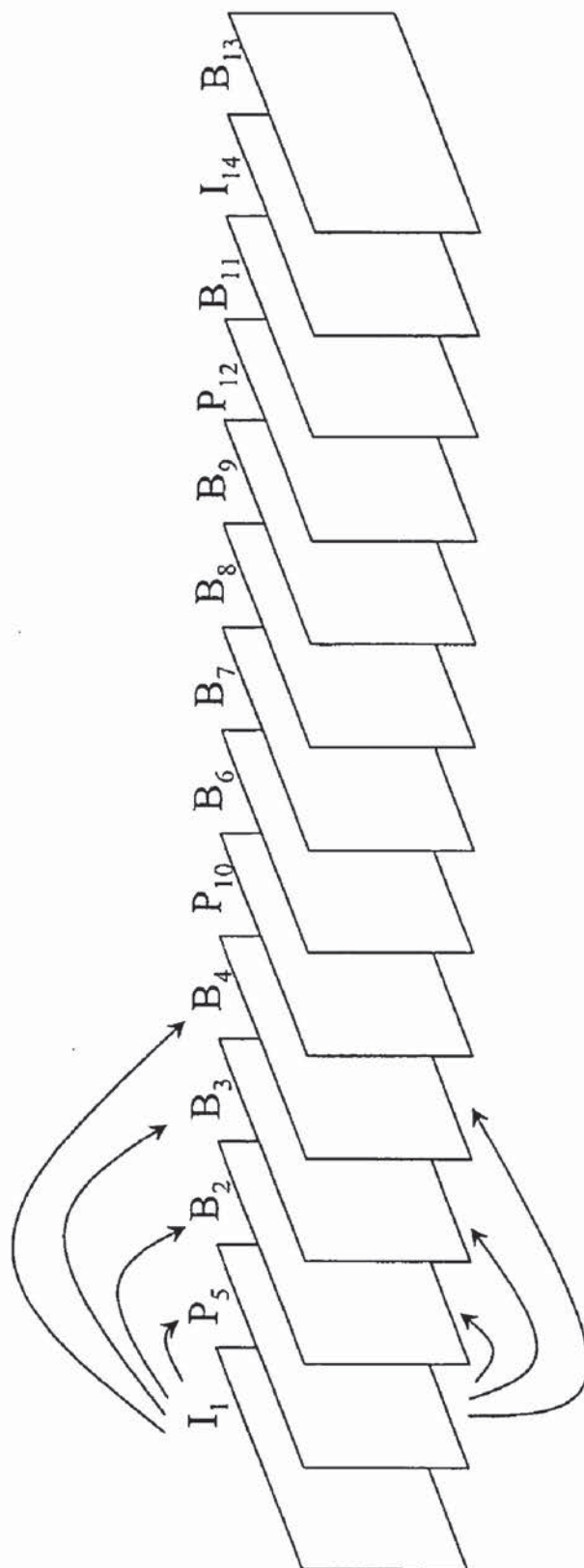


Figure 3

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