

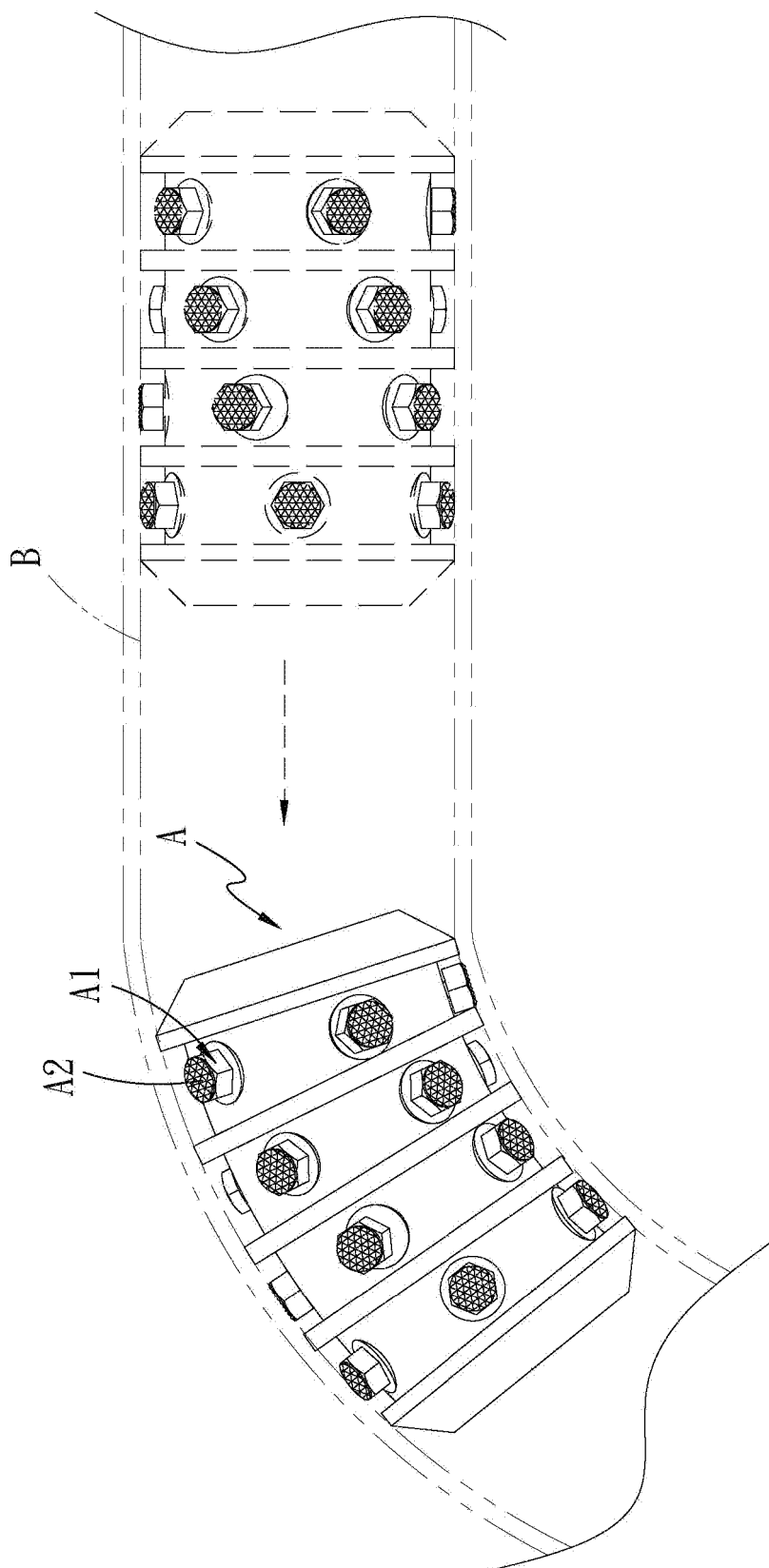


FIG. 1

a. providing a viewing apparatus arranged inside an inlet end of the cleaned pipeline, wherein said viewing apparatus has a flexible cylinder whose outer diameter is more larger than its inner diameter, the front end of which is provided with a camera and a lighting unit providing lighting for said camera;



b. providing a pressurization apparatus arranged outside inlet end of the cleaned pipeline, said the viewing apparatus being pushed from the inlet end to inside of the pipeline with pushing pressure generated by a pressurization apparatus, and being forced to go ahead from the inlet end of the pipeline to the outlet end of the pipeline, at the same time, the camera views the status of the interior of the pipeline, and the pipeline images are saved or stored in a memory of the camera;



c. taking the camera out of the viewing apparatus, reading the caught image in the memory and viewing the interior of the pipeline using a screen;



d. calculating, according to the known total length of the pipeline from the inlet end of the pipeline to the outlet end of the pipeline, and the time displayed on the screen and spent by the viewing apparatus in reaching the outlet end, the average speed of movement of the viewing apparatus can be calculated, and the positions existing uncleanness, damage or corrosion can be calculated by multiplying the average speed by the journey time displayed on the screen, for a reference for re-cleaning, replacement or maintenance;

FIG. 2

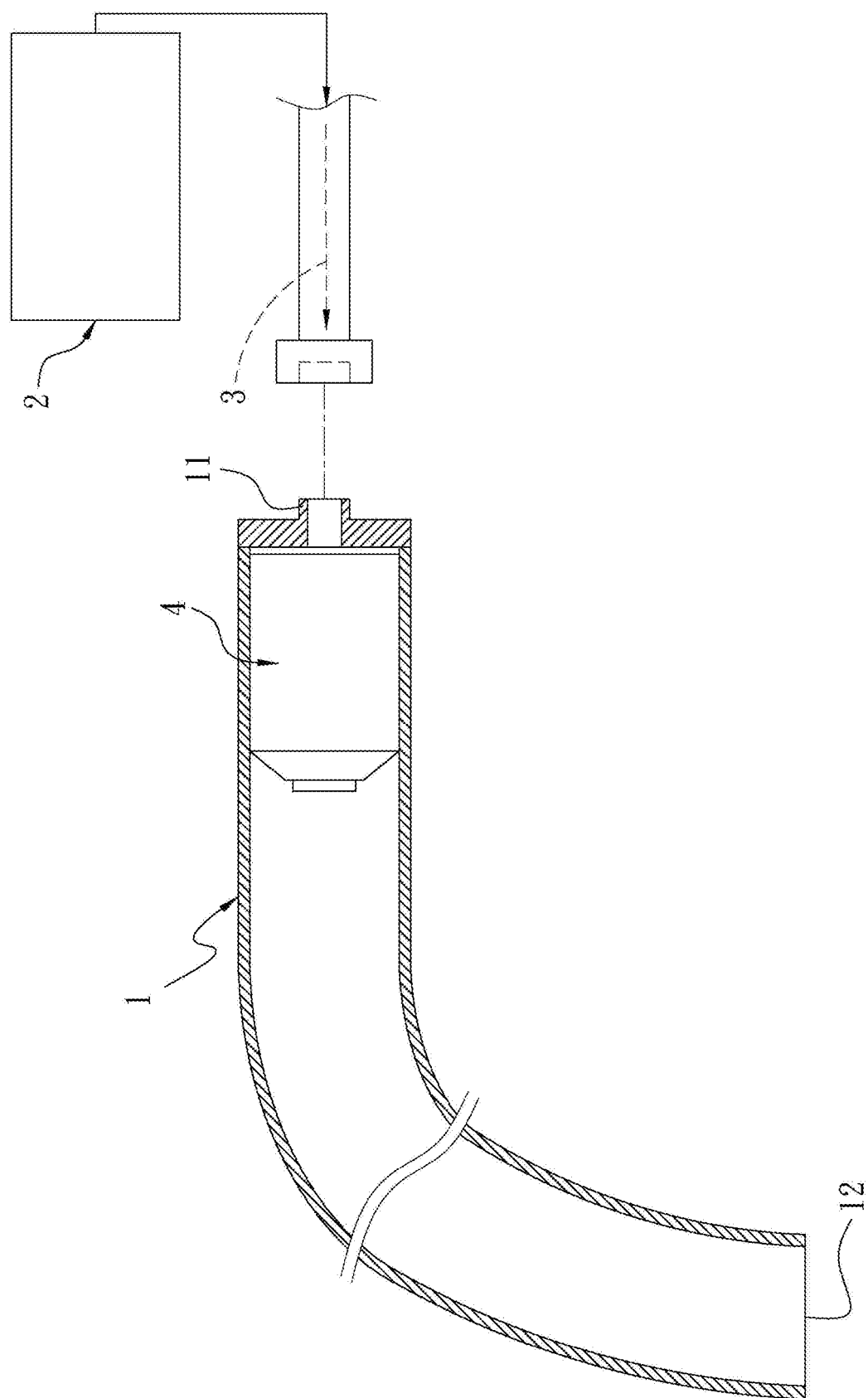


FIG. 3



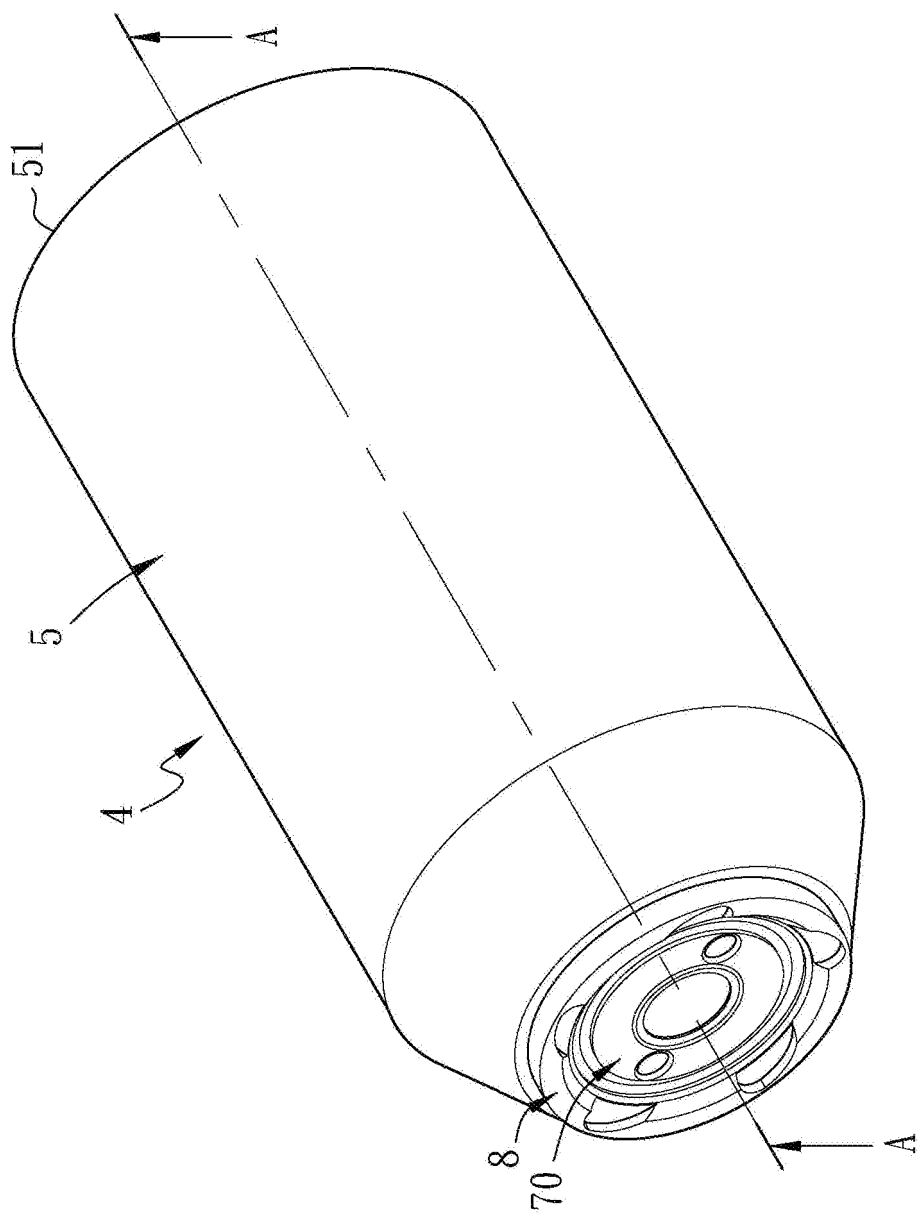


FIG. 5-1

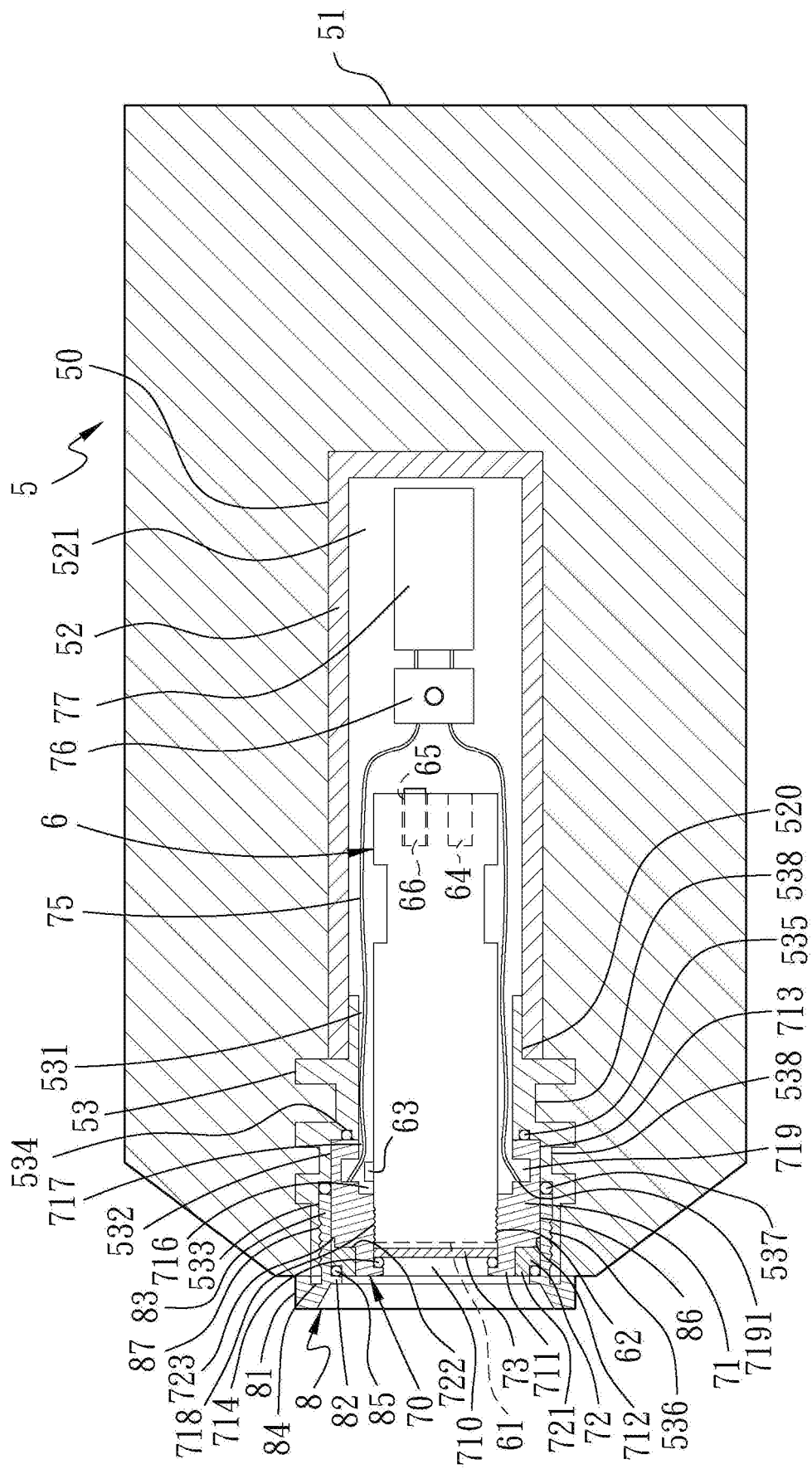


FIG. 5-2

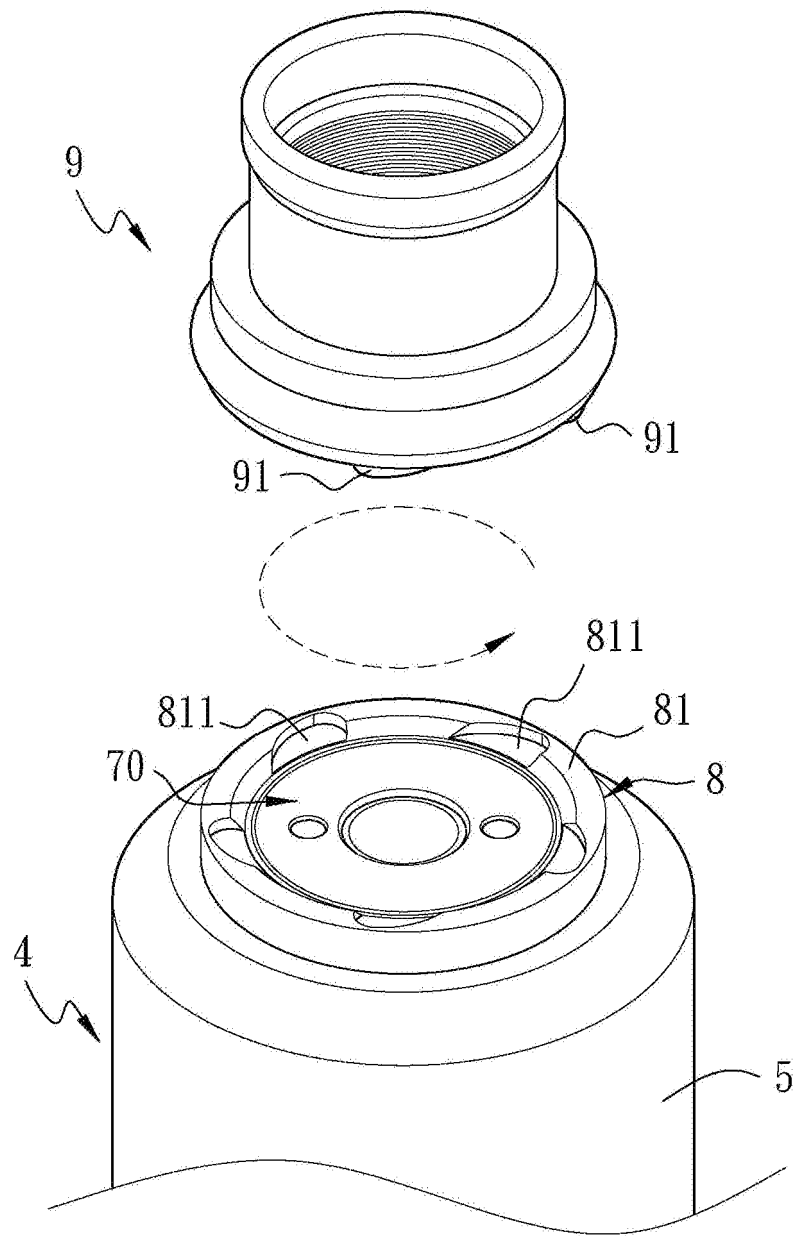


FIG. 6

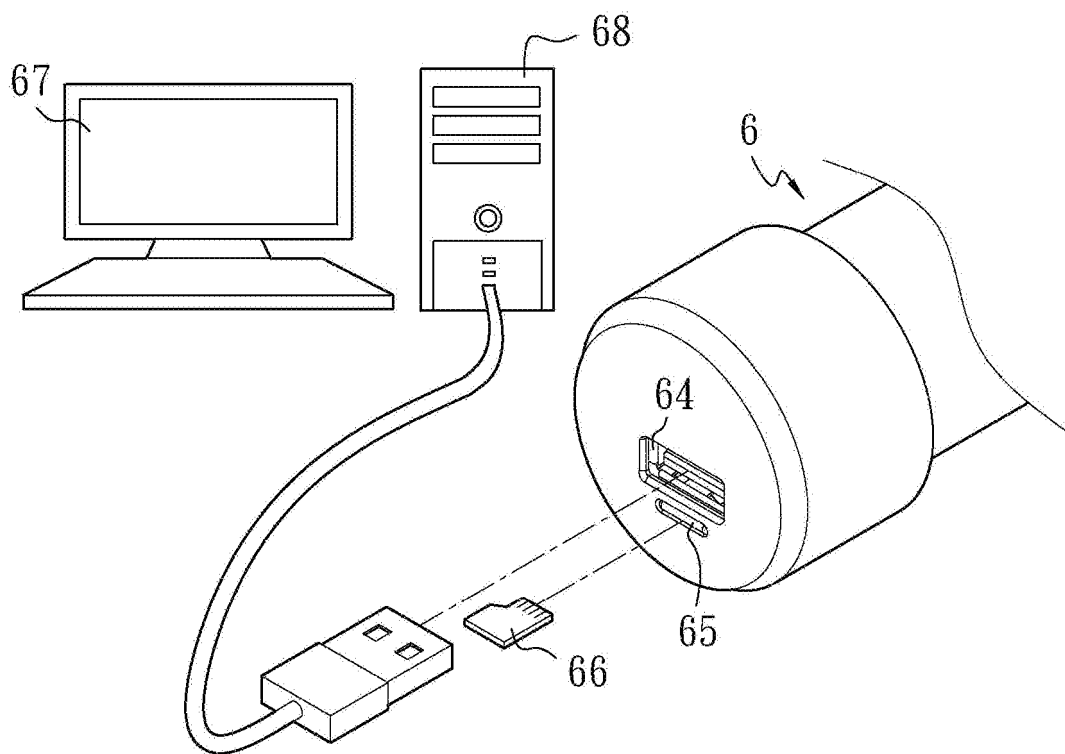


FIG. 7

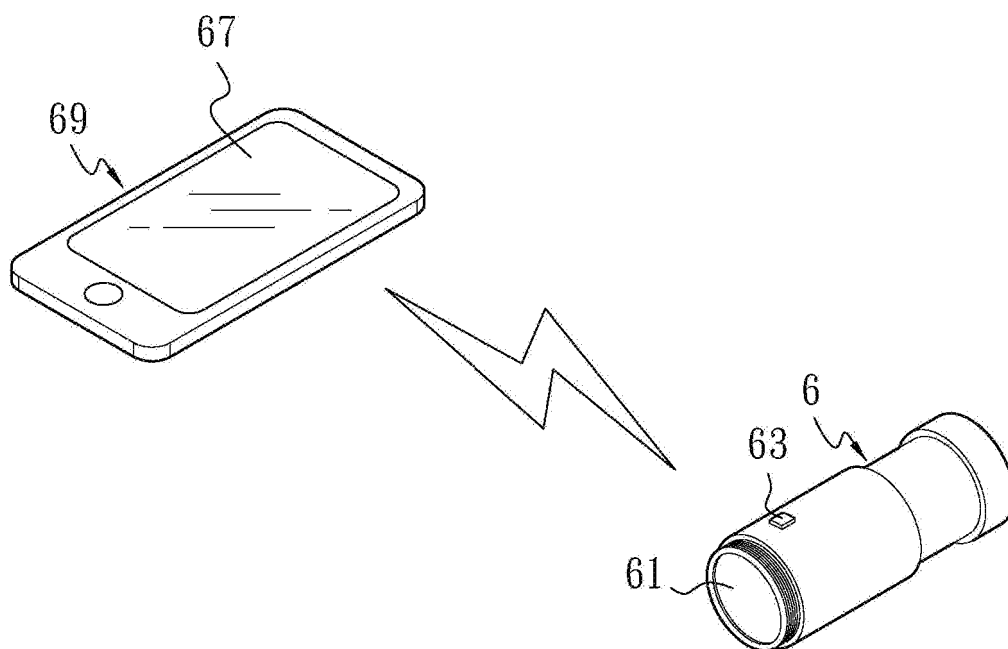


FIG. 8

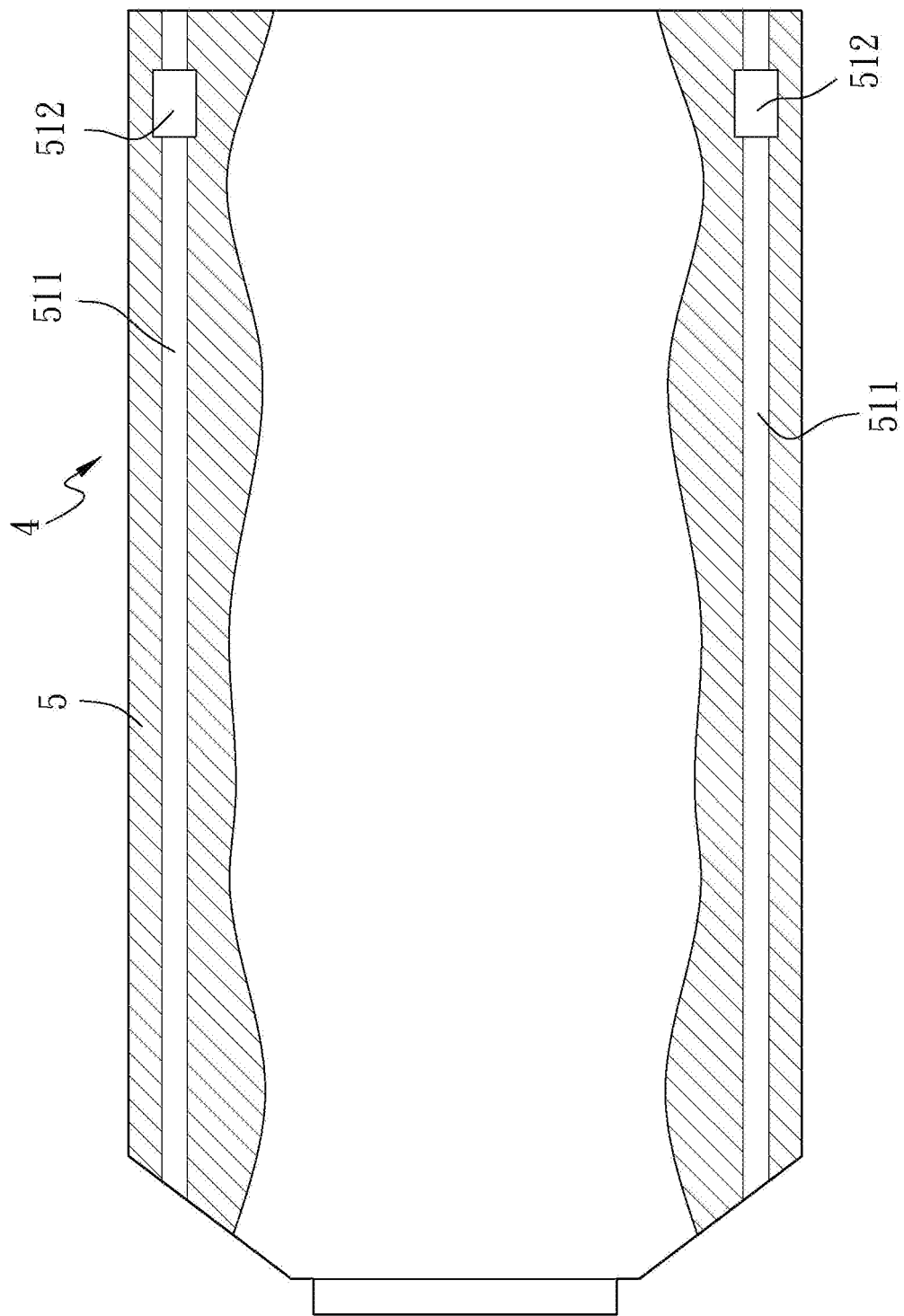


FIG. 9

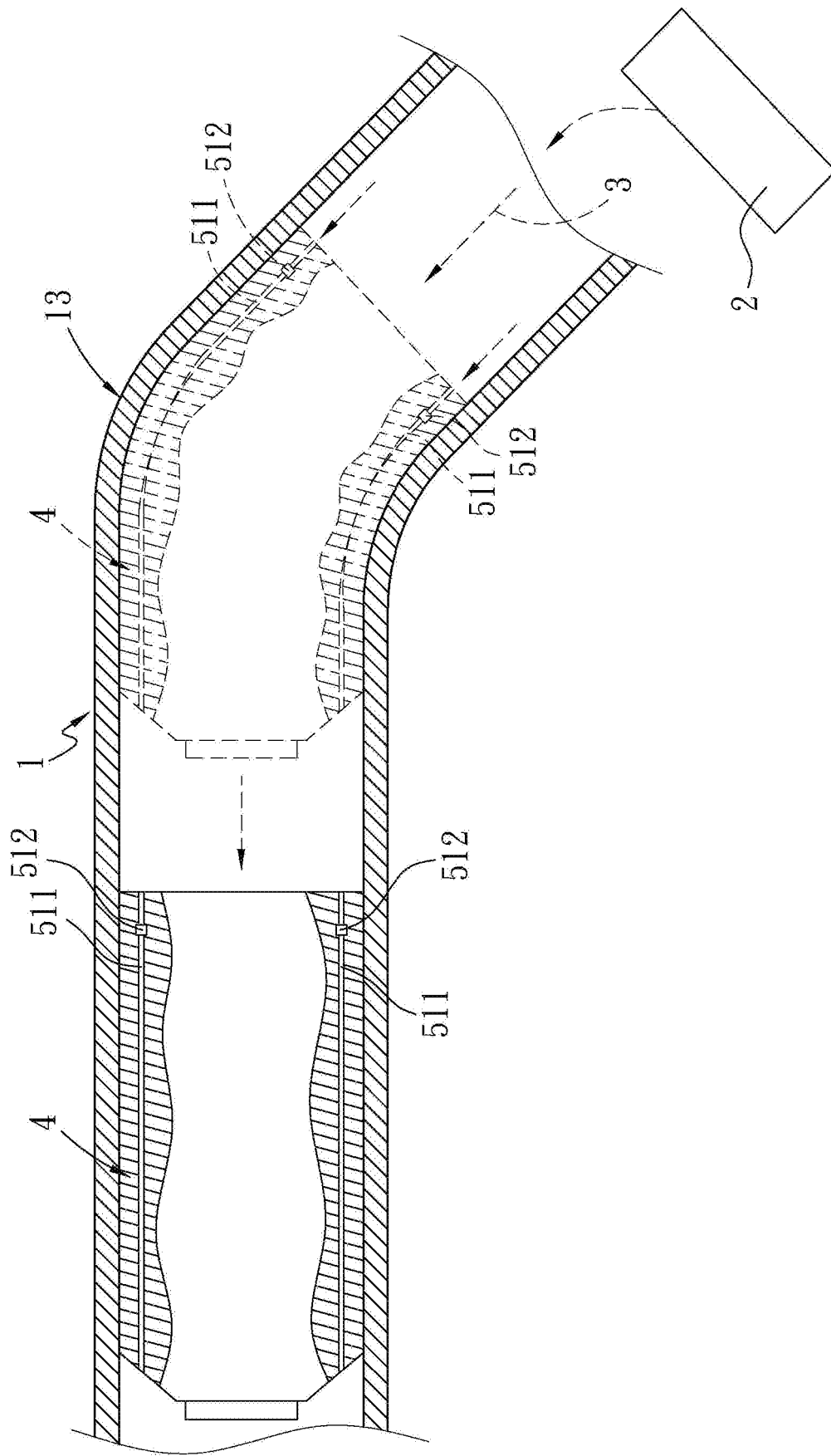


FIG. 10