

IMAGE ATTRIBUTE ALTERING DEVICE AND ELECTRONIC WATERMARK EMBEDDING DEVICE

ABSTRACT

Image attribute detection means (102) for detecting the attribute (attribute 'A') of an input image (101) and image attribute altering means (104) for altering the image attribute in the input image (101) on the basis of the attribute detection result (103) of the input image (101) are provided to output an output image (105) having a new attribute (attribute 'B'). The image attribute detection means (102) includes first DCT means (201) for subjecting the input image (101) to discrete cosine transform to obtain frequency components, second DCT means (201) for subjecting the original image (101) to discrete cosine transform to obtain original frequency components, and means (202) of subtracting the original frequency components from the image frequency components and dividing the subtraction result by the image frequency components to detect the electronic watermark data.

FIG.1.