

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202311086971 A

(19) INDIA

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

(43) Publication Date : 19/01/2024

(54) Title of the invention : AUTOMATED OBJECT SECURING DEVICE

(51) International classification :H04W0072080000, A42B0007000000, H04W0072120000, H04W0072040000, B25H0005000000

(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)Ratna Raju Ravela

Address of Applicant :Department of Electrical and Electronics 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)Shikha Singh

Address of Applicant :Department of Electronics & Communication 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)Swarnima

Address of Applicant :Department of Electronics & Communication 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)Dr. Prabha Shreeraj Nair

Address of Applicant :Department of Information Technology and M.Tech Integrated, 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 :

An automated object securing device comprises of a L-shaped platform 1 arranged with a handle 2 that allows a user to hold platform 1 at a certain height, a cushioned padding for providing comfort to the user while holding handle 2, a plate 3 installed on platform 1 and is accessed by user to place an object to initiate a process of tying of objects and after placing of objects on the plate 3 the user is required to attach a locking head of a zip tie between a pair of flaps 4 configured on platform 1 to accommodate objects over zip tie, an imaging unit 5 for determining securing of head and tab of tie, a telescopically operated clamp 6 for gripping and retracting tab in a pulling motion that results in securing of object and a tension sensor integrated on clamp 6 for detecting tension generated within tab.

No. of Pages : 14 No. of Claims : 4