

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202111014493 A

(19) INDIA

(22) Date of filing of Application :30/03/2021

(43) Publication Date : 23/12/2022

(54) Title of the invention : FRUIT COLLECTING DEVICE

(51) International classification	:H04N0005232000, B07C0005360000, A01G0013020000, A01D0046260000, B07C0005342000	(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
(31) Priority Document No	:NA	(72) Name of Inventor :
(32) Priority Date	:NA	1)Amarjeet Kaur
(33) Name of priority country	:NA	2)Ashmeet Kaur
(86) International Application No	:NA	3)Syed Mohd. Arif
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	

(57) Abstract :

A frame 1 having a vibrating unit wrapped around trunk of a tree manually that trembling the tree to aid in falling of fruits, a covering unit 2 attached to multiple telescopic rods 3, wherein the rods 3 extends/retracts the covering unit 2 in order to collect fruits, a PIR (passive infrared) sensor 4 integrated with an AI(artificial intelligence) camera 5 for detecting animals in nearby surrounding of the trees, wherein the camera 5 captures images of the animals and sends acquired data to a controller, plurality of spikes fabricated for quailing the animals, a primary chamber 6 having multiple slots for storing fruits falling from the trees, wherein the slots stores fresh and rotten fruits, a hyper spectral image processing unit for checking quality of the fruits, wherein the controller on processing the images generates a command to actuate a sorting unit in order to separate the fresh and rotten fruits. Ref Figure 1 and 2

No. of Pages : 15 No. of Claims : 6