

CLAIMS

1. A method for updating a database, comprising:

searching for at least two reference image templates matching an image of a target object from among a plurality of reference image templates comprised in a first database;

performing filtering processing on the at least two reference image templates to obtain a filtered result, wherein the filtered result comprises at least one reference image template of the at least two reference image templates; ~~and~~

performing merging processing on the at least one reference image template comprised in the filtered result to obtain a merged image template; and

replacing the at least one reference image template stored in the first database with the merged image template.

2. The method of claim 1, wherein performing the filtering processing on the at least two reference image templates to obtain the filtered result comprises:

determining a first reference image template from among the at least two reference image templates that has a greatest similarity with the image of the target object; and

performing the filtering processing on the at least two reference image templates based on the first reference image template to obtain the filtered result.

3. The method of claim 2, wherein performing the filtering processing on the at least two reference image templates based on the first reference image template to obtain the filtered result comprises:

adding one or more of at least one second reference image template, which have a similarity with the first reference image template reaching a third similarity threshold, into the filtered result, wherein the at least one second reference image template is one or more of the at least two reference image templates other than the first reference image template.

4. The method of claim 2, wherein performing the filtering processing on the at least two reference image templates based on the first reference image template to obtain the filtered result comprises:

obtaining a first updated reference feature based on the first reference image template and the image feature of the image of target object; and

performing the filtering processing on the at least one second reference image template based on similarities between the reference features comprised in the at least one second reference image template and the first updated reference feature to obtain the filtered result, wherein the at least one second reference image template is one or more of the at least two reference image templates other than the first reference image template.

5. The method of claim 4, wherein performing the filtering processing on the at least one second reference image template based on the similarities between the reference features comprised in the at least one second reference image template and the first updated reference feature to obtain the filtered result comprises:

adding one or more of the at least one second reference image templates, whose reference features have respective similarities with the first updated reference feature satisfying a first condition, into the filtered result,

wherein the first condition comprises: the similarities with the first updated reference feature are greater than or equal to a third similarity threshold.

6. The method of claim 4 or 5, wherein obtaining the first updated reference feature based on the first reference image template and the image feature of the image of target object comprises:

obtaining at least two pieces of first feature data corresponding to the first reference image template, wherein the reference feature comprised in the first reference image template is obtained based on the at least two pieces of first feature data; and

determining the first updated reference feature based on the image feature of the

image and the at least two pieces of first feature data.

7. The method of claim 6, wherein determining the first updated reference feature based on the image feature of the image and the at least two pieces of first feature data comprises:

selecting at least two first updated features from among the image feature of the image and the at least two pieces of first feature data; and

obtaining the first updated reference feature based on the at least two first updated features.

8. The method of claim 7, wherein selecting the at least two first updated features from among the image feature of the image and the at least two pieces of first feature data comprises:

performing the averaging processing on the image feature and the at least two pieces of first feature data to obtain a first average feature; and

selecting, based on a distance between the image feature and the first average feature as well as a distance between each of the at least two pieces of first feature data and the first average feature, the at least two first updated features from among the image feature and the at least two pieces of first feature data.

9. The method of any one of claims 1 to 8, wherein performing the merging processing on the at least one reference image template comprised in the filtered result to obtain the merged image template comprises:

obtaining at least two pieces of second feature data corresponding to each of the at least one reference image template comprised in the filtered result, wherein a reference feature comprised in each reference image template is obtained based on the at least two pieces of second feature data corresponding to the each reference image template; and

obtaining a second updated reference feature based on the at least two pieces of second feature data corresponding to each of the at least one reference image template,

wherein the merged image template comprises the second updated reference feature.

10. The method of claim 9, wherein obtaining the second updated reference feature based on the at least two pieces of second feature data corresponding to each of the at least one reference image template comprises:

selecting the at least two second updated features from among a plurality pieces of second feature data corresponding to the at least one reference image template; and

obtaining the second updated reference feature based on the at least two second updated features.

~~11. The method of any one of claims 1 to 10, further comprising:~~

~~replacing the at least one reference image template stored in the first database with the merged image template.~~

~~12~~11. The method of any one of claims 1 to ~~11~~10, wherein before performing the filtering processing on the at least two reference image templates to obtain the filtered result, the method further comprises:

determining whether similarities between the at least two reference image templates and the image satisfy a filtering condition, wherein the filtering condition comprises: a maximum of the similarities between the at least two reference image templates and the image is greater than or equal to a second similarity threshold; and

wherein performing the filtering processing on the at least two reference image templates to obtain the filtered result comprises:

in response to that the similarities between the at least two reference image templates and the image satisfy the filtering condition, performing the filtering processing on the at least two reference image templates to obtain the filtered result.

~~13~~12. The method of claim ~~12~~11, further comprising: in response to that the similarities between the at least two reference image templates and the image do not satisfy the filtering condition, adding a reference image template corresponding to the image into

the first database.

~~14~~13. A device for updating a database, comprising:

a searching unit, configured to search for at least two reference image templates matching an image of a target object from among a plurality of reference image templates comprised in a first database;

a filtering unit, configured to perform filtering processing on the at least two reference image templates to obtain a filtered result, wherein the filtered result comprises at least one reference image template of the at least two reference image templates; ~~and~~

a merging unit, configured to perform merging processing on the at least one reference image template comprised in the filtered result to obtain a merged image template; and

a replacing unit, configured to replace the at least one reference image template stored in the first database with the merged image template.

~~15~~14. The device of claim ~~14~~13, wherein the filtering unit comprises:

a maximum-similarity module, configured to determine a first reference image template from among the at least two reference image templates that has a greatest similarity with the image of the target object; and

a filtering processing module, configured to perform the filtering processing on the at least two reference image templates based on the first reference image template to obtain the filtered result.

~~16~~15. The device of claim ~~15~~14, wherein the filtering processing module is configured to add one or more of at least one second reference image template, which have a similarity with the first reference image template reaching a third similarity threshold, into the filtered result, wherein the at least one second reference image template is one or more of the at least two reference image templates other than the first reference image template.

~~17~~16. The device of claim ~~15~~14, wherein the filtering processing module is configured to:

obtain a first updated reference feature based on the first reference image template and the image feature of the image of target object; and perform the filtering processing on the at least one second reference image template based on similarities between the reference features comprised in the at least one second reference image template and the first updated reference feature to obtain the filtered result, wherein the at least one second reference image template is one or more of the at least two reference image templates other than the first reference image template.

~~18~~17. An electronic device, comprising:

a memory, configured to store executable instructions;

a processor, configured to communicate with the memory to perform the executable instructions to perform operations of a method for updating a database, the method comprising:

searching for at least two reference image templates matching an image of a target object from among a plurality of reference image templates comprised in a first database;

performing filtering processing on the at least two reference image templates to obtain a filtered result, wherein the filtered result comprises at least one reference image template of the at least two reference image templates; ~~and~~

performing merging processing on the at least one reference image template comprised in the filtered result to obtain a merged image template; and

replacing the at least one reference image template stored in the first database with the merged image template.

~~19~~18. A computer-readable storage medium, configured to store computer-readable instructions that perform operations of the method for updating a database according to any one of claims 1 to ~~13~~12 when executed.

~~20~~19. A computer program product comprising computer-readable codes that, when executed on a device, cause a processor in the device to perform instructions for

implementing the method of any one of claims 1 to ~~13~~12.