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(54) Title of the invention : AUTOMATIC HOSE PIPE WRAPPING DEVICE

<p>(51) International classification :G01N0027901300, E21B0019160000, B25J0015000000, A61B0034000000, B25J0009100000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : 1)Jaipur National University Address of Applicant :Jaipur-Agra Bypass, Near New RTO office, Jagatpura, Jaipur-302017, Rajasthan, India. Jaipur ----- -----</p> <p>Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : 1)Dr. Rajeew Mathur Address of Applicant :School of Engineering & Technology, Jaipur National University, Jaipur-Agra Bypass, Near New RTO office, Jagatpura, Jaipur-302017, Rajasthan, India. Jaipur ----- -----</p> <p>2)J.N. Mathur Address of Applicant :School of Engineering & Technology, Jaipur National University, Jaipur-Agra Bypass, Near New RTO office, Jagatpura, Jaipur-302017, Rajasthan, India. Jaipur ----- -----</p> <p>3)Dr. Avdesh Singh Pundir Address of Applicant :School of Engineering & Technology, Jaipur National University, Jaipur-Agra Bypass, Near New RTO office, Jagatpura, Jaipur-302017, Rajasthan, India. Jaipur ----- -----</p> <p>4)Anil Agarwal Address of Applicant :School of Engineering & Technology, Jaipur National University, Jaipur-Agra Bypass, Near New RTO office, Jagatpura, Jaipur-302017, Rajasthan, India. Jaipur ----- -----</p>
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(57) Abstract :

An automatic hose pipe wrapping device comprising a platform 1 developed in a manner to be placed in proximity to pipe, multiple omnidirectional wheels 2 configured with platform 1 for maneuvering, an AI module 3 mounted on platform 1 for capturing multiple images of pipe, a robotic arm 4 configured on platform 1 for gripping pipe, a block 5 configured with a motorized clamp 6 for secure gripping of pipe, a motorized slider 7 configured between clamp 6 and block 5 for translating clamp 6 in order to position pipe in contact with a pair of rollers 8 installed on block 5 via a T-shaped rod 9, an expandable pulley arrangement integrated with each rollers 8 for increasing/decreasing diameter of rollers 8 in accordance to diameter of pipe, and a DC motor coupled with rod 9 for rotating rod 9 in order to wrap the hose pipe on rollers 8.

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