

ABSTRACT

**METHOD OF BUILDING A VIDEO SURVEILLANCE SYSTEM FOR OBJECT
DETECTION AND TRACKING**

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A method of building a video surveillance system for object detection and tracking relates to the field of computer vision, and to methods and means of detecting and tracking moving objects, for example, persons. The method consists in special adjustment of each camera of a video surveillance system by means of calibration elements, linking cameras to the location plan, plotting a coordinate match of a coordinate system of a two-dimensional image of each camera with a three-dimensional system of coordinates of a location plan, for example premises; detecting and tracking objects of interest. The method makes it possible to construct motion tracks of objects of interest in the coordinate system of the location plan by means of multicamera surveillance, to analyze the nature of behavior and motion of objects, assess their interaction and individual parameters, as well as to calculate the quantity thereof in location regions of interest.

20 (FIG. 15)