

FILTER STRUCTURE, OPTICAL DETECTION SYSTEM, AND OPTICAL DETECTION METHOD

ABSTRACT

A filter structure, an optical detection system, and an optical detection method, which are used for improving the accuracy of acquiring a defect signal from an object to be inspected. The filter structure comprises: a first filter structure configured to filter main diffraction signals of structural units periodically arranged in an object to be inspected; and a second filter structure configured to filter secondary diffraction spots of the structural units periodically arranged in said object. The first filter structure comprises at least one filter structure that has a closed periphery, and when said object has structural units arranged therein, a light-blocking structure connected to any two ends of the filter structure is further provided in the closed filter structure. The second filter structure comprises a plurality of parallel light-blocking members, wherein the projection of the light-blocking members on the plane where the secondary diffraction spots are located is not less than the diameter of the secondary diffraction spots.

FIG. 9