

CLAIMS

1. A method for processing an image, the method comprising:
removing an interference factor from an original image by using a plurality of methods, to generate a plurality of sample images (S101);
segmenting each sample image into a plurality of sample sub-images based on a predetermined segmentation rule (S102);
determining a target sub-image from sample sub-images that have the same attributes (S103);
and
combining a plurality of target sub-images with different attributes into a target image (S104).
2. The method according to claim 1, wherein determining the target sub-image from sample sub-images that have the same attributes comprises:
determining a mathematical parameter of each sample sub-image (S301);
dividing the sample sub-images that have the same attributes into a plurality of image sets based on the mathematical parameters by using a clustering algorithm, wherein each image set comprises one or more sample sub-images (S302); and
determining the target sub-image from an image set that comprises the maximum number of sample sub-images (S303).
3. The method according to claim 2, wherein determining the mathematical parameter of each sample sub-image comprises:
generating an RGB vector for the sample sub-image based on RGB information of each pixel in the sample sub-image to use the RGB vector as the mathematical parameter of the sample sub-image.
4. The method according to claim 2, wherein determining the target sub-image from the image set that comprises the maximum number of sample sub-images comprises:
determining, as the target sub-image from the image set that comprises the maximum number of sample sub-images, a sample sub-image that corresponds to the center point in the image set generated after clustering.

5. The method according to claim 2, wherein the clustering algorithm comprises at least one of a Density-Based Spatial Clustering of Applications with Noise (DBSCAN) clustering algorithm and a K-means clustering algorithm.

6. The method according to any one of claims 1 to 4, wherein combining the plurality of target sub-images with different attributes into a target image comprises:

combining the plurality of target sub-images with different attributes into the target image based on location coordinates of each pixel in the target sub-image.

7. The method according to any one of claims 1 to 4, wherein the interference factor comprises an interference pattern or a watermark.

8. The method according to any one of claims 1 to 4, wherein the predetermined segmentation rule comprises segmenting each sample image into a predetermined natural number of sample sub-images.

9. The method according to any one of claims 1 to 4, further comprising restoring a real image based on the target image.

10. A device for image processing, the device comprising a plurality of modules configured to perform the method according to any one of claims 1 to 9.