

Abstract

An image processing device includes a frame buffer compressor, which is configured to: (i) compress source data into compressed data having CRC bits appended thereto, and (ii) decompress the compressed data into output data and use the CRC bits to check for errors in the output data. A multimedia device is provided, which is configured to generate the source data in response to raw data. A memory device is provided, which is configured to store the compressed data. The frame buffer compressor may include an encoder configured to compress the source data into the compressed data with the CRC bits appended thereto, and a decoder configured to decompress the compressed data into the output data. The encoder may include a prediction module, which is configured to generate prediction data including reference data and residual data, from the source data.

FIG. 3