

Israeli inventor of trenchless automated leakage repair looking for joint venture partnerships abroad

Summary

Profile type	Company's country	POD reference
Technology offer	Israel	TOIL20230706019
Profile status	Type of partnership	Targeted countries
PUBLISHED	Commercial agreement with technical assistance	• World
Contact Person	Term of validity	Last update
Rita ELSTE - TOMSONE	6 Jul 2023 5 Jul 2024	6 Jul 2023

General Information

Short summary

An Israeli SME offers the service to reduce leakage in urban water pipes. Advantages - no need to excavate the pipeline (trenchless approach), the solution is permanent, cost-effective repair (no pipeline replacement saves money by more than an order of magnitude), with rapid deployment (by order of magnitude quicker). Looking for joint venture agreement, technical cooperation agreement, services agreement.

Full description

There was no solution for bulk reduction of urban water leakage in pipelines. The company has developed an original technology, which enables bulk reduction of leakage at minimal disruption and rapid deployment. The offered solution is a low-cost alternative to water mains renewal, since focused primarily on urban water distribution networks that constantly leak.

The offered procedure is as following. A train, which contains a "compartment" (of special viscous curing material) wedged between the 2 'pipeline pigs', is launched into a pipe section (isolated prepped distribution mains from an assembly) and fixed to an upstream fire hydrant or hot tap. Leaky holes and cracks are self-detected – the developed special viscous curing material automatically seals and permanently cures the detected leaks. The material is operating under pressure, thus penetrates into leaky joints, fittings & service connections, and plugs the leaks. The train is extracted through a downstream fire hydrant.

Active material hardens, and leaks are permanently cured.

The technology may be used as a cost-efficient method:

- a) for bulk reduction of leakage (water saving, i.e. energy saving up to tens of MWatt/hour a day and up to thousands of carbon credits per annum),
- b) to remediate aging water infrastructure.

The end-users are private and public water utilities / authorities.

The described technology possesses world newness.

Founded in 2007, the start-up company in 2011 was nominated as a finalist in the "Most Innovative New Technology of the Year" category by WIAA, UK.

Current and Potential Domain of Application: 1) Leakage reduction in urban water networks / systems.

2) Saving wasted water, energy and carbon emission for urban water utilities.

3) Remediation of aging water infrastructure.

Looking for infrastructure companies (mainly, contractors) to serve water utilities, service types of cooperation, JV.

Looking for joint venture agreement, technical cooperation agreement, services agreement.

Advantages and innovations

Innovative Aspects of the Offer

1. Repairing leakage in buried pipelines from inside.
2. Automated non-manual way of repair system work

Main advantages of the Offer

1. No need to excavate the pipeline - trenchless approach
2. Permanent curing solution
3. Cost-effective repairing way as compared to pipeline replacement (by more than order of magnitude cheaper)
4. Rapid deployment (by more than order of magnitude quicker)

Technical specification or expertise sought

Stage of development

Available for demonstration

IPR Status

IPR applied but not yet granted

Sustainable Development goals

• **Goal 6: Clean Water and Sanitation**

Partner Sought

Expected role of the partner

1. type of the partner sought - industry, municipalities (local urban water serving companies)
2. the specific area of activity of the partner – water utility repair & maintenance contractor who possesses the necessary assets and skills and is familiar with local standards & procedures.

3. the tasks to be performed – to implement the technology offered & service provision, technical cooperation, joint venture.

Type of partnership

Commercial agreement with technical assistance

Type and size of the partner

- **Big company**
- **SME 50 - 249**

Dissemination

Technology keywords

- **02001 - Design and Modelling / Prototypes**
- **002006008 - Sensory/Multisensory Technology, Instrumentation**
- **02006006 - Construction engineering (design, simulation)**

Targeted countries

- **World**

Market keywords

- **08003007 - Other industrial equipment and machinery**
- **08001018 - Polymer (plastics) materials**
- **08004003 - Water treatment equipment and waste disposal systems**

Sector groups involved