

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202111014051 A

(19) INDIA

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

(43) Publication Date : 16/12/2022

(54) Title of the invention : SPORTS GROUND MAINTENANCE DEVICE

(51) International classification	:G01N0027040000, A61F0002760000, G01N0003400000, A63B0102020000, A61F0002720000	(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)Dr. G.G. Shastry
(33) Name of priority country	:NA	2)Dr Vikas Verma
(86) International Application No	:NA	3)Syed Mohd. Arif
Filing Date	:NA	4)Bhanu Chaudhary
(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 sports ground/pitch maintenance device, comprising, a body 1 having plurality of wheels 2, wherein the wheels 2 assist in movement of the body 1 on a sports ground, a camera module 3 for continuously monitoring images of the ground and comparing the monitored images with pre-fed images, a motorized telescopic brush 4 in combination with a color dispensing unit for drawing markings on the ground, a strain gauge functionally for measuring hardness level of the ground, , a roller 5 for levelling the ground on the basis of the detected hardness level, a motorized grabber 6 configured with a suction cup for collecting undesirable objects present on the ground, and a moisture sensor connected to the body 1 for measuring moisture level of the ground, wherein the microcontroller on comparing the detected moisture level with pre-fed levels generates a command to actuate a water dispensing unit. Ref Figure 1

No. of Pages : 13 No. of Claims : 6