

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211064882 A

(19) INDIA

(22) Date of filing of Application :12/11/2022

(43) Publication Date : 02/12/2022

(54) Title of the invention : PIPELINE REPAIRING ASSISTIVE DEVICE

(51) International classification :F16L0101300000, G06F0003041000, F16L0055180000, A63B0021000000, F25D0029000000

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

(71)Name of Applicant :

1)Jaipur National University

Address of Applicant :Jaipur-Agra Bypass, Near New RTO office, Jagatpura, Jaipur- 302017, Rajasthan, India. Jaipur -----

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

1)Chandra Shekhar Rajora

Address of Applicant :School of Engineering & Technology, Jaipur National University, Jaipur-Agra Bypass, Near New RTO office, Jagatpura, Jaipur- 302017, Rajasthan, India. Jaipur -----

(57) Abstract :

The present invention relates to a pipeline repairing assistive device, comprising a cuboidal body 1 attached with multiple omnidirectional wheels 2 for providing movement over ground surface, a touch interactive display panel 4 installed on body 1 for taking user input regarding pipeline length that is to be repaired along with point of repairing, a laser measurement sensor installed on body 1 measures pipeline diameter, a robotic arm 5 configured with motorized spool 6 wrapped with a tape attached on body 1 for winding tape around pipeline from first to second end, an artificial intelligence-based imaging unit 7 installed on body 1 detects dimension of pipeline, an ultrasonic sensor installed on C-shaped member 8 measure distance between ends and members 8, multiple pneumatically operated pins 9 attached within members 8 for proper gripping of ends, and a speaker 11 installed on body 1 notify user to drain fluid from pipeline.

No. of Pages : 20 No. of Claims : 7


- Registrar
Jaipur National University