

Fluid Pipeline Leak Detection and Location Apparatus and Method

Disclosure Number

201002496

Technology Summary

Miniature sensors are used to identify and locate leaks in fluid pipelines. These sensors, through tailored physical and geometric properties, preferentially seek fluid leaks due to flow streaming. The sensors can be queried via transceivers outside the pipeline or located and interrogated by submersible unmanned vehicle to identify and characterize the nature of a leak. The sensors can be functionalized with other capabilities for additional leak and pipeline characterization if needed. Sensors can be recovered from a pipeline flow stream and reused for future leak detection activities.

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