

ABSTRACT

A VIDEO PROCESSOR TRAINING METHOD, A VIDEO PROCESSOR TRAINING DEVICE, A VIDEO PROCESSING DEVICE AND A VIDEO PROCESSING METHOD

The present invention provides a video processor training method which involves: inputting a decoded video into a video processor as a training sample; processing the decoded video and outputting an expected difference by the video processor; determining a loss function according to the difference between the expected difference and an ideal difference; and adjusting the parameters of the video processor according to the value of the loss function to obtain a trained video processor. Using the training method described in the present application, an expected difference is output from the video processor and the loss function is determined by comparing the expected difference and an ideal difference, greatly reducing the data size to be processed and improving training efficiency. The video processing method described in the present application is applied to train a video processor through a deep learning network, use the trained video processor to output an expected difference, superimpose the expected difference and the video input, and restore the compressed and decompressed video to the original video, avoiding large motion estimation residuals and coding residuals caused by adopting motion estimation and motion compensation for inter-frame prediction in the prior art and improving the effect of video restoration.

Fig. 1