

Amendment under Article 19(1)

5 ~~Cancel claim 1.~~

Claims

10 12.—(Amended) A method of monitoring a moving object within a predetermined monitoring area, characterized in that the method comprises steps of:

detecting objects by scanning the monitoring area by an optical distance meter;

identifying moving objects among the detected objects;

15 setting, as a tracking target being tracked, among the identified moving objects, a moving object closest to a priority monitoring object which is preset in the monitoring area; ~~and~~

automatically tracking, using a camera device, the moving object which is set to the tracking target; and

20 ~~wherein, when a count showing that a tracking period becomes lower sequentially than a lower limit value becomes larger than a lower determination count, the same moving object being automatically tracked during the tracking period, counting a number of times a tracking period during which the same moving object is automatically tracked falls below a lower limit value as a count,~~

25 wherein, when the count exceeds a lower determination count, a preset priority monitoring area including the priority monitoring object is enlarged for fixed-point monitoring performed by the camera device.

2.3. (Amended)

A method of monitoring a moving object within a predetermined monitoring area, characterized in that the method comprises steps of:

detecting objects by scanning the monitoring area by an optical distance meter;

5 identifying moving objects among the detected objects;

setting, as a tracking target being tracked, among the identified moving objects, a moving object closest to a priority monitoring object which is preset in the monitoring area; and

10 automatically tracking, using a camera device, the moving object which is set to the tracking target,

wherein, when a count showing that the tracking target has been switched to other tracking targets in a predetermined determination period has exceeded a predetermined upper determination count, a priority monitoring area including the priority monitoring object is enlarged for fixed-point monitoring performed by the camera device.

~~3.4. (New)—The method of claim 23, characterized in that the method comprises steps of: when a count showing that a tracking period becomes lower sequentially than a lower limit value becomes larger than a lower determination count, the same moving object being automatically tracked during the tracking period;~~

~~counting a number of times a tracking period during which the same moving object is automatically tracked falls below a lower limit value as a count,~~

~~wherein, when the count exceeds a lower determination count, a preset priority monitoring area including the priority monitoring object is enlarged for fixed-point monitoring performed by the camera device.~~

~~4.5. (Amended)—The method of any one of claims 1 to 32 to 4, characterized in that the priority monitoring area is set to be an area in which, at least, a plurality of the moving objects are able be imaged.~~

~~5.6. (Amended) A method of monitoring a moving object within a predetermined monitoring area, characterized in that the method comprises steps of:~~

detecting objects by scanning the monitoring area by an optical distance meter;

identifying moving objects among the detected objects;

setting, as a tracking target being tracked, among the identified moving objects, a moving object closest to a priority monitoring object which is preset in the monitoring area;

5 automatically tracking, using a camera device, the moving object which is set to the tracking target;

determining whether or not a plurality of the moving objects are identified in the monitoring area;

10 determining whether or not a predetermined tracking release condition, which is set for releasing the automatic tracking using the camera device has been met when it is determined that the plurality of the moving objects are identified in the monitoring area; and

15 monitoring, in fixed-point monitoring, preset priority monitoring areas including the priority monitoring object present in the monitoring area at a wide angle with use of the camera device, when it is determined that the tracking release condition is met.

6.7. (Amended)—The method of claim 12, characterized in that the method comprises steps of:

20 determining whether or not a plurality of the moving objects are identified in the monitoring area,

determining whether or not a predetermined tracking release condition, which is set for releasing the automatic tracking using the camera device has been met when it is determined that the plurality of the moving objects are identified in the monitoring area, and

25 enlarging and monitoring, in fixed-point monitoring, preset priority monitoring areas including the priority monitoring object present in the monitoring area with use of the camera device, when it is determined that the tracking release condition is met.

30 7.8. (Amended) The method of claim 56 or 7, characterized in that the tracking release condition is set such that a count showing that a tracking period becomes lower sequentially than a lower limit value becomes larger than a lower determination count, the same moving object being automatically tracked during the tracking period.

35 a number of times a tracking period during which the same

moving object is automatically tracked falls below a lower limit value is counted as a count; and

_____ said count exceeds a lower determination count.

- 5 8. The method of claim 6, characterized in that the tracking release condition is set such that said count exceeds a lower determination count.

9. (Amended)—The method of any one of claims 5 to 8~~6 to 8~~, characterized in that the tracking release condition is set such that a count showing that the tracking target has been switched to other tracking targets in a predetermined determination period has exceeded a predetermined upper determination count.

10. (Amended)—The method of any one of claims 5 to 9~~6 to 9~~, characterized in that the whole monitoring area is set as the priority monitoring area.

11. (Amended)—The method of any one of claims 5 to 10~~6 to 10~~, characterized in that the tracking release condition is set such that a response time required to automatically track a moving object newly set as a tracking target is longer than a predicted time necessary for the newly set moving object to reach the priority monitoring object.

12. (Amended)—The method of any one of claims 5 to 11~~6 to 11~~, characterized in that the tracking release condition is set such that the number of identified moving objects exceeds a predetermined upper number.

13. (Amended)—The method of any one of claims 5 to 12~~6 to 12~~, characterized in that the tracking release condition is set such a period of time during which the priority monitoring object or the priority monitoring area is not continuously monitored is over a predetermined upper limit.

14. (Amended)—The method of any one of claims 5 to 13~~6 to 13~~, characterized in that the priority monitoring area is set as an area in which, at least, a plurality of the moving objects are able to be imaged.

15. (Amended) —The method of claim 5~~6~~, characterized in that the fixed-point monitoring step is set such that when the priority monitoring area is positionally fixedly monitored at a

wide view using the camera device and, during the monitoring, any of the moving objects in the priority monitoring area is selected, the selected moving object is set to the tracking target and automatically tracked.

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16. ~~(Amended)~~—A method of monitoring a moving object, by which a monitoring area is scanned by an optical distance meter to detect moving objects, a moving object is identified among the detected moving objects, and the identified moving object is set to a tracking target for automatic tracking by a camera device, the method is characterized in that

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when a plurality of the moving objects are identified in the monitoring area and it is determined that a tracking release condition is met which is preset for releasing the automatic tracking performed using the camera device, the camera device monitors, in fixed-point monitoring, a priority monitoring area at a wide view angle, the priority monitoring area being preset in the monitoring area to contain a priority monitoring object present in the monitoring area.

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17. ~~(Amended)~~—An apparatus for monitoring a moving object in a preset monitoring area, characterized in that the apparatus comprises

means for detecting objects by scanning the monitoring area using an optical distance meter;

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means for identifying moving objects among the detected objects;

means for setting, as a tracking target, among the specified moving objects, a moving object which is the closest to a priority monitoring object which is preset in the monitoring area; and

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means for automatically tracking the moving object which is set as the tracking target being automatically tracked, by an camera apparatus; and

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~~means for, when a count showing that a tracking period becomes lower sequentially than a lower limit value becomes larger than a lower determination count, the same moving object being automatically tracked during the tracking period, counting a number of~~

times a tracking period during which the same moving object is automatically tracked falls below a lower limit value as a count, the means also configured for, when the count exceeds a predetermined lower determination count, i) enlarging a preset priority

monitoring area including the priority monitoring object and ii) performing fixed-point monitoring of the priority monitoring area using by the camera device.