

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211064922 A

(19) INDIA

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

(43) Publication Date : 02/12/2022

(54) Title of the invention : ASSISTIVE JOIST HANGER INSTALLATION DEVICE

(51) International classification :E04B0001260000, H04N0005247000, H04N0005232000, G06F0003048800, H05K0005000000
(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)Robin Khandelwal

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

2)Rohit Kumar Meena

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

3)Sanjeet Kumar

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

4)Surbhi Agrawal

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 :

An assistive joist hanger installation device, comprising a housing 1 arranged in proximity to a wooden flap, motorized wheels 3 for providing movement to housing 1, a display panel 4 to input regarding number and dimension of hangers, multiple racks 5 for storing joist hangers, an artificial intelligence based image capturing module 6 for capturing and processing images of the racks 5, an expandable U-shaped member 7 for extending/retracting to accommodate the user-specified hanger, a robotic gripper 8 assembled on the housing 1 for extending and gripping the hanger, an ultrasonic sensor fabricated on the member 7 to detect distance of the flap from the member 7, a telescopically operated L-shaped bar 9 positioned between the member 7 and housing 1 for extending in order to position member 7 on the flap that is accessed by the user for drilling the hanger on flap.

No. of Pages : 13 No. of Claims : 4


Registrar
Jaipur National University