

CLAIMS

1. A method for identity verification, comprising:
 - obtaining a first image of a document, wherein the first image contains a first face image;
 - obtaining a second image containing a face of a to-be-verified person;
 - performing face comparison on the first image and the second image to obtain a first comparison result; and
 - obtaining an identity verification result according to the first comparison result.
2. The method according to claim 1, wherein before the step of obtaining a first image of a document, the method further comprises:
 - obtaining attributes of the document, the attributes comprising a built-in chip document and a non-built-in chip document; and
 - obtaining the first image of the document when the document is a non-built-in chip document, wherein the first image contains the first face image.
3. The method according to claim 2, further comprising:
 - performing authenticity recognition processing on the document when the document is a built-in chip document; and
 - obtaining the second image containing the face of the to-be-verified person when the authenticity recognition processing result on the document indicates that the document is an authentic document.
4. The method according to claim 3, wherein the step performing authenticity recognition processing on the document comprises:
 - obtaining a third image of the document, wherein the third image contains an external face image;
 - obtaining chip information of the document, wherein the chip information contains a preset second face image;
 - comparing the external face image with the second face image to obtain a second comparison result; and
 - determining the authenticity of the document according to the second

comparison result.

5. The method according to any one of claims 1 to 4, wherein the step of performing face comparison on the first image and the second image to obtain a first comparison result comprises:

- performing face feature extraction on the face image in the first image to obtain first face feature data;

- performing face feature extraction on the second image to obtain at least one group of second face feature data; and

- separately comparing the first face feature data with any of the at least one group of second face feature data to obtain a third comparison result.

6. The method according to claim 5, wherein the step of separately comparing the first face feature data with any of the at least one group of second face feature data to obtain a third comparison result comprises:

- separately calculating a first similarity between the first face feature data and any of the at least one group of second face feature data; and

- using the calculated at least one group of first similarities as the third comparison result.

7. The method according to claim 6, wherein the step of obtaining an identity verification result according to the first comparison result comprises:

- determining that identity verification succeeds when any of the at least one group of first similarities is greater than a preset threshold; and

- determining that identity verification fails when the at least one group of first similarities is less than or equal to the preset threshold.

8. The method according to any one of claims 1 to 7, wherein after the step of obtaining an identity verification result according to the first comparison result, the method further comprises:

- displaying the face image in the first image, the second image, and the identity verification result.

9. The method according to any one of claims 1 to 7, wherein before the step of performing face comparison on the first image and the second image to obtain a first

comparison result, the method further comprises:

processing the first image to separate the first face image and/or text part in the first image.

10. The method according to claim 9, wherein before the step of separating the face image and/or text part in the first image, the method further comprises:

determining whether the first image contains a face image; and

if the first image does not contain a face image, prompting a user to relocate the document.

11. The method according to claim 9 or 10, further comprising

determining whether the first image contains a text part; and

performing, if the first image contains a text part, text recognition processing on the text part in the first image to obtain text information in the document.

12. The method according to claim 11, wherein the step of performing text recognition processing on the text part in the first image to obtain text information in the document comprises:

performing feature extraction on the text part in the first image to obtain feature data of the text part;

determining a second similarity between the feature data of the text part and feature data corresponding to a preset text in a preset database;

using the preset text corresponding to the second similarity as a text recognition result when the second similarity is greater than a similarity threshold; and

obtaining the text information in the document according to the text recognition result.

13. The method according to claim 11 or 12, further comprising:

displaying the face image in the first image, the second image, the identity verification result, and the text information in the document.

14. An apparatus for identity verification, comprising:

a first image acquisition unit, configured to obtain a first image of a document, wherein the first image contains a first face image;

a second image acquisition unit, configured to obtain a second image containing

a face of a to-be-verified person;

an image comparison unit, configured to perform face comparison on the first image obtained by the first image acquisition unit and the second image obtained by the second image acquisition unit to obtain a first comparison result; and

an identity verification unit, configured to obtain an identity verification result according to the first comparison result obtained by the image comparison unit.

15. The apparatus according to claim 14, further comprising:

an attribute obtaining unit, configured to obtain attributes of the document, the attributes comprising a built-in chip document and a non-built-in chip document;

the first image acquisition unit is configured to obtain the first image of the document when the document is a non-built-in chip document, wherein the first image contains the first face image.

16. The apparatus according to claim 15, further comprising:

an authenticity recognition unit, configured to perform authenticity recognition processing on the document when the document is a built-in chip document;

the second image acquisition unit is further configured to obtain the second image containing the face of the to-be-verified person when the authenticity recognition processing result of the document indicates that the document is an authentic certificate.

17. The apparatus according to claim 16, wherein the first image acquisition unit is further configured to obtain a third image of the document, wherein the third image contains an external face image;

the apparatus further comprises: a chip recognizer, configured to obtain chip information of the document, wherein the chip information contains a preset second face image;

the authenticity recognition unit is configured to compare the external face image with the second face image to obtain a second comparison result, and determine the authenticity of the document according to the second comparison result.

18. The apparatus according to any one of claims 14 to 17, wherein the image comparison unit is configured to perform face feature extraction on the face image in

the first image to obtain first face feature data, perform face feature extraction on the second image to obtain at least one group of second face feature data, and separately compare the first face feature data with any of the at least one group of second face feature data to obtain a third comparison result, wherein the image comparison unit is configured to separately calculate a first similarity between the first face feature data and any of the at least one group of second face feature data, and use the calculated at least one group of first similarities as the third comparison result.

19. An electronic device, comprising: a processor and a memory configured to store a computer program that can run on the processor, wherein the processor is configured to execute the method for identity verification according to any one of claims 1 to 13 when running the computer program.

20. A computer storage medium, configured to store computer-readable instructions, wherein when the instructions are executed, the method for identity verification according to any one of claims 1 to 13 is implemented.