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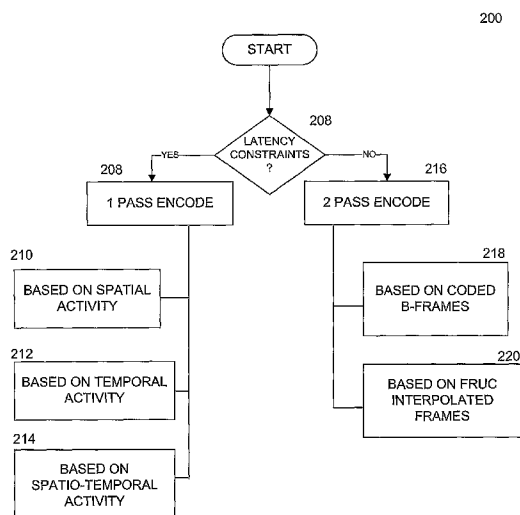
- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
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(54) Title: METHOD AND APPARATUS FOR ENCODER ASSISTED-FRAME RATE UP CONVERSION (EA-FRUC) FOR VIDEO COMPRESSION



(57) Abstract: An Encoder Assisted Frame Rate Up Conversion (EA-FRUC) system that utilizes video coding and pre-processing operations at the video encoder to exploit the FRUC processing that will occur in the decoder in order to improve compression efficiency and reconstructed video quality is disclosed. One operation of the EA-FRUC system involves determining whether to encode a frame in a sequence of frames of a video content by determining a spatial activity in a frame of the sequence of frames; determining a temporal activity in the frame; determining a spatio-temporal activity in the frame based on the determined spatial activity and the determined temporal activity; determining a level of a redundancy in the source frame based on at least one of the determined spatial activity, the determined temporal activity, and the determined spatio-temporal activity; and, encoding the non-redundant information in the frame if the determined redundancy is within predetermined thresholds.

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