

What is claimed is:

1. An object recognition system (1), comprising:
 - an information collection module (101) configured to collect information about
5 an object to be inspected, wherein information about the object to be inspected
comprises identity information of the object to be inspected;
 - a first video acquisition module (103) configured to acquire an image of the
object to be inspected, and acquire multiple types of features of the object to be
inspected by using a plurality of recognition methods based on the image of the object
10 to be inspected, wherein the multiple features of the object to be inspected comprise a
face feature, a gait feature, a human body feature, and an iris feature of the object to
be inspected;
 - a storage module (102) configured to store the information about the object to
be inspected in association with the multiple types of features of the object to be
15 inspected;
 - a second video acquisition module (104) configured to track and capture a
suspect object with abnormal behaviour to acquire an image of the suspect object, and
acquire multiple types of features of the suspect object by using the plurality of
recognition methods based on the image of the suspect object, wherein the multiple
20 features of the suspect object comprise a face feature, a gait feature, a human body
feature, and an iris feature of the suspect object; and
 - a recognition module (105) configured to recognize identity information of the
suspect object based on the multiple types of features of the suspect object and the
multiple types of features of the object to be inspected which are stored in association
25 with the information about the object to be inspected in the storage module (102),
wherein the first video acquisition module (103) comprises:
 - an image capture module (1031) configured to acquire the image of the
object to be inspected;
 - an image extraction module (1032) configured to extract a face image,
30 gait images, a human body image, and a human eye image of the object to be
inspected from the image of the object to be inspected;

an image normalization module (1033) configured to normalize the face image, gait images, human body image, and human eye image of the object to be inspected;

5 a feature extraction module (1034) configured to extract a face feature, a gait feature, a human body feature, and an iris feature from the normalized face image, gait images, human body image, and human eye image respectively; and

a serialization module (1035) configured to serialize the extracted face feature, gait feature, human body feature, and iris feature to obtain serialized features of the object to be inspected,

10 wherein the storage module (102) is configured to store information about the object to be inspected in association with the serialized features of the object to be inspected.

15 2. The object recognition system (1) according to claim 1, wherein the information collection module (101) is configured to recognize a mobile phone number of the object to be inspected based on a WiFi probe method.

3. The object recognition system (1) according to claim 1, wherein the recognition module (105) comprises: a pairing module (1051) configured to pair the features of the suspect object acquired by the second video acquisition module with the features of the object to be inspected which are stored in the storage module (102).

4. An object recognition method, comprising:
25 collecting information about an object to be inspected (51), wherein information about the object to be inspected comprises identity information of the object to be inspected;

acquiring an image of the object to be inspected (52), and acquiring multiple types of features of the object to be inspected by using a plurality of recognition methods based on the image of the object to be inspected (53), wherein the multiple features of the object to be inspected comprise a face feature, a gait feature, a human body feature, and an iris feature of the object to be inspected;

storing the information about the object to be inspected in association with the multiple types of features of the object to be inspected (54);

tracking and capturing a suspect object with abnormal behaviour to acquire an image of the suspect object (55), and acquiring multiple types of features of the suspect object by using the plurality of recognition methods based on the image of the suspect object (56), wherein the multiple features of the suspect object comprise a face feature, a gait feature, a human body feature, and an iris feature of the suspect object; and

recognizing identity information of the suspect object based on the multiple types of features of the suspect object and the multiple types of features of the object to be inspected which are stored in association with the information about the object to be inspected (57),

wherein acquiring an image of the object to be inspected (52) and acquiring multiple types of features of the object to be inspected by using a plurality of recognition methods based on the image of the object to be inspected (53) comprises:

acquiring the image of the object to be inspected (531);

extracting a face image, gait images, a human body image, and a human eye image of the object to be inspected from the image of the object to be inspected (532);

normalizing the face image, gait images, human body image, and human eye image of the object to be inspected (533);

extracting a face feature, a gait feature, a human body feature, and an iris feature from the normalized face image, gait images, human body image, and human eye image respectively (534); and

serialize the extracted face feature, gait feature, human body feature, and iris feature to obtain serialized features of the object to be inspected (535),

wherein storing the information about the object to be inspected in association with the multiple types of features of the object to be inspected (54) comprises storing the information about the object to be inspected in association with the serialized features of the object to be inspected.

5. The object recognition method according to claim 4, wherein collecting information about the object to be inspected (51) comprises:

recognizing a mobile phone number of the object to be inspected based on a WiFi probe method (511).

6. The object recognition method according to claim 4 or 5, wherein recognizing
5 identity information of the suspect object based on the acquired multiple types of features of the suspect object and the multiple types of features of the object to be inspected which are stored in association with the information about the object to be inspected (57) comprises:

10 pairing the features of the suspect object with the stored features of the object to be inspected (571).

7. The object recognition method according to claim 6, wherein recognizing
15 identity information of the suspect object based on the acquired multiple types of features of the suspect object and the multiple types of features of the object to be inspected which are stored in association with the information about the object to be inspected (57) further comprises:

20 calculating a similarity between paired features, and determining M features of the object to be inspected with similarities higher than any other features as the features of the suspect object (572, 573).

8. The object recognition method according to one of claims 4 to 6, wherein
25 recognizing identity information of the suspect object based on the acquired multiple types of features of the suspect object and the multiple types of features of the object to be inspected which are stored in association with the information about the object to be inspected (57) further comprises:

recognizing a mobile phone number of the suspect object based on a WiFi probe method (574).

9. The object recognition method according to claim 8, wherein recognizing
30 identity information of the suspect object based on the acquired multiple types of features of the suspect object and the multiple types of features of the object to be inspected which are stored in association with the information about the object to be inspected (57) further comprises:

recognizing the features of the suspect object from M features with similarities higher than any other features based on the mobile phone number of the suspect object (575).

- 5 10. A non-transitory computer readable medium, comprising program code instructions recorded thereon for implementing the method according to any one of claims 4 to 9.
- 10 11. An electronic device, comprising:
 one or more processors;
 a storage device for storing one or more programs, which causes the one or more processors to perform the method according to any one of claims 4 to 9 when executed by the one or more processors.