

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211016480 A

(19) INDIA

(22) Date of filing of Application :24/03/2022

(43) Publication Date : 02/02/2024

(54) Title of the invention : SMART CATAPULT DEVICE

(51) International classification

:A47C

7/50

(31) Priority Document No

:NA

(32) Priority Date

:NA

(33) Name of priority country

:NA

(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)Chandigarh Group of Colleges, Jhanjeri

Address of Applicant :State Highway 12A Jhanjeri, Sahibzada,
Ajit Singh Nagar, Punjab 140307, India. Punjab India

(72)Name of Inventor :

1)Sonia Bhukra

2)Manbir Kaur

3)Ashmeet kaur

4)Nandini

5)Nikhil

(57) Abstract :

A smart catapult device, comprises of a frame 1 having an artificial intelligence enabled image capturing module 2 for determining a target point, an ultrasonic sensor 3 for detecting distance in between frame 1 and target point, a stretchable rope 4 coupled with a fabric 5 through a pair of telescopic rods 6 to extend or retract, an electromagnetically powered springs 7 for providing required stretching/loosening of rope 4, a weight sensor 8 for determining the weight of the object that needs to be launched, a holographic projector 9 for projecting a virtual pathway that needs to be followed by object, a speaker 10 for producing voice outputs regarding launching of object and retracts a pair of pneumatically actuated stopper 11 for allowing object to be properly launched, and a foot 12 and knee slots 13 for providing footrest and knee rest to user.

No. of Pages : 13 No. of Claims : 5