The method may comprise: obtaining prepared image data originating from a hologram digital image frame captured by an image sensor receiving light propagated across, i.e. crosswise through, a sample volume, containing a fluid possibly comprising microscopic objects of foreign origin, while illuminating the sample volume by coherent light, whereby the possible microscopic objects scatter part of the light, the scattered and non-scattered light interfering so as to form interference fringes behind the microscopic objects, the prepared image data comprising, for a microscopic object, a prepared hologram pattern with prepared spatially alternating intensity formed by the interference fringes; providing filtered image data, comprising automatically filtering the prepared image data by an edge enhancing filter, possibly in two or more different directions, the filtered image data comprising, for a prepared hologram pattern present in the prepared image data, a filtered hologram pattern; and automatically detecting, on the basis of the filtered hologram pattern, the presence of the microscopic object associated with the filtered hologram pattern in the sample volume of the fluid.

In the method, some principles as such known from in-line holographic microscopy may be used.

In a first aspect, there is provided a method for detecting microscopic objects of foreign origin present in a fluid, the method comprising: obtaining prepared image data originating from a hologram digital image frame captured by an image sensor receiving light propagated across a sample volume, containing a fluid possibly comprising microscopic objects of foreign origin, while illuminating the sample volume by coherent light, whereby the possible

microscopic objects scatter part of the light, the scattered and non-scattered light interfering so as to form interference fringes behind the microscopic objects, the prepared image data comprising, for a microscopic object, a prepared hologram pattern with prepared spatially alternating intensity formed by the interference fringes; providing filtered image data, comprising automatically filtering the prepared image data by an edge enhancing filter, the filtered image data comprising, for a prepared hologram pattern present in the prepared image data, a filtered hologram pattern; and automatically detecting, on the basis of the filtered hologram pattern, the presence of the microscopic object associated with the filtered hologram pattern in the sample volume of the fluid.

In a second aspect, there is provided an apparatus for detecting microscopic objects of foreign origin present in a fluid, the apparatus comprising a computing arrangement configured to perform the operations of the method according to the first aspect.

In a third aspect, there is provided a computer program product comprising program code instructions which, when executed by a processor, cause the processor to perform the method according to the first aspect.

Many of the attendant features will be more readily appreciated as the same becomes better understood by reference to the following detailed description considered in connection with the accompanying drawings.