(19) INDIA

(22) Date of filing of Application :18/08/2022

(43) Publication Date : 09/09/2022

(54) Title of the invention : ADAPTABLE HAND REST DEVICE

(57) Abstract :

The present invention relates to an adaptable hand rest device comprising a frame 1 arranged with a supporting member 2 for adhering underneath edge of a furniture over which a user wants to rest user's hand, an elongated pad 4 connected with the member 2 via multiple links 3 for positioning the pad 4 over the furniture, an artificial intelligence (AI) based thermal imaging unit 6 installed on the pad 4 for monitoring the user's hand movements, a linear actuator linked with the links 3 for moving the pad 4 as per the user's hand movement to provide comfort to the user's hand while moving and multiple extendible pins 5 integrated on the pad 4 that extends and retracts in repetitive manner for imparting massaging sensation on the user's hand to relief the user's hand of any pain or numbness.

(19) INDIA

(22) Date of filing of Application :18/08/2022

(54) Title of the invention : BREAKDOWN ASSISTANCE DEVICE FOR VEHICLE

 (51) International classification (86) International Application No Filing Date (87) International Publication No (61) Patent of Addition to Application Number Filing Date (62) Divisional to Application Number Filing Date 	:H04N0007180000, H04N0005247000, A63C0017060000, B62B0005000000, B62B0003100000 :PCT// :01/01/1900 : NA :NA :NA :NA	 (71)Name of Applicant : Chandragupt Institute of Management Patna Address of Applicant :Mithapur Institutional Area, Patna - 800001, Bihar, India. Patna
		Patna

(57) Abstract :

A breakdown assistance device for vehicle, comprising a pair of tapered plates 1 are hinged 2 with the frame 3 to translate the wheel on the frame 3, rollers 4 fabricated on the frame 3 for rotating in synchronization to rotation of driving wheel as user accelerates via gear train arrangement 5 for translating rotational motion from the rollers 4 to plurality of wheels 6 that provides movement to the frame 3 on the surface in order to maneuver the vehicle form one location to another, an artificial intelligence based imaging unit 7 mounted on the frame 3 for capturing images of the road surface, in case the irregularity is detected, a pair of robotic arms 8 fabricated on the frame 3 for gripping an axle of driving wheel to prevent misbalancing of the vehicle and speed sensor 9 mapped on frame 3 for detecting speed of the driving wheel.

(19) INDIA

(22) Date of filing of Application :18/08/2022

(54) Title of the invention : CUSTOMIZED THREAD DYEING DEVICE

(57) Abstract :

A customized thread dyeing device, includes a housing 1 having a first portion 2 installed with chambers 4 for storing colors, a roller 5 wrapped with thread 6 to be painted installed on second portion 3, a display panel 7 for inputting commands regarding color(s) to be painted on thread 6 and dying length, a nozzle 8 for dispensing user-defined color in a receptacle 9, cylindrical members 10 integrated with a foam-pad 11, installed under receptacle 9 via a conveyer belt 12 a robotic arm 13 for gripping thread's 6 free-end to tuck in roller 14, multiple iris pores 16 for dispensing color(s) to soak foam-pad 11 with color(s) an opening 17 crafted for collection of dyed thread, a container 18 filled with water/decolorizing solution dispensed via pair of ECVs 19 and actuates belt 12 for dipping particular member 10 in container 18 to remove excess color for next use.

(19) INDIA

(22) Date of filing of Application :18/08/2022

(54) Title of the invention : WALKING ASSISTIVE DEVICE FOR TODDLERS

 (71)Name of Applicant : 1)Chandragupt Institute of Management Patna Address of Applicant :Mithapur Institutional Area, Patna - 800001, Bihar, India. Patna

(57) Abstract :

A walking assistive device for toddlers comprises a telescopic frame 1 whose lower portion 8 is fabricated with a U-shaped member 2 that supported frame 1, an omnidirectional wheel 3 arrangement installed underneath the member 2 for providing movement to the frame 1 over irregular surface, an artificial intelligence based imaging unit 4 installed on frame 1 for capturing multiple images of a toddler, a primary C-shaped waist supporting unit 5 linked at upper portion 7 for gripping and supporting a waist portion of toddler, a secondary C-shaped chest supporting unit 6 linked at upper portion 7 via a tapered telescopic bar 9 for gripping and supporting a chest portion of toddler, a bar 9 is designed to extend/retract to provide support to upper portion 7 around chest portion, a head support 10 connected at upper portion 7 by means of a motorized hinge 11.

(22) Date of filing of Application :18/08/2022

(54) Title of the invention : WEARABLE HYGIENE MAINTENANCE DEVICE FOR SPORTSPERSON

		 (71)Name of Applicant : 1)Chandragupt Institute of Management Patna Address of Applicant :Mithapur Institutional Area, Patna - 800001, Bihar, India, Patna
(51) International	:A61B0005000000, A61F0013840000, A42B0001000000, G03B0017560000,	Name of Applicant : NA Address of Applicant : NA
classification	A41D0013000000	(72)Name of Inventor :
 (86) International Application No Filing Date (87) International Publication No (61) Patent of Addition to Application Number Filing Date (62) Divisional to Application Number Filing Date 	:PCT// :01/01/1900 : NA :NA :NA :NA	 1)Dr. Rana Singh Address of Applicant :Director, Department of Electronics & Communication Engineering, Chandragupt Institute of Management Patna, Mithapur Institutional Area, Patna -800001, Bihar, India. Patna

(57) Abstract :

The present invention relates to a wearable hygiene maintenance device for sportsperson, comprising a wearable body 1 equipped by a user on a forehead portion while performing an athletic activity, an imaging unit 2 for capturing images of the user, a U-shaped member 3 to hold the hair away from the forehead portion, a moisture sensor for detecting presence of sweat on the forehead portion, a motorized roller 4 wrapped with a cleaning cloth for unwrapping the cloth to allow the user for accessing the cloth to wipe the sweat, a pH sensor for detecting nature of the sweat, an electronic nozzle 5 coupled with a water chamber 6 for dispensing water on face of the user to dilute the acidic nature to prevent skin irritation and a speaker 7 for alerting the user to consume water to prevent a risk of dehydration.

(19) INDIA

(22) Date of filing of Application :18/08/2022

(43) Publication Date : 09/09/2022

(54) Title of the invention : PET TRESPASSING PREVENTION DEVICE

 (71)Name of Applicant : 1)Chandragupt Institute of Management Patna Address of Applicant :Mithapur Institutional Area, Patna - 800001, Bihar, India. Patna Name of Applicant : NA Address of Applicant : NA (72)Name of Inventor : 1)Dr. Rana Singh Address of Applicant :Director, Department of Electronics & Communication Engineering, Chandragupt Institute of Management Patna, Mithapur Institutional Area, Patna -800001, Bihar, India. Patna

(57) Abstract :

A pet trespassing prevention device, comprises of a body 1 developed in a manner to be installed on door frame for affixing frame on body 1 on frame, an artificial intelligence based imaging unit 3 is attached with body 1 for detect opening and closing of door along with presence of any pets in vicinity to door, a microcontroller mounted on for measuring distance between door and pet, a pair of telescopic rod arrangement 5 linked with body 1 for extending in a manner to position a suction unit 10 attached with each of rods 5 on door that in turn affixes with door, a meshed sheet 6 is linked in a stowed state for forming a barrier between door and frame, a pair of motorized roller 7 is attached on an arrangement for wrapping and unwrapping of sheet 6 and providing tightening and losing of barrier.

(19) INDIA

(22) Date of filing of Application :18/08/2022

(54) Title of the invention : HAND-HELD GROOMING ASSISTIVE DEVICE

 (71)Name of Applicant : 1)Chandragupt Institute of Management Patna Address of Applicant :Mithapur Institutional Area, Patna - 800001, Bihar, India. Patna Name of Applicant : NA Address of Applicant : NA (72)Name of Inventor : 1)Dr. Rajeev Verma Address of Applicant :Associate Professor, Department of Electronics & Communication Engineering, Chandragupt Institute of Management Patna, Mithapur Institutional Area, Patna - 800001, Bihar, India. Patna 2)Dr. Jyoti Verma Address of Applicant :Assistant Professor, Department of Electronics & Communication Engineering, Chandragupt Institute of Management Patna, Mithapur Institutional Area, Patna - 800001, Bihar, India. Patna

(57) Abstract :

A hand-held grooming assistive device, includes a housing 1 integrated with a display panel 2 accessed by user for inputting commands regarding daily activity/schedule of user, a microcontroller that decodes amount of fragrance/talcum powder to be applied on body/clothes of user, an image capturing module 3 for capturing user's images to decode amount of talcum powder present on user's body, a circular disc 4 installed with bristles 5 attached via a telescopically operated rod 6 that extends for popping out bristles 5 to place them in contact with user's body, a DC (Direct Current) motor 7 for rotating disc 4 to scrub user's body with bristles 5 for removing excess talcum powder from user's body, multiple pores internally connected with a chamber 8 stored with a fragrance removing solution and upon positioning bristles 5 near user's cloth, the solution dispensed over clothes via pores to eliminate excess fragrance.

(19) INDIA

(22) Date of filing of Application :18/08/2022

(54) Title of the invention : BED SAFETY SYSTEM FOR TODDLERS

(43) Publication Date : 09/09/2022

(71)Name of Applicant : 1)Chandragupt Institute of Management Patna Address of Applicant : Mithapur Institutional Area, Patna -:A63B0071000000, A47C0029000000, (51) International 800001. Bihar. India. Patna ------E04G0021320000, B26D0007200000, Name of Applicant : NA classification A47D0007000000 Address of Applicant : NA (86) International (72)Name of Inventor : :PCT// Application No :01/01/1900 1)Dr. Rajeev Verma Filing Date Address of Applicant : Associate Professor, Chandragupt Institute (87) International : NA of Management Patna, Mithapur Institutional Area, Patna -Publication No 800001, Bihar, India. Patna ------(61) Patent of Addition :NA 2)Dr. Sudeep Rohit to Application Number :NA Address of Applicant : Assistant Professor, Chandragupt Institute Filing Date of Management Patna, Mithapur Institutional Area, Patna -(62) Divisional to :NA 800001, Bihar, India. Patna ------Application Number 3)Kumod Kumar :NA Filing Date Address of Applicant : Chief Administrative Officer, Chandragupt Institute of Management Patna, Mithapur Institutional Area, Patna -800001, Bihar, India. Patna ------

(57) Abstract :

A bed safety system for toddlers, comprises of set of elongated cylindrical bodies 1 installed on bed 2, a roller 3 wrapped with net 4 is housed within each bodies 1, a pair of telescopic rods 5 connected to body 1, an ultrasonic sensor mapped on each of bodies 1 for detecting distance of bodies 1 from toddler present on bed 2 for actuating respective rods 5 to extend by virtue of which net 4 is unwrapped from roller 3 and boundary/fencing is established around bed 2, a locomobis sensor detects presence of mosquitoes around bed 2 for actuating hinge joint 6 for tilting rods 5 for enclosing toddler by net 4 over bed 2, a push button 7 is accessed by user for tilting one rod 5 towards ground surface for providing net 4 as ramp to toddler for allowing toddler to easily get off bed 2.

(19) INDIA

(22) Date of filing of Application :18/08/2022

(54) Title of the invention : ADJUSTABLE READING ASSISTIVE DEVICE

 (51) International classification (86) International Application No Filing Date (87) International Publication No (61) Patent of Addition to Application Number Filing Date (62) Divisional to Application Number Filing Date 	:G02B0027010000, A61H0007000000, G16H0040670000, A47B0023040000, A47C0001140000 :PCT// :01/01/1900 : NA :NA :NA :NA	 (71)Name of Applicant : 1)Chandragupt Institute of Management Patna Address of Applicant :Mithapur Institutional Area, Patna - 800001, Bihar, India. Patna Name of Applicant : NA Address of Applicant : NA (72)Name of Inventor : 1)Kalyan Prasad Agrawal Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, Chandragupt Institute of Management Patna, Mithapur Institutional Area, Patna -800001, Bihar, India. Patna 2)Dr. Rajeev Ranjan Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, Chandragupt Institute of Management Patna, Mithapur Institutional Area, Patna -800001,
8		Management Patna, Mithapur Institutional Area, Patna -800001, Bihar, India. Patna

(57) Abstract :

An adjustable reading assistive device comprises of a first and second platform 1, 2 attached with each other via a hinge joint 3, a computing unit wirelessly associated with device accessed by user for providing commands regarding inclination angle of platform 1, 2 required by user, along with medical history of user and time duration for reading books/documents, an artificial intelligence enabled image capturing module 4 decodes height of user and eye-coordination of user's eyes, a pair of telescopically operated rods 5 attached to platform 1,2 by means of slider 6 and primary suction cups 7 for adjusting height and inclination angle of user, a chamber 8 configured with a motorized drawer 9 for storing books/documents, a biometric scanner 10 open for allowing user to access books/documents, a pair of robotic arms 11 detects that user in not wearing a dedicated spectacles for placing glasses in front of user.

(19) INDIA

(22) Date of filing of Application :18/08/2022

(54) Title of the invention : ENTRANCE MANAGEMENT DEVICE FOR MULTI-STORY BUILDING

 (51) International classification (86) International Application No Filing Date (87) International Publication No (61) Patent of Addition to Application Number Filing Date (62) Divisional to Application Number Filing Date 	:E06B000900000, A47B009500000, A61L0002200000, F24F0011580000, E06B0005020000 :PCT// :01/01/1900 : NA :NA :NA :NA	 (71)Name of Applicant : Chandragupt Institute of Management Patna Address of Applicant :Mithapur Institutional Area, Patna - 800001, Bihar, India. Patna Name of Applicant : NA Address of Applicant : NA (72)Name of Inventor : Dr. Sayan Banerjee Address of Applicant :Assistant Professor, Department of Mechanical Engineering, Chandragupt Institute of Management Patna, Mithapur Institutional Area, Patna -800001, Bihar, India. Patna
C		Patna, Mithapur Institutional Area, Patna -800001, Bihar, India. Patna

(57) Abstract :

The present invention relates to an entrance management device for multi-story building, comprising of, a U-shaped frame 1 having a first and second portion 2, 3, multiple steps 4 to climb, an artificial intelligence based imaging unit 5 to detect user or vehicle, a pair of sliding arrangements 6 to translate the frame 1, a touch interactive display panel 7 for providing inputs regarding translation of frame 1, a sliding rack 8 mapped on periphery of the frame 1 to aid in movement of the frame 1, a rectangular wall 9 to prevent water from entering basement, a slider 11 arranged within the frame 1 and coupled with each of the steps 4 to regulate the steps 4, a greasing assembly comprising a chamber 12 and multiple electronic nozzles 13 to grease the sliding arrangements 6, and a pair of telescopic bars 14 to alter height of frame 1.

(22) Date of filing of Application :18/08/2022

(54) Title of the invention : AUTOMATIC GARLIC LOBE(S) PROCESSING DEVICE

		 (71)Name of Applicant : 1)Chandragupt Institute of Management Patna Address of Applicant :Mithapur Institutional Area, Patna - 800001, Bihar, India. Patna
 (51) International classification (86) International Application No Filing Date (87) International 	:A61K0036896200, A47J0019040000, A47J0043040000, G06F0003160000, B02C0021000000 :PCT// :01/01/1900 : NA	Name of Applicant : NA Address of Applicant : NA (72)Name of Inventor : 1)Dr. Rana Singh Address of Applicant :Director, Department of Foodtech, Chandragupt Institute of Management Patna, Mithapur Institutional Area, Patna -800001, Bihar, India. Patna
 (61) Patent of Addition (61) Patent of Addition to Application Number Filing Date (62) Divisional to Application Number Filing Date 	:NA :NA :NA :NA	 2)Dr. Shriranga Vishnu Address of Applicant :Assistant Professor, Department of Foodtech, Chandragupt Institute of Management Patna, Mithapur Institutional Area, Patna -800001, Bihar, India. Patna

(57) Abstract :

An automatic garlic lobe(s) processing device comprising of a cylindrical body 1 for enabling chopping and smashing operation, a chamber 4 housed on the body's 1 first portion 2 for placing garlic lobes along with water, a microphone 19 for providing the voice input command, the peltier unit for heating the water, a spiral blade 6 for peeling the lobe, multiple primary iris pores 5 for dispensing the water, a motorized iris lid 7 provided with a circular blade 16 for the remnant peel removal ,a telescopic pusher 17 for transferring the lobe(s) into the second portion 3, a motorized hinge 9 for the movement of the cutter 8 in perpendicular direction with respect to shaft 18 for smashing , multiple secondary iris poles 10, vibrating unit 15 and a flap 11 for removing the chopped garlic/garlic paste.