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(57) Abstract :

An automated pipe installation and repairing device, comprising a frame 1 arranged with an elongated handle 2 gripped by a user for moving frame 1 over surface by means of two wheels 3, an artificial intelligence-based imaging unit 4 to determine position of ends of pipes, a pair of telescopically operated rod 5 arranged on frame 1 and integrated with a clamping unit 6 for gripping ends of each pipe, an extendable L-shaped bar 7 extends and inserts an expandable disc 8 in one pipe, an expandable pulley arrangement 9 integrated in disc 8 to expand disc 8, a heating unit generates heats to soften peripheral portion of pipe and now inserted in other pipe, an air blower 13 to blow hot air over joint, an ultrasonic sensor monitors defects on pipe, and an electronically controlled valve connected to a chamber 11 to dispense adhering material on defect.

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