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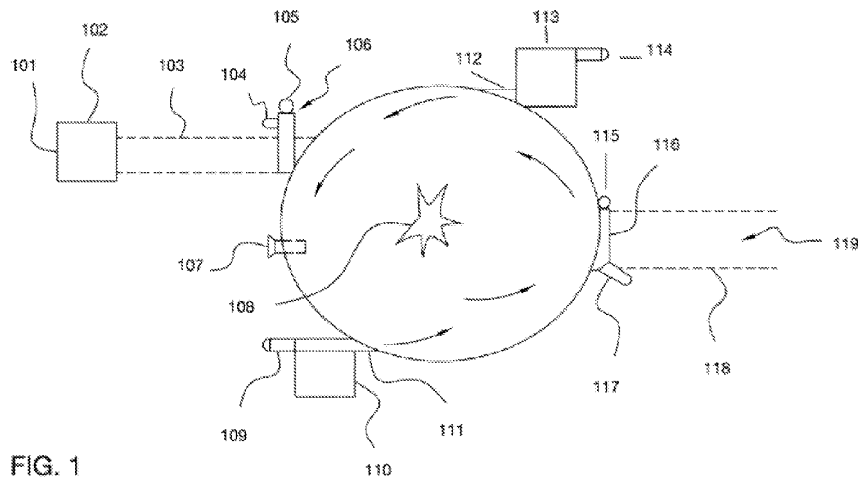


FIG. 1

(57) Abstract: An apparatus and method of using said apparatus for detecting a matter and microorganisms, the apparatus comprising: at least one sample reservoir having a sample inlet and a sample outlet for holding a sample comprising liquid, matter, and microorganisms; at least one liquid tube connected to a sample outlet of the sample reservoir, wherein the liquid tube comprises a plurality of microscope slides embedded therein, a plurality of image enlargement device located above or below the microscope slide, and a light source for emitting the sample on the plurality of microscope slides; and a control unit having computer software and algorithm programs that manage the operation of the apparatus and identify and classify the sample, wherein the control unit is in electric communication with the at least one sample reservoir and the at least one liquid tube.

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