CLAIMS

1. A method for analyzing a positional relationship between target objects, wherein the method comprises:

obtaining multiple videos, each of which contains a video image of a target spatial area;

determining multiple target objects in the multiple videos and fusing the multiple videos to obtain a synthesized video containing the multiple target objects;

analyzing and determining the positional relationship between the target objects based on a change in a feature parameter of a target image corresponding to each of the target objects in the synthesized video over a time sequence, comprising:

monitoring each video frame of the synthesized video to obtain the change in the feature parameter of the target image corresponding to each of the target objects over the time sequence;

if feature parameters of target images corresponding to at least two target objects change, determining the target objects whose feature parameters change as candidate target objects;

obtaining a two-dimensional contour image formed by a projection of a target image corresponding to each of the candidate target objects on a preset plane;

determining whether the two-dimensional contour image of the target image corresponding to each of the candidate target objects overlaps with each other;

determining that the candidate target objects, which correspond to two-dimensional contour images overlapping with each other, contacted with each other in the target spatial area.

2. The method as claimed in claim 1, wherein, determining the multiple target objects in the multiple videos and fusing the multiple videos to obtain the synthesized video containing the multiple target objects comprises:

constructing a background image;

extracting video frames associated with the multiple target objects from the multiple videos;

extracting a target image corresponding to each of the determined target objects from each of the video frames;

fusing each target image with the background image according to a motion time sequence of the target object, to generate multiple synthesized video frames, wherein the multiple synthesized video frames constitute the synthesized video, wherein each of the multiple synthesized video frames corresponds to a time point in the motion time sequence.

3. The method as claimed in claim 2, wherein, at least one video of the multiple videos has higher definition and/or more original environmental information relative to other videos, and constructing the background image comprises constructing the background image of the target spatial area according to the at least one video with higher definition and/or more original environmental information.

4. The method as claimed in claim 1, wherein, the feature parameter comprises at least one of: transparency, color, shape, area, and angle relative to a reference standard of the target image corresponding to the target object in video frames of the synthesized video.

5. An apparatus for analyzing a positional relationship between target objects, wherein the apparatus comprises:

a video-obtaining module, configured for obtaining multiple videos, each of which contains a video image of a target spatial area respectively;

a video-fusing module, configured for determining multiple target objects in the multiple videos and fusing the multiple videos to obtain a synthesized video containing the multiple target objects;

a video-analyzing module, configured for analyzing and determining the positional relationship between the target objects based on a change in a feature parameter of a target image corresponding to each of the target objects in the synthesized video over a time sequence;

wherein, the video-fusing module is further configured for:

constructing a background image;

extracting video frames associated with the multiple target objects from the multiple videos;

extracting a target image corresponding to each of the determined target objects from each

of the video frames;

fusing each target image with the background image according to a motion time sequence of the target object, to generate multiple synthesized video frames, wherein the multiple synthesized video frames constitute the synthesized video, wherein each of the multiple synthesized video frames corresponds to a time point in the motion time sequence;

wherein, at least one video of the multiple videos has higher definition and/or more original environmental information relative to other videos; and

the video-fusing module is further configured for constructing the background image according to the at least one video with higher definition and/or more original environmental information;

the video-analyzing module is further configured for monitoring each video frame of the synthesized video to obtain the change in the feature parameter of the target image corresponding to each of the target objects over the time sequence;

if feature parameters of target images corresponding to at least two target objects change, determining the target objects with whose feature parameters change as candidate target objects,; and

obtaining a two-dimensional contour image formed by a projection of a target image corresponding to each of the candidate target objects on a preset plane;

determining whether the two-dimensional contour image of the target image corresponding to each of the candidate target objects overlaps with each other;

determining that the candidate target objects, which correspond to two-dimensional contour images overlapping with each other, contacted with each other in the target spatial area;

wherein, the feature parameter comprises at least one of: transparency, color, shape, area, and angle of the target image corresponding to the target object in the video frames of the synthesized video.

6. A non-volatile computer-readable storage medium, wherein, the non-volatile computer-readable storage medium stores a computer program that, when executed by a computer, causes the computer to carry out the method for analyzing a positional relationship

between target objects as claimed in any one of claims 1 to 4.

7. An electronic device, comprising a memory, a processor, and a computer program that is stored on the memory and can run on the processor, wherein, when the processor, when executing the computer program, carries out the method for analyzing a positional relationship between target objects as claimed in any one of claims 1 to 4.

8. A computer program product containing instructions, which, when run on a computer, causes the computer to carry out the method for analyzing a positional relationship between target objects as claimed in any one of claims 1 to 4.