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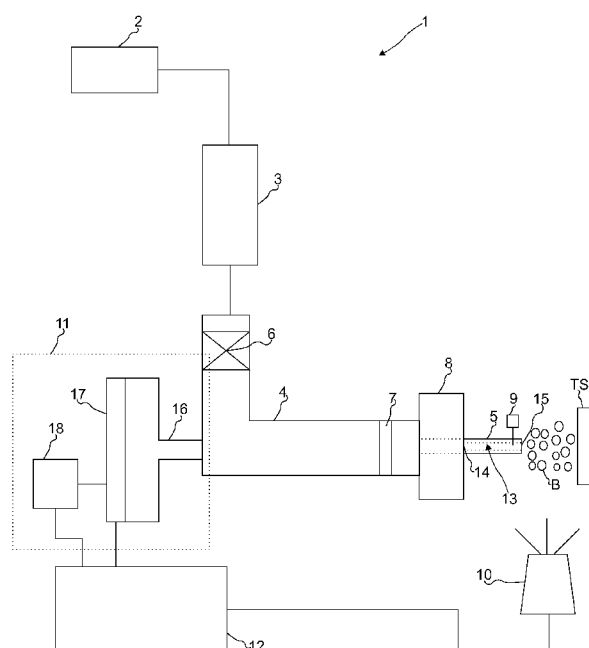
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(54) Title: AN APPARATUS FOR USING HYDRODYNAMIC CAVITATION IN MEDICAL TREATMENT

Figure 1



(57) Abstract: The present invention relates to an apparatus for using the hydrodynamic cavitation in medical treatment such as destroying kidney stones or killing infected cancer cells. This apparatus comprising a tank used as a container for a fluid, a compressor which is connected to the tank in order to maintain the input pressure of the fluid, a tubing in which the fluid flows, a probe in which the cavitation occurs, a valve, which is positioned inside the tubing, allowing the fluid to flow into the probe, a filter, which is positioned inside the tubing, preventing the predetermined size particles flow into the probe, a fitting connecting the probe to the tubing, a flowmeter measuring the volume flow rate of the fluid through the probe, an image capturing unit capturing the sequential images of bubble growing and collapsing of the bubbles after the bubbles exit from the probe, a positioning assembly which adjusts the distance between the probe and the target surface and a control and data acquisition unit.