

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202311086980 A

(19) INDIA

(22) Date of filing of Application :19/12/2023

(43) Publication Date : 19/01/2024

(54) Title of the invention : HOLE DRILLING DEVICE FOR DOWELLING

(51) International classification :B23K0026062200, B23K0026080000, B23B0047280000, H05K0003000000, B23K0026382000

(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)Noida Institute of Engineering and Technology, Greater Noida

Address of Applicant :Plot No. -19, Knowledge Park-II, Institutional Area, Greater Noida, Uttar Pradesh-201306, India. Greater Noida -----

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

1)Shahazad Ali

Address of Applicant :Department of Mechanical Engineering, Noida Institute of Engineering and Technology, Greater Noida, Plot No. -19, Knowledge Park-II, Institutional Area, Greater Noida, Uttar Pradesh-201306, India. Greater Noida -----

2)Ajay Kumar

Address of Applicant :Department of Mechanical Engineering, Noida Institute of Engineering and Technology, Greater Noida, Plot No. -19, Knowledge Park-II, Institutional Area, Greater Noida, Uttar Pradesh-201306, India. Greater Noida -----

3)Rakesh Kumar Singh

Address of Applicant :Department of Mechanical Engineering, Noida Institute of Engineering and Technology, Greater Noida, Plot No. -19, Knowledge Park-II, Institutional Area, Greater Noida, Uttar Pradesh-201306, India. Greater Noida -----

4)Anant Prakash Agrawal

Address of Applicant :Department of Mechanical Engineering, Noida Institute of Engineering and Technology, Greater Noida, Plot No. -19, Knowledge Park-II, Institutional Area, Greater Noida, Uttar Pradesh-201306, India. Greater Noida -----

5)Dr. Raman Batra

Address of Applicant :Department of Mechanical Engineering, Noida Institute of Engineering and Technology, Greater Noida, Plot No. -19, Knowledge Park-II, Institutional Area, Greater Noida, Uttar Pradesh-201306, India. Greater Noida -----

(57) Abstract :

A hole drilling device for dowelling, comprising a U-shaped body 1 developed to be accommodated around edge of a wooden workpiece, a touch enabled screen 2 is installed on body 1 for enabling a user to give input commands for carving holes in workpiece for dowelling, an ultrasonic sensor arranged on body 1 for detecting width of workpiece, a pair of telescopically operated pushers 3 configured with body 1 to extend for securing body 1 with workpiece, a camera 4 mounted on body 1 for capturing multiple images of workpiece, a set of hollow members 5 configured with body 1 via a motorized sliding rail 6 for translating members 5 to maintain optimum distance between members 5, a speaker 7 mounted on body 1 for notifying user to drill holes within workpiece and a laser sensor fabricated on each of members 5 for detecting depth of holes drilled.

No. of Pages : 16 No. of Claims : 4