



2016 International Exhibition for Young Inventors

Organized by: China International Education Institute - International teenage
Competition and Communication Center (ITCCC)
China Committee of IEYI

Co-organized by: IFIP Secretariat Team

Convener by: Commission of China (Harbin) Animation Week for Youth

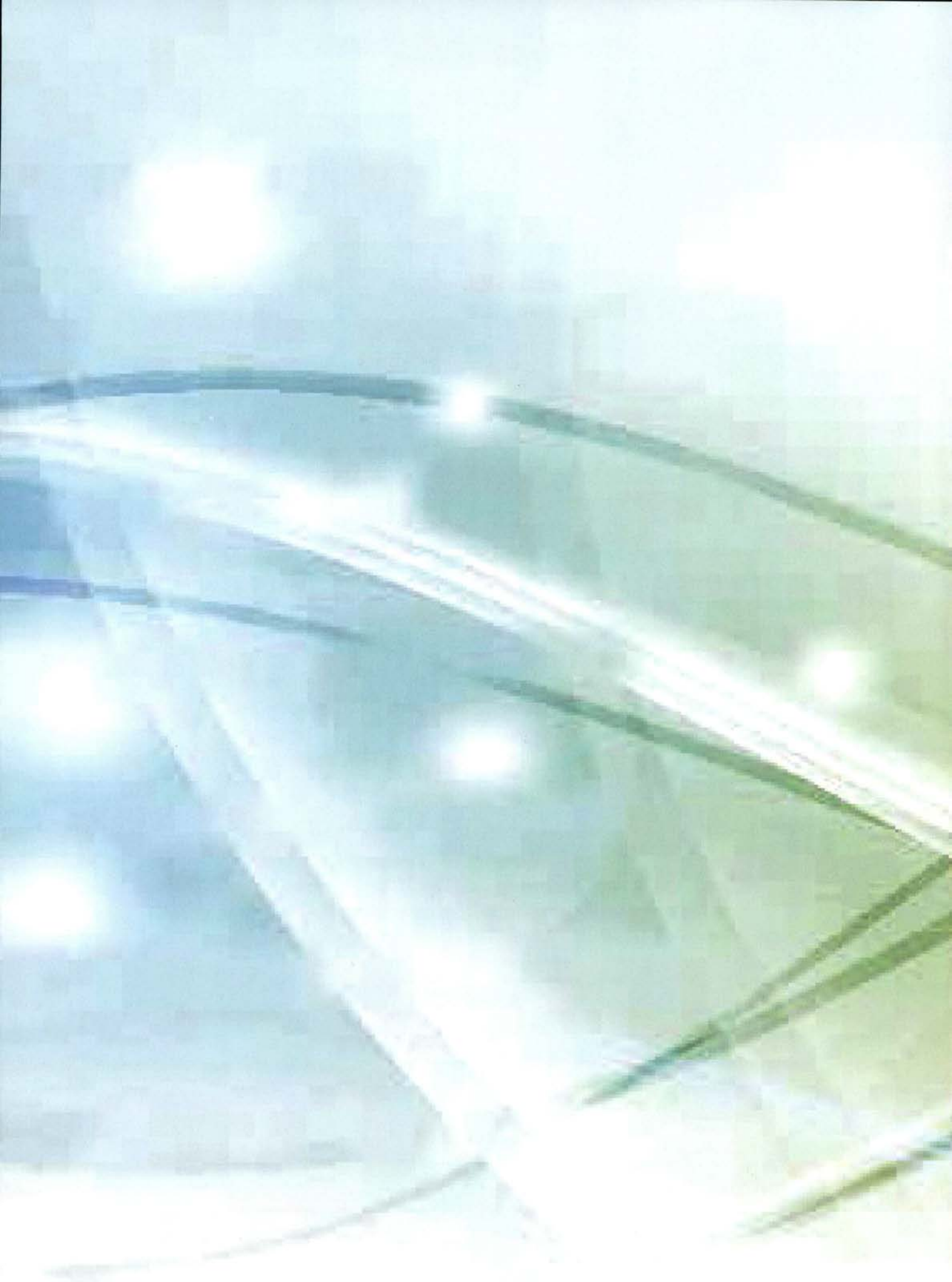


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2016 IEYI SCHEDULE

TIME	7/15 Fri. Arrival	7/16 Sat. Day 1	7/17 Sun. Day 2	7/18 Mon. Day 3	7/19 Tue. Day 4	7/20 Wed. Day 5			
09:00	Airport pick-up (Harbin Taiping International Airport) & Team check-in (Victories Hotel - Lobby) Booth installation (Harbin International Convention Exhibition and Sports Center - Exhibition A) (9:00 -)	Opening ceremony (Victories Hall - V1) (8:00-9:00)	Exhibition & judging (Harbin International Convention Exhibition and Sports Center - Exhibition A) (9:00-12:00)	Exhibition (Harbin International Convention Exhibition and Sports Center - Exhibition A) (9:00-17:00)	Cultural Trip (Optional)				
10:00		Exhibition (Harbin International Convention Exhibition and Sports Center - Exhibition A) (9:00-12:00)							
11:00		IFIP Board Meeting (Victories Hall - 201) (09:00-11:00)							
12:00		Lunch (Participants to arrange themselves) (12:00-13:30)							
13:30		Exhibition & judging (Harbin International Convention Exhibition and Sports Center - Exhibition A) (13:30-17:00)	Exhibition & judging (Harbin International Convention Exhibition and Sports Center - Exhibition A) (13:30-17:00)						
14:00							Place restoration (Harbin International Convention Exhibition and Sports Center - Exhibition A) (17:00-17:30) [Organizer requests teams keep their posters and/or models at the booths]		
15:00									
16:00									
17:00		Welcome Dinner (Victories Hall - V2) (17:00-19:00)	Judges' meeting (Victories Hall - 202) (17:00- 19:00)						
18:00 ~	Rehearsal for the Opening ceremony (Victories Hall - V1) (19:00-21:00)	Cultural Performance Show (19:00-)	Dinner (Victories Hotel - Restaurant)	Farewell Dinner (Victories Hall - V2) (18:00- 19:00)					
				Award Ceremony & Cultural Night (Victories Hall - V2) (19:45- 21:00)					

OPENING CEREMONY

(1) Time : July 16, 2016 (Saturday) 8:00-9:00

(2) Venue : Victories Hall - V1

(3) Process :

Time	Program
7:30-8:00	Registration
8:00-8:05	Introducing honored guests
8:05-8:10	Introduce participating countries
8:10-8:20	Welcome Speech: IFIP Secretariat
8:20-8:30	Welcome Speech: ITCCC
8:30-8:40	Welcome Speech: Harbin deputy mayor
8:40-8:45	Opening Address
8:45-9:00	Commencement remarks
9:00-9:30	Media interviews

WELCOME DINNER

(1) Time : July 16, 2016 (Saturday) 17:00-20:00

(2) Venue : Victories Hall - V2

(3) Process :

Time	Program
17:00-17:10	Take a seat
17:10-17:20	Introducing honored guests
17:20-19:00	Buffet
19:00-20:00	Performance
20:00	Group pictures, return to hotel

AWARD CEREMONY & CULTURAL NIGHT

(1) Time : July 18, 2016 (Monday) 19:00-21:00

(2) Venue : Victories Hall - V2

(3) Process :

Time	Program
19:00-19:05	Chinese Cultural Performance
19:05-19:10	Introducing honored guests
19:10-19:20	Co-host's and Guests Address
19:20-19:40	Bronze Medals
19:40-19:50	Silver Medals
19:50-20:00	Gold Medals
20:00-20:10	Macau Cultural Performance Indonesian Cultural Performance
20:10-20:35	Special Award
20:35-20:40	Chinese Taipei Cultural Performance
20:40-21:00	Closing remarks

PREFACE

International Exhibition for Young Inventors (IEYI) was founded in 2004 by Japan Institute of Invention and Innovation (JIII). The aim of IEYI was to encourage creativity and invention from teenagers. To celebrate the 100th anniversary and to promote invention and innovation around the world, the 1st International Exhibition for Young Inventors (IEYI) was held in Tokyo, Japan. IEYI has subsequently been hosted by different member countries.

The purpose of the establishment of IEYI is to exhibit outstanding inventions and innovations from all over the world, and honor and award inventors to carry out the contribution of abundant creativity.

Members of International Forum of Invention Promotion (IFIP) have agreed that Taiwan would be in charge of the IEYI Secretariat Office, dealing with all affairs of IEYI for 5 years from 2012 to 2017. As agreed with the IFIP, China is honored to host the 2016 IEYI (organized by China International Education Institute - International teenage Competition and Communication Center (ITCCC) and China Committee of IEYI) at Harbin International Convention Exhibition and Sports Center.

There are 10 countries participating in the 2016 IEYI, including China, Egypt, Hong Kong, Indonesia, Japan, Macau, Malaysia, Singapore, Chinese Taipei & Thailand. We are very delighted to have more than 300 delegates participating and exhibiting more than 100 inventions in China.

We endeavor to promote this meaningful activity for the development of inventions and innovations.

IEYI SONG

lyrics : J.C. Hong
music : P.H. Cheng

The image displays a page from a musical score for the song "The Lord of the Dance." The score is written for a large ensemble, including vocalists and various instruments. The top system features the vocal parts: Voice, Soprano, Piano, Cello, Contrabass, and Percussion. The bottom system features the instrumental parts: Flute, Saxophone, Trombone, Trumpet, and Tuba. The music is in 4/4 time and G major. The lyrics are written in both English and French. The English lyrics are: "The Lord of the Dance, the Lord of the Dance, the Lord of the Dance, the Lord of the Dance." The French lyrics are: "Le Seigneur de la Danse, le Seigneur de la Danse, le Seigneur de la Danse, le Seigneur de la Danse." The score is written in a traditional musical notation style, with staves for each instrument and vocal part. The music is characterized by a strong, rhythmic melody and a complex, multi-layered accompaniment. The overall mood is festive and celebratory.

AWARD

Award Scheme:

Gold:

For the Junior Group and Senior Group respectively, 10% of the inventions will receive gold award

Silver:

For the Junior Group and Senior Group respectively, 15% of the inventions will receive silver award

Bronze:

For the Junior Group and Senior Group respectively, 20% of the inventions will receive bronze award

Special award:

For the Junior Group and Senior Group respectively, 35% of the inventions will receive special award

Recipient: Only contestants who attend IEYI 2016 in China will receive any medal, special awards or certificate.

INVENTION CRITERIA

Creation must adhere to all exhibition specifications. The invention must be safe and not belong to the field of basic scientific research or pure art creations. General criteria are listed below:

- (1) Pure art creations such as poetry, songs, short stories, paintings, sculptures, etc. will NOT be qualified for this exhibition.
- (2) Basic or pure scientific research experiments involving living organisms will NOT be qualified for this exhibition.
- (3) Inventions must be safe. NO explosives, corrosives, poison substances and combustible materials are allowed.

Invention Categories

An invention must be registered in one of the following six categories:

(1) Disaster Management

Inventions are useful in detecting, preventing natural disasters or post-disaster management (e.g. technologies/ products/ systems).

(2) Education & Recreation

Inventions that show usefulness in classrooms or elsewhere for educative purposes. Invention that improves activities involve in recreational purposes (e.g. sports, entertainment, & etc.)

(3) Foods & Agriculture

Inventions that improve the qualities of agricultural practices or inventions that solve contemporary food issues. This category involves only inventions that belong to system/technology/product but does not include the food item itself.

* Creation should not involve any living organisms. These are prohibited from entering countries.

INVENTION CRITERIA

(4) Green Technology

Inventions that create sustainability, reduce pollution, promote energy efficiency, and environmentally friendliness.

(5) Safety & Health

Inventions that contribute to safety and health (e.g. devices, system, practices).

(6) Technology for Special Needs

Inventions that contribute the convenience of minorities, people with special needs (e.g. elderly, children, people with disability, pregnant women).

Summary of Display Specification

Safe	Materials should be durable. Materials which are dangerous, rotten or fragile will not be allowed.
Technology-oriented	No art and basic scientific research will be allowed.
Newness/Uniqueness	If the invention has patent(s), this can be displayed.
Completeness	Participants must provide clear explanation of the purposes, developing processes and operation about the invention.

JUDGING CRITERIA

Judging Criteria

The judging panel will be primarily comprised of delegates from the member institutions/countries. The accumulated scores of each invention from all the judges will form the basis for most of the awards. The invention is judged from multiple aspects by experts in related fields. Each judge will judge each team for a maximum of 3 minutes. The scoring rubrics is shown in the table below.

Scoring criteria for each invention	
Creativity (35%)	Theme (5%)
	1. High: Completely matched with the theme (4-5%)
	2. Middle: Mostly matched with the theme (2-3%)
	3. Low: Hardly matched with the theme (0-1%)
	Innovative Function (25%)
	1. High: New, not known anywhere in the world prior to filing (21-25%)
	2. Middle: Refined and better function (11-20%)
	3. Low: Mildly progressive (0-10%)
	Innovative Material (5%)
	1. High: Multiple and transformative (4-5%)
Appearance (15%)	2. Middle: Multiple (2-3%)
	3. Low: Mono-material (0-1%)
	Total _____
	Look (5%)
	1. High: Look of Invention (4-5%)
	2. Middle: Look of Invention (2-3%)
	3. Low: Look of Invention (0-1%)
	Detail (10%)
	1. High: Detail (8-10%)
	2. Middle: Detail (4-7%)
	3. Low: Detail (1-3%)
	Total Appearance _____

JUDGING CRITERIA

Operability (20%)	Operation (person vs. object or object vs. object) (10%)
	1. High: Smooth of Operation (7-10%)
	2. Middle: Smooth of Operation (4-6%)
	3. Low: Smooth of Operation (1-3%)
	Stability (10%)
	1. High: Stability (7-10%)
	2. Middle: Stability (4-6%)
	3. Low: Stability (1-3%)
	Total Coordination _____
Marketability & Environmental Friendly (20%)	Marketability & Environmental Friendly (15%)
	1. High: Reusability, marketability (11-15%)
	2. Middle: Reusability, marketability (6-10%)
	3. Low: Reusability, marketability (1-5%)
	Patent (5%)
	1. Invention Patent has pended (Domestic) (5%)
	2. Utility Model Patent has pended (3%)
	3. Invention Patent pending (2%)
	4. Utility Model Patent pending (1%)
	5. N/A (0%)
	Total Marketability & Environmental Friendly _____
Presentation (5%)	1. High: Paper/Oral (4-5%)
	2. Middle: Paper/Oral (2-3%)
	3. Low: Paper/Oral (0-1%)
	Total Presentation _____
Overall (5%)	1. High: Integration of invention (4-5%)
	2. Middle: Integration of invention (2-3%)
	3. Low: Integration of invention (0-1%)
	Total Integration _____

EXHIBITORS LIST

Country	Organization
China	China International Education Institute - International teenage Competition and Communication Center (ITCCC) China Committee of IEYI
Egypt	The Egyptian Society for Women & Youth Inventor
Hong Kong	Hong Kong Invention Association
Indonesia	Indonesian Institute of Sciences (LIPI)
Japan	Japan Institute of Invention and Innovation (JIII)
Macau	Macao innovation & invention association
Malaysia	Malaysian Invention and Design Society (MINDS)
Singapore	ITE College East
Chinese Taipei	Chinese Taipei IEYI Taiwan Creativity Development Association (TCDA)
Thailand	Office of the Basic Education Commission (OBEC)





CHINA



Creative Musical Box--Control

Description of Invention

It is boring when we have nothing to do, then we usually listen to music or play the music . Now you can do all those things together because of The Control. You can play notes, and combine those with existing music on this machine. Besides, this instrument can be use by most people. It is a toy for children and a loud-speaker for puber and an exercise tool for the old to prevent dementia.



Inventor(s)

YIQU ZHANG

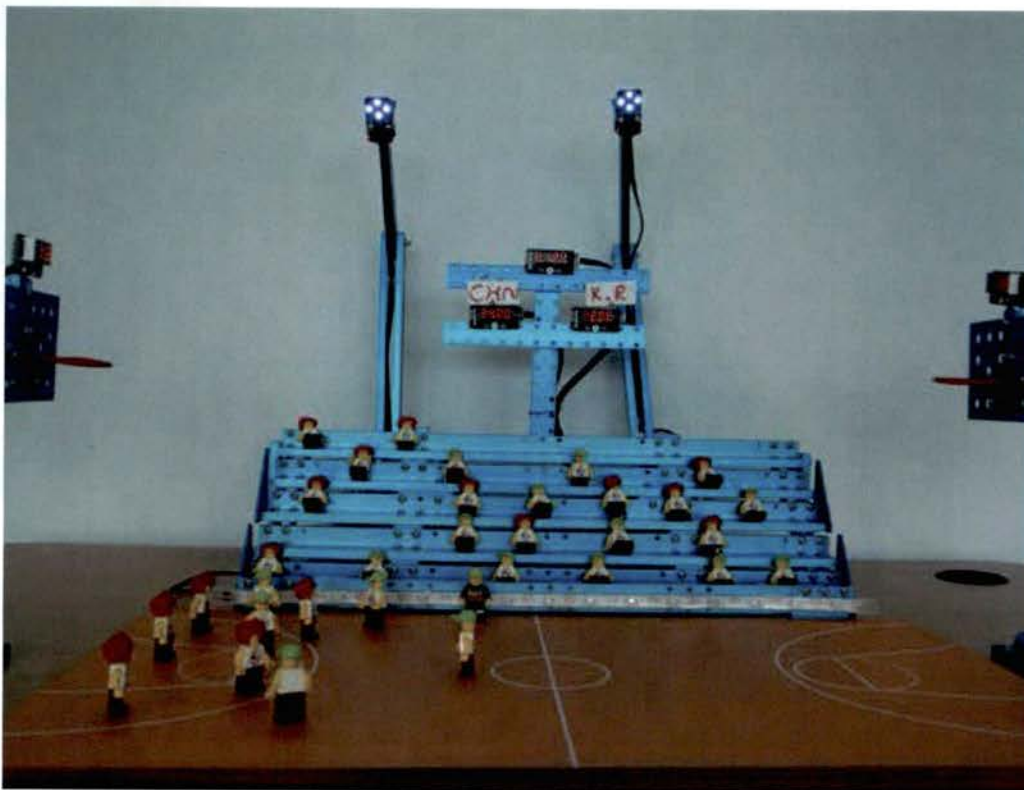




Dynamic Basketball Court

Description of Invention

The project uses the Makeblock hardware and mBlock software to simulate the basketball court related facilities. We use Nixie tube to display the 24 seconds score and clock time. We Use LED to adjust the atmosphere of the stadium. The LEDs can change the color and blink speed.



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Inventor(s)

ZIHENG ZENG
ZIYAN FANG
TIANHAO CHEN

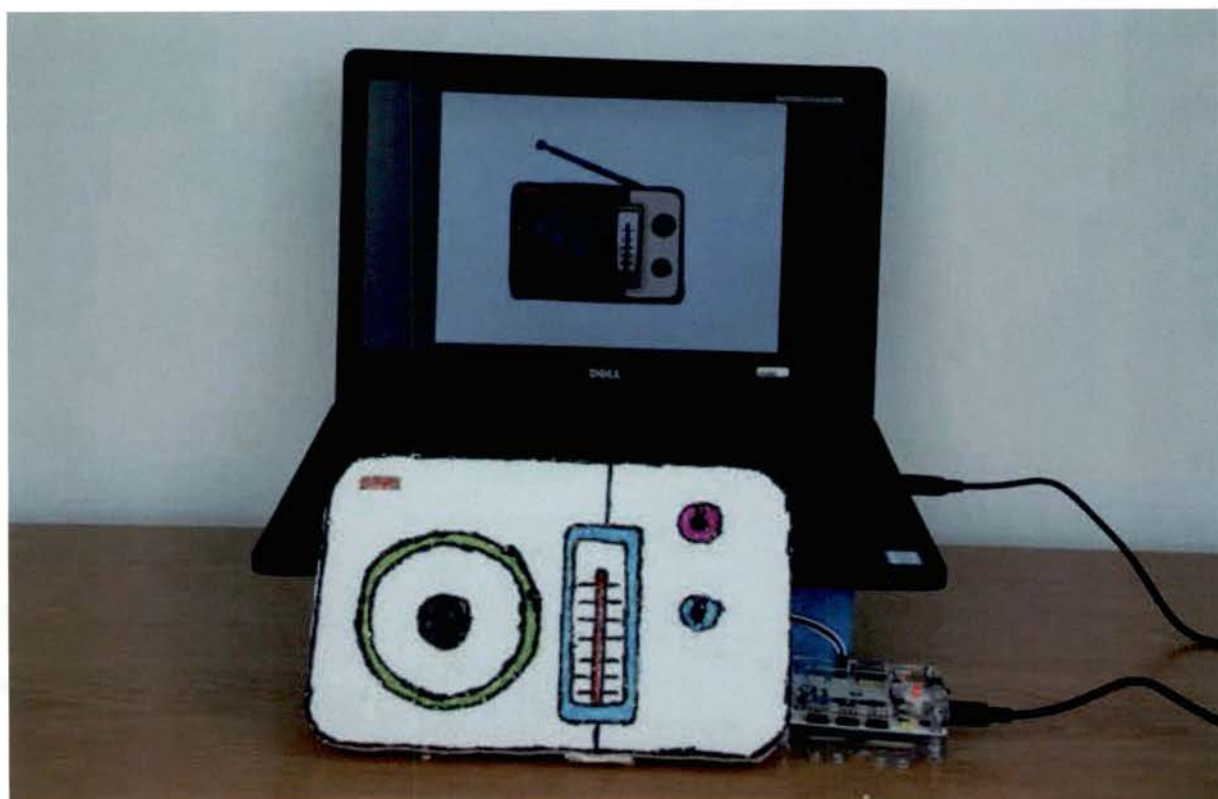




Cool Radio

Description of Invention

We made a radio with S4A software and Arduino hardware. It's very cool. We use two knob, a knob to control the volume size, and the other knob can be tuned.



Inventor(s)

ZIYAN FANG
JINGHAO LI
YIPU GE

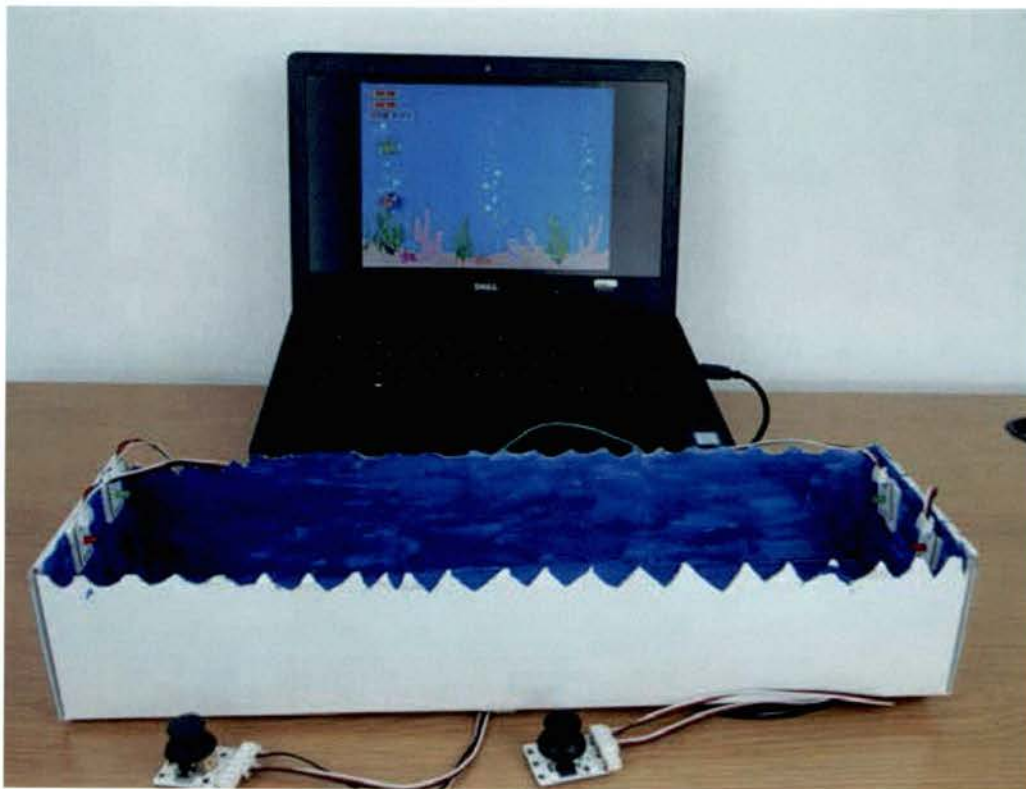




Undersea Marathon

Description of Invention

Students use S4A software and Arduino hardware to make the game.



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Inventor(s)

TIANHAO CHEN
JINGHAO LI
YIPU GE





Intelligent Uniform Irradiance System in the Classroom

Description of Invention

"Collecting the data of illumination intensity in the classroom by the digital light sensor connected by Arduino mini and calculating the data sent by wireless transmission module RF2401, the Intelligent uniform Irradiance System adjusts the light in the classroom. If the light is too strong outside, the curtain in the classroom will fall automatically, which will reduce the influence of the light outside and balance the illumination inside. It meets the criterion GB7793-2010, which states the average illumination is no lower than 300Lx with uniformity no less than 0.7. The energy consumption can be reduced by over 30% if PWM dimming technology is adopted and fluorescent lamps in the classroom are changed to LED. According to the model test, it will reduce another 20% if Intelligent uniform Irradiance System is added. The application of the system will make the classroom a good place to study with a balanced light."



Inventor(s)

SU XIN
ZHOU HEYANG

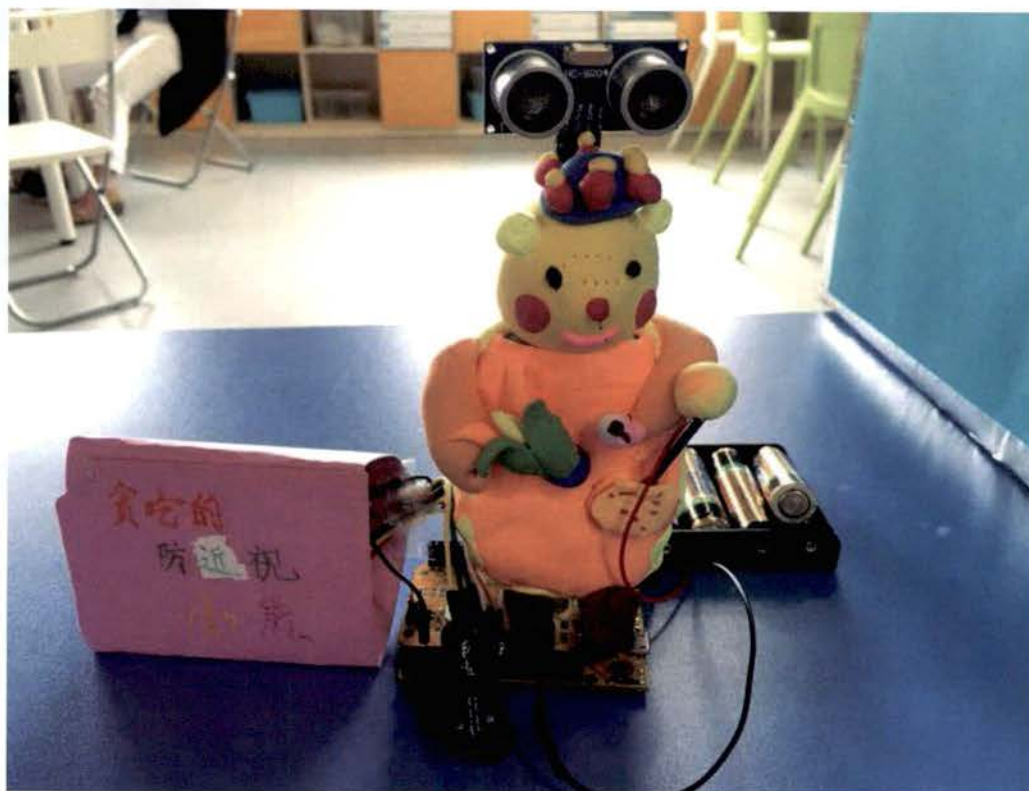




Myopia Prevention Device

Description of Invention

The device can automatically adjust the brightness and the chromatogram of the desk lamp according to the indoor light, and the child can be prompted to take the position of the child when the child is too low.



Inventor(s)

YUKAI CHEN
HE ZE HENG
WU CHENG ZE





Future Smart Home

Description of Invention

This intelligent networking family is suitable for modern people advocate low carbon life, especially for vulnerable groups. We created the initial inspiration from disadvantaged groups of services. When children, the elderly, the patient alone, or we have many things to do at the same time, more able to reflect the advantages of smart home.



This intelligent networking home can be used in the smart home networking hospital ward, the old apartment, for the disabled and the elderly to provide services. Bedridden patient to open distant lights from the bed, television, or electric fan, just say, lonely old man looking for a chat, this is a patient chat experts the disabled to plants conservation and water watering everything in a row.

Intelligent home networking can usually be installed in a separate family, the child does not need keys, speech recognition can be entered into the room. To prevent the invasion, the fire alarm device, to ensure the safety of the home. Our future smart home appliances, furniture, all of the use of a control system, the use of simple and convenient, because it uses a voice intelligent system, so it is suitable for all ages.

Inventor(s)

XIANGYU PAN
YIJIA DONG
XIN FENG



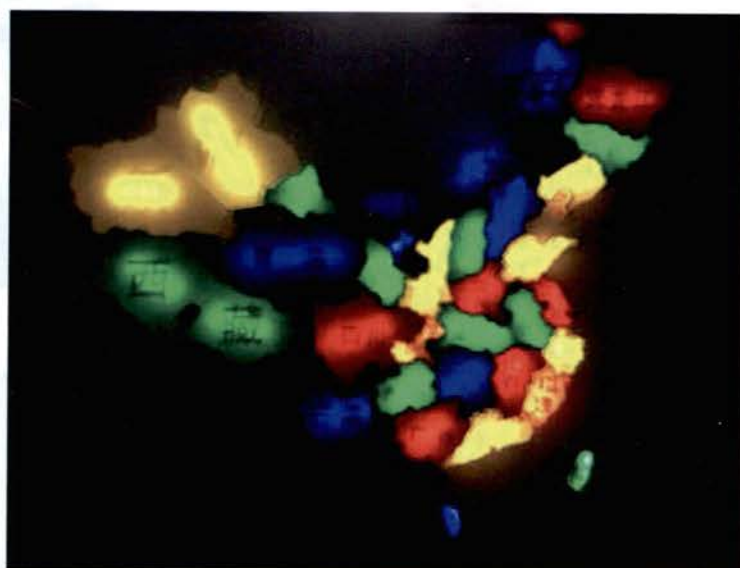


Magic Map

Description of Invention

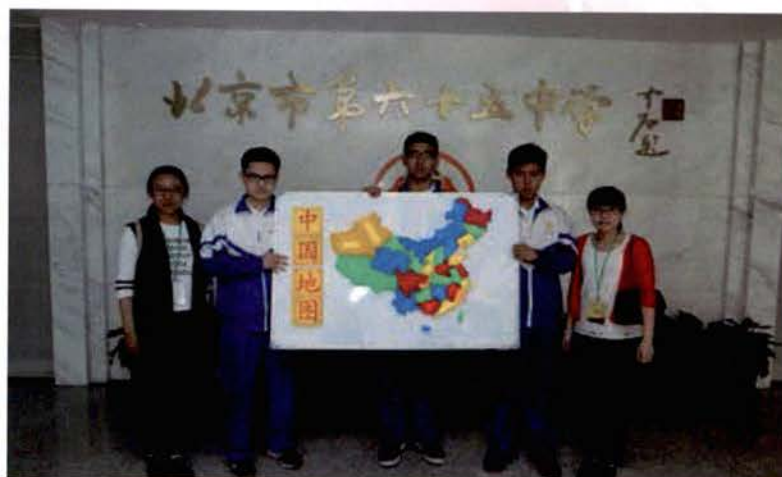
Combining the education of the new curriculum concept, around our "best jump education", we will be the electromagnetic technology of physics and interdisciplinary integration map model, design a service in geography classroom practical teaching AIDS, shine in the map. Hollowed, we put the whole piece of the map to create dry reed pipe and LED lamp belt of space, and set aside the thickness of the font on the bottom space, finally make a bottom cover. And break the blackboard, studded with high magnetic magnets in the blackboard, so can not only block adsorption the map on the

blackboard, can trigger the dry reed pipe in the map again, the LED light. At the same time, we in the back of each map is studded with small magnets, when the purpose is to don't need a light, can adsorption in ordinary on the blackboard, when several provinces need to glow, we also design the helm of magnetic, adapt to a variety of situations.



Inventor(s)

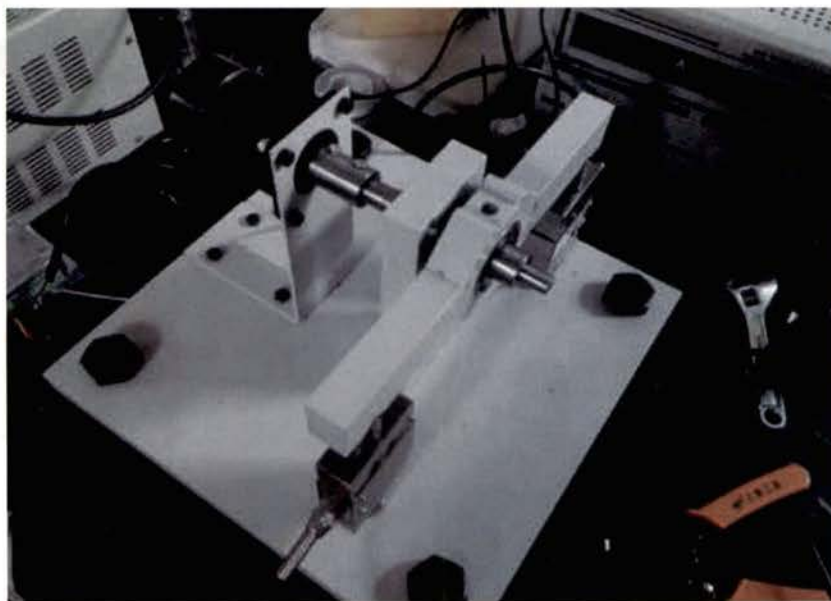
HE JIACHEN
GAO ZIYANG
TANG XIAOYI





Test Platform of Automobile Bearing of New Energy

Description of Invention



Realizing the critical produce of the traditional energyresources and the severity of the lacking of the energy resources, vehiclesstill consume enormous fossil energy every year in nowadays society. Advocatingthe use of new energy automobile is the major trend to transit and adjust thestructure of the energy today. This

essay studied the test and evaluate methodof the bearing aiming at those new energy automobile, and autonomously build upthe test instrument, by measure the tiny changes of the running of the bearingwhich are enlarged by the circuit, it can calculate the moment of friction ofthe bearing accurately. Also it can change the load, adaptability, temperature,amount of lubricating oil, rotate speed, tiny vibration, etc, testing theperformance of the bearing in many ways. It achieved the controlling and the monitoringof the bearing on the PC, users can test bearings on the PC in order to producethe testing data to evaluate the bearing performance. This essay built thedrafts by Solidworks, drew blueprints and made the instrument, and willsummarize the theory, composition and steps of the building.

Inventor(s)

XUAN HAONING

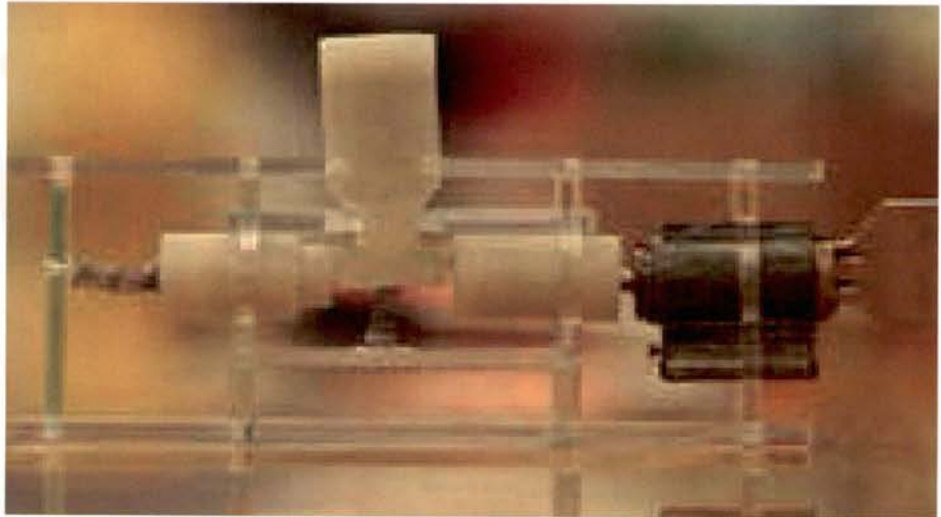




Bicycle Hub Lock

Description of Invention

Recently, the concept of green travel increases the demand of bicycle, but the bicycle losing problem has always plagued the people. So, I try to design a lock with better anti-theft performance and more convenient operation, making



the bicycle's parking more securely, and bicycle's locking, unlocking operation more convenient, so as to make people more willing to green travel. The bicycle lock on the current market is easy to be cut off and destroyed. With the principle of integration of bicycle and lock, that is the bicycle hub lock which I designed, set the lock part into the bicycle hub to lock the wheel. So the attempt to destroy the structure of the lock, will damage the structure of the bicycle at the same time. Bicycle hub lock is also connected with the bicycle stand, preventing the bike from being locked while riding.

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Inventor(s)

YANG CHENYU



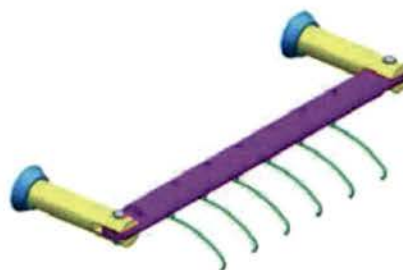


Portable Clothes Hanger

Description of Invention

With the accelerating pace of modern society, people travel, travel more and more opportunities, but at the same time travel troubles arise, especially in the hotel accommodation, traveling clothes washed and dried very troublesome, often need dry cleaning treatment, but the hotel dry cleaning is expensive, therefore, to solve this problem we the team invented a portable combined hanger, the utility model is composed of a suction cup and a folding rod, when used by chuck and foldable support rod fast combination to form a combined hanger, by adsorption on both sides of the fast sucker in the hotel window, and then the clothes can be placed in the bottom folding support rod set special racks, the whole process of installation and use is convenient, and low cost. Convenient for people to travel.

Works have applied for the national utility model patents, and has a small batch of production, has been customer service, the next step will be to mass production, to market.



Inventor(s)

XU KE JUN
ZHAO DAN
ZHANG HAO NAN





Innovative Toilet Lid

Description of Invention

The innovative idea of automatic toilet lid is rooted in healthy and energy-saving idea of the modern life. It consists of two steering gear drives, Motion of the connecting rod, the arduino board and a variety of sensors. It has three basic functions. The induction flip is



used to avoid bacteria. The timely warning can be used to remind you not to seat on the toilet for too long. Two lift-lid schemes are also designed to bring convenient to men and women. They are convenient for our life and to ensure our health as well as the humanistic care.

Inventor(s)

YIZHAN SUN
YILONG LUO







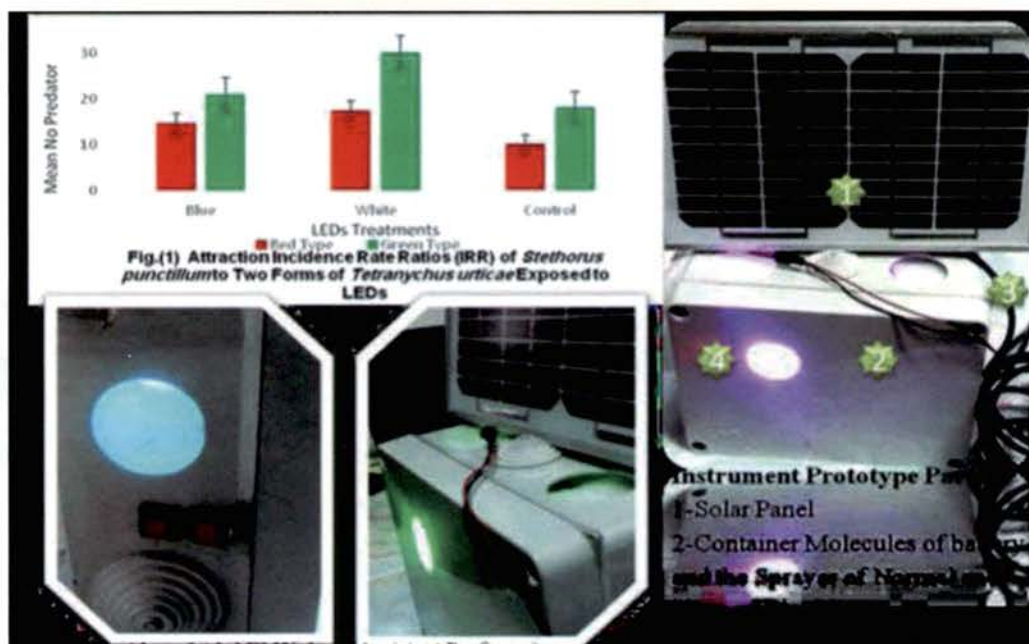
EGYPT



Solar Energy and Light Emitting Diodes (LEDs) To Control Agricul

Description of Invention

Present invention is depending mainly on the effect of Light Emitting Diodes (LEDs) against certain agricultural pests. LEDs were powered by solar energy to be able to do its effect in fields and greenhouses specifically in night when most pests are active. LEDs colors with their different wavelengths showed that they were successfully able to control pests directly and also they can attract special predator to each pest and can attract others to the same pest with other color. Besides, LEDs showed their effect on the metabolic resistance of pesticides in insects and mites.. Instrument Prototype Parts: 1-Solar Panel 2-Container Molecules of battery and the Sprayer of Normal and Nano of Biocides 3-Power 4- Light Emitting Diodes (LEDs)



Inventor(s)

RANIA AHMED ABD EL-WAHAB



E- Rain Gate (Automatically Smart Gates For Storm Water Inlets)

Description of Invention

The Environmental Technology Invention (Green Management) Prevent the entry of sand in the drainage of rain or filled in it,+ Save time and effort for the workers + Electronic drawing print end of the work day with showing the percentage of sand The entry of sand in the drainage of rain or filled in it, leading to the accumulation of rainwater in the street outside the storm water Inlet The Environmental Technology Invention (Green Management) (Prevent the entry of sand in the drainage of rain or filled in it,+ Save time and effort for the workers + Electronic drawing print end of the work day with showing the percentage of sand

E- Rain Gate
Automatically Smart Gates for Storm Water Inlets with E-Maintenance

(Registered Patent No.: 2011/514 (Egyptian Patent Office)) & Patent Software No.: 001836/ 2012 (The Egyptian Ministry of Communications and Information Technology -Patent Office) ITIDA.

Automatic Gates to Open and Close the openings with Storm Water Maintenance of Electronic (Electronic Civil) It is automatically Gates for Storm water Inlets (Open & Close) on rain time by (Water sensor) to Prevent the entry of sand in the drainage of rain or filled in it, leading to the accumulation of rainwater in the street outside the storm water Inlet.

With Electronic Maintenance by (Distance sensor) to clarify the proportion of the amount of sand inside the inlets without (remove cover for inlet or check it or more labours.... etc.) Or any difficulties work

Advantages: The Environmental Technology Invention (Green Management)



Inventor(s)

KHALED ABDUL HAMID ELNEMS



The Sun Printer by Mobile

Description of Invention



Device for It is Printer by free resources a (Sun) by two way through (a magnifying glass to focuses the sun's energy onto soft wood to sun engraver by Stencils) also (a solar panel to run the electronic inside items) it will printed after taken order from a Mobile – Just Put the Device under the Sun. Connected, typed and give order for printed wirelessly by Mobile)

Inventor(s)

KHALED ABDUL HMAID ELNEMS





M-YoKa (The Pod Mob Phone Charger by Body Temperature)

Description of Invention

It is a pod to ship the phone through the body temperature of man where converts thermal energy into electric so doing, you charge the phone in addition to the kinetic energy, which supports the thermal energy in charging the phone and is shipping wirelessly in addition to the bursa characteristic change color and forms depending on what he wants He's the person as they appear natural Colors In addition : to the experiments by the slice calculate the amount of calories lost, along with the pulse of man and also found on the Bursa hour to provide him with the effort to know the time instead of open mobile



Inventor(s)

RANIA IBRAHIEM
ASHOUR EL SAYED
HADEER IBRAHIEM ASHOUR EL SAYED

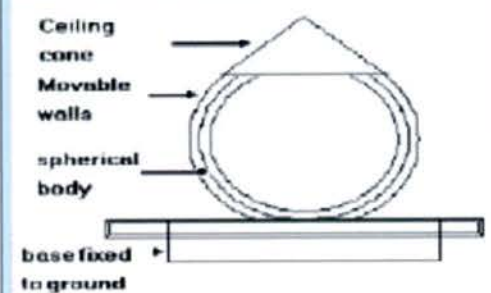
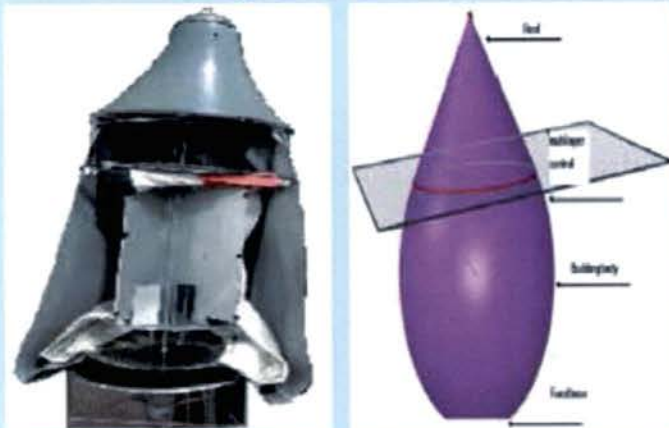


Spherical Green Building

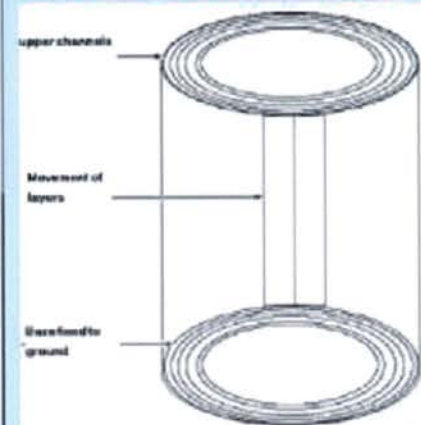
Description of Invention

Design for building element in the form of incomplete sphere, the design save energy. It consists of multiple layers on moving streams equipped with sensors, the movement of the working layers were controlled automatically or manually according to climate changes in the surrounding atmosphere. The top and bottom of the layers are installed on several axes cantered together. The movements of insulated layers are done by sliding on the certain channels

The Spherical Unit



Green Building design



The Insulated Layers

Inventor(s)

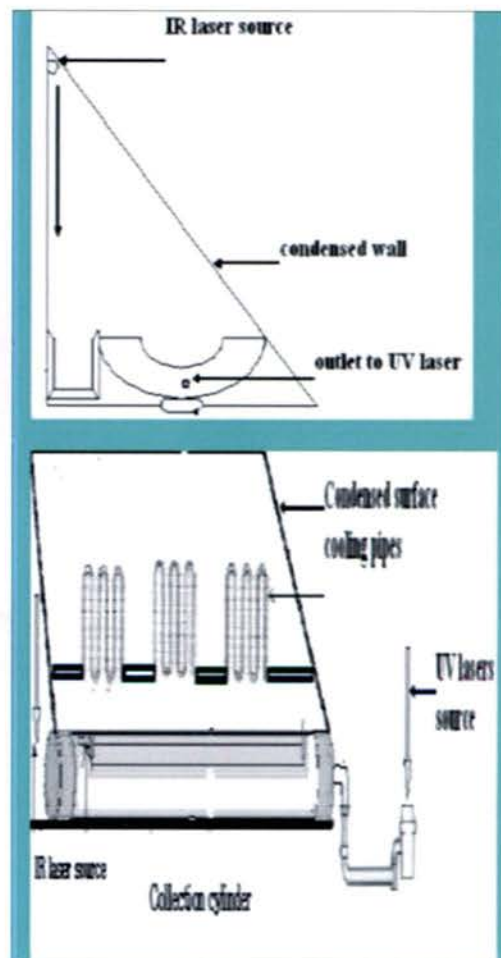
HEBATALRAHMAN AHMED



Laser Device For Water Treating

Description of Invention

Device for water purification and sterilization in two stages: the first stage uses infrared lasers to convert water into steam condenses on polished metal surface and gathered in a half cylinder, which has a valve and speed sensor to control the speed of water flow to the second stage. In second stage, water is exposed to UV laser radiation. Water gets rid of suspended solids and salts in the first stage, while it disinfected and cleaned from bacteria and organic material in the second stage. The device is characterized by easy maintenance. It does not cause any color or taste change of water, it has ability of automation control, and installing directly on water source



Inventor(s)

HEBATALRAHMAN AHMED



Safety Electronic Protection Glasses

Description of Invention



Only by worn this Safety electronic protection glasses can protection the eyes from (dangerous consequences) like (cutter and trimmer trees device or welder or holder device) to protect the worker otherwise this Dangerous Device it will not working

Inventor(s)

KHALED ABDUL HAMID ELNMES





Blind Spot by Bluetooth (BSB)

Description of Invention

It is View by mobile the blind spot (vehicle rear) by Bluetooth alarm system control installed (Device in the rear sides for vehicle wheels) with self- power (charger Movement by wheels)), belonging to the vehicle safe driving device technology. Technical solution that contains in the rear sides for vehicle wheels. The advantages that: only installed Bluetooth transmitter Device in the rear sides for vehicle wheels, self-power (because it is powered by moving wheels charger), no drilling, wiring, change car circuit; easy to install, can be installed by the owners themselves, without professional; low cost, the cost of less than 10 \$



Inventor(s)

KHALED ABDUL HAMID ELNEMS





MT Smart Pelvic Trainer

Description of Invention

A surgical training device composed of face wall cover with female anatomy, basal box with dimensions 30x30x60 cm ,Led light camera tube, organs(uterus, fallopian tubes, ovaries)attached with sensors to be placed inside the box. It is considered as dry Lab for training purpose for doctors specified to gynecological laparoscopic and hysteroscopy operations



Inventor(s)

MOHAMMAD AL TOOKHY



(Enjad) “Artificial Physical Therapy Arm”

Description of Invention

The projects focus on increasing the human muscle strength and help the disabled people, makes their life easier. In addition to build a new generation of machines works on principle of human muscle with pneumatic power. The project is a Prosthesis or Artificial Limb as a cure of muscle dystrophy. The arm was designed to sense the movement of human body through variable semiconductor elements, or imitating the body movement by brain signal. The objective of this arm is for helping the muscle atrophy disease, and increase or enhance their strength. The Effects: 1. Solution for disability people, with low cost. 2. It could be used as an external arm to labourers, to give them external power. 3. The advantages compare to the exiting arm in markets, including:



Inventor(s)

MOHAMED ELMOUSLY
MOUSTAFA MOHAMED HASSEN





HONG KONG



Convenient Clothes Pegs

Description of Invention



The Convenient Clothes Pegs can help us to do the household chores more quickly. Both the socks and ties can be hung on it easily either for drying or keeping them properly. It is also convenient for the travelers to use it in the hotel. It is colorful, attractive and can be produced in a low cost.

Inventor(s)

YANG CHENYU





INDONESIA



SIMINA BANJIR (Flood Mitigation System)

Description of Invention

The function of SIMINA BANJIR is to reduce flood victims by early warning system. Floods that occurs due to overflowing rivers and SIMINA BANJIR can be installed on upstream of the river to monitor potential flooding. The device has a 5 warning level that indicated by signal light and alarm for the peak level warning. The device can inform water level, as shown on the screen at the device and if there are certain changes in water level SIMINA BANJIR will be inform the water level through Short Message Service (SMS) in automatically to the user (officer / stakeholder) or manually by user request any time and any where, so it can help user to determine further actions for people who will affected by flooding. At a Certain water level , devices can be set to make a calls to the certain phone number automatically. The device is equipped by a solar panel system to avoid electricity network failure.



Inventor(s)

ASEP MUHAMADYANWAR SALIM
MUCHAMMAD ALFARISI





Smart Trash Bin

Description of Invention

Trash has become a serious problem in various major cities in Indonesia for a long time, especially in Jakarta. These days, there are many people who are ignorant about the trash issues. They litter around because of the lack of awareness of the society itself. So far, the government has been doing some efforts in order to countermeasure the trash issues in Jakarta. They have provided public trash bins with 3 different categories which are placed on public places. However, people tend to be ignorant and still throw their trash randomly without considering its category. And so, researcher started to think about making a prototype of trash bins that can distinguish the trash based on its category using a capacitance sensor from activated carbon that was made by the researcher. Moreover, the trash bins can only be open based on the trash's category. By demonstrating its function to differentiate trashes based on its categories, it can educate our society about the importance of trash treatment. Furthermore, when trashes were disposed of in accordance with the category, it will obviously enlighten the recycling process. When the trashes are mixed up, it is going to be hard to process it because each category has its own way to be process and it is not going to be easy to sort it when it is already piled up in a place in a mixed condition. So if this trash bin can restrict people from throwing trash randomly, it can prevent trashes from being mixed. As a result, the recycling process can be enlightened because they can directly recycle the trash without sorting it again. On the contrary, the inventor is planning to develop this trash bin by adding the concept of IoT (Internet of Things) into it. So there will be a weight sensor in each bin that can indicate whether the trash bin is full or not. Furthermore, if the trash bin is full, then it will sent a notification to the trash taker in which the trash taker will go directly that way and pick it up. As a result, they can work efficiently without having themselves walking all around the city and check every single trash bin that does exist in the city.

Inventor(s)

RYAN TIMOTHY ABISHA





D-Box CC (Detector Box for CO and CO₂)

Description of Invention



D-Box CC is an instrument sbased on microcontroller Arduino Uno R3 which serves to detect CO and CO₂ gas by using a censor MQ7 and MQ135. In this tool, the reading on the censor is done in an analog. D-Box CC is also equipped to the several additional components such as DHT11 (Temperature and Humidity Censor) that serves to measure the temperature

and humidity, 16x2 Character LCD is used to display gas concentrations of CO and CO₂, fan DC that serves the compression of air in order to enter MQ7 and MQ135 gas censor, LED as an indicator to determine the air quality as well as an alarm buzzer when air quality is in danger level. Inventor also make an interface application based on Visual Studio 2012 to cultivate and show the data from the microcontroller in the graphic and numeric form. Overall, the D-Box CC has far more advantages than other detection tools. D-Box CC is also needed by society because in addition the portable form, this tool only requires 7V-12V electrical current which can be derived from the USB, Adapter, and battery. Because of that D-Box CC is more efficient compared to other measuring equipment that only displays measurement data and can use only one type of power resources, while the D-Box CC has been equipped with the system data viewer, indicators and warning systems / alarms. D-Box CC is also Cheaper than other measurement instrument, the estimated costs in the manufacture of D-Box CC is IDR 574.000.

Inventor(s)

AAN ARIA NANDA
FERIAWAN TAN





JAPAN



Hybrid Power Blackboard Eraser Cleaner

Description of Invention



I wanted to invent a blackboard eraser cleaner that operates quietly without spreading chalk dust and causes little damage to the erasing surface of the blackboard eraser. To use the cleaner, open the top, set the blackboard eraser and select a power source from among solar power

rechargeable batteries, dry-cell batteries, and hand powered generator. Nails on both right and left drums flick the laterally-arranged metallic strips to beat the erasing surface of the eraser. In this way, chalk dust is removed and the eraser becomes clean. Despite the type of power source, removed dust is vacuumed using a motor and collected on a tissue paper. Collected dust can be thrown away wrapped in the tissue paper. Anyone can use this cleaner in a fun, easy and safe manner.

Inventor(s)

AYA WATANABE





Height Measuring Device That Requires Only One Person To Operate

Description of Invention



At home, my mother measured my height on the wall. My elder sister, however, is taller than my mother. Therefore, my sister's height could only be measured only when my father was at home. This is why I decided to create a stadiometer that enables users to measure their own height. Through consultation with my father, I designed a stadiometer to have a scale that faces the user when measuring their height. The design allows the user to read the scale without any help from other people. To measure accurately, users can check that the device is placed in a horizontal position and their head has contact with the device properly by using a scale and a lamp installed on the device, respectively.

Inventor(s)

AYANA ANDO

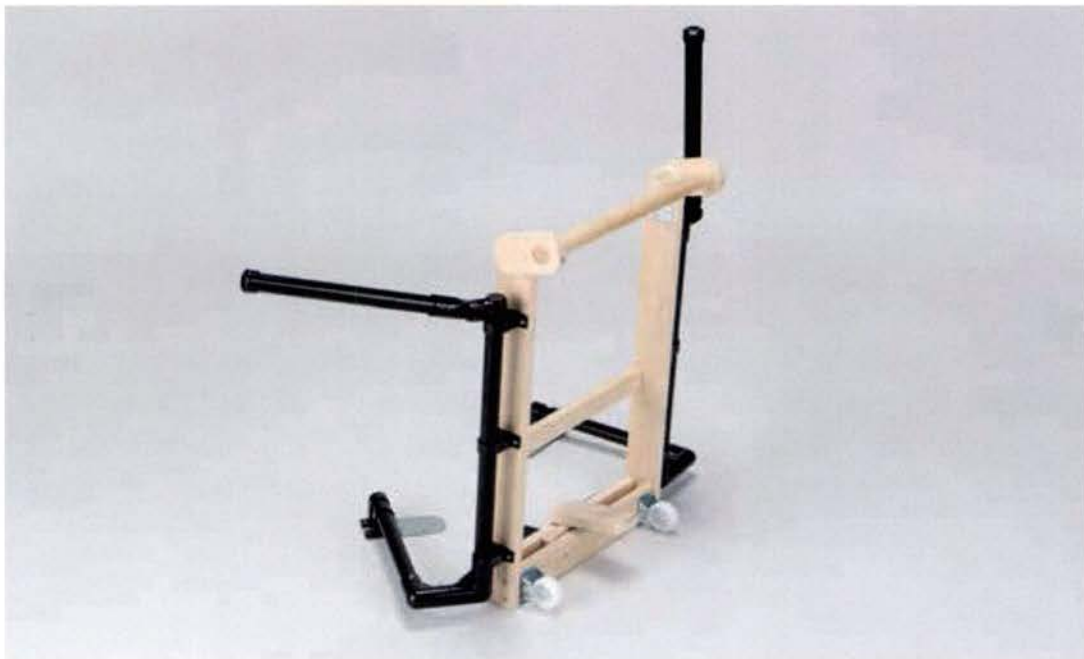




Carrier That Makes Light Work Of Heavy Objects

Description of Invention

My grandmother often says that her back hurts when she carries a kerosene can or other heavy loads. To resolve this issue, I devised a load carrier that enables users to easily lift and carry loads. The carrier has a wooden body and lifter made of erector sets. To lift a load, insert the metallic plate, which is installed at the bottom of the carrier, under the load and step on the pedal. This carrier can carry not only cardboard or other types of boxes, but also cylindrical loads.



Inventor(s)

SHOTARO MIZUGUCHI



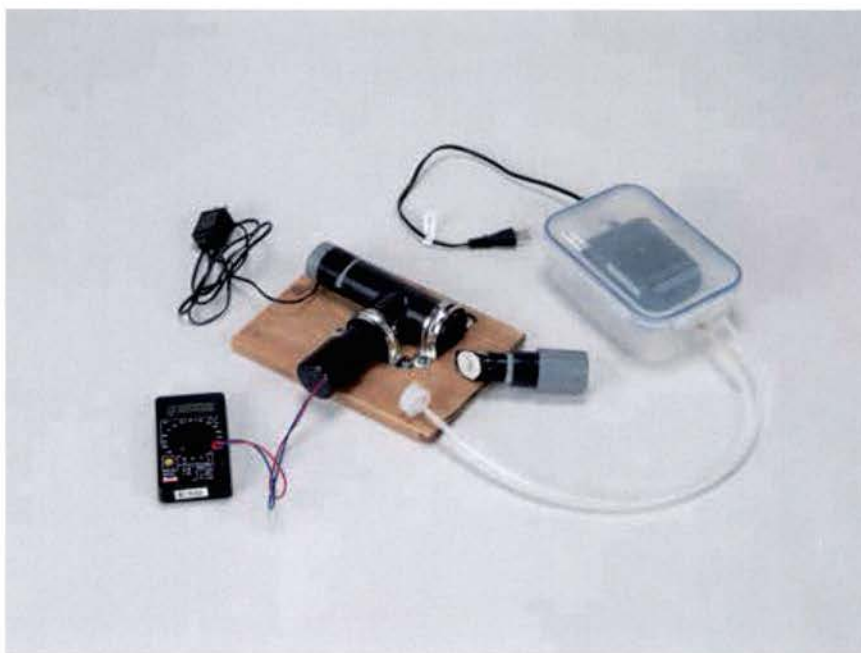


Sakurajima Volcanic Ash Measuring Device "Mr. Ashfall"

Description of Invention

The large volcanic eruptions in Iceland in 2010 affected flights in about 30 countries. In Japan, approximately ten decades ago, the Sakura-jima volcanic eruption caused severe damage. At present, Kagoshima Meteorological office measures the mass of ash falling on a dedicated plate to calculate the amount of ash fall. We invented a device to measure the

amount of ash fall more easily. A vacuuming device collects volcanic ashes in the filter. By exposing the filter to white LED light and measuring the reflected light intensity, we succeeded in measuring accurately the amount of ash fall and the amount of ash inhaled by a person.



Inventor(s)

KAZUKI ARAKAWA





Broom In A Stand That Comes Out With A Touch

Description of Invention

This is a self-standing broom. Lowering the sliding portion can unfold the stand. Because the broom can stand by itself without the help of a wall, it can be stored in any place. The stand is collapsible, so that it does not hinder cleaning. My broom for cleaning outdoors used to become dirty from being left on the ground. This is why I devised this broom.



Inventor(s)

YUHEI SENZAKI

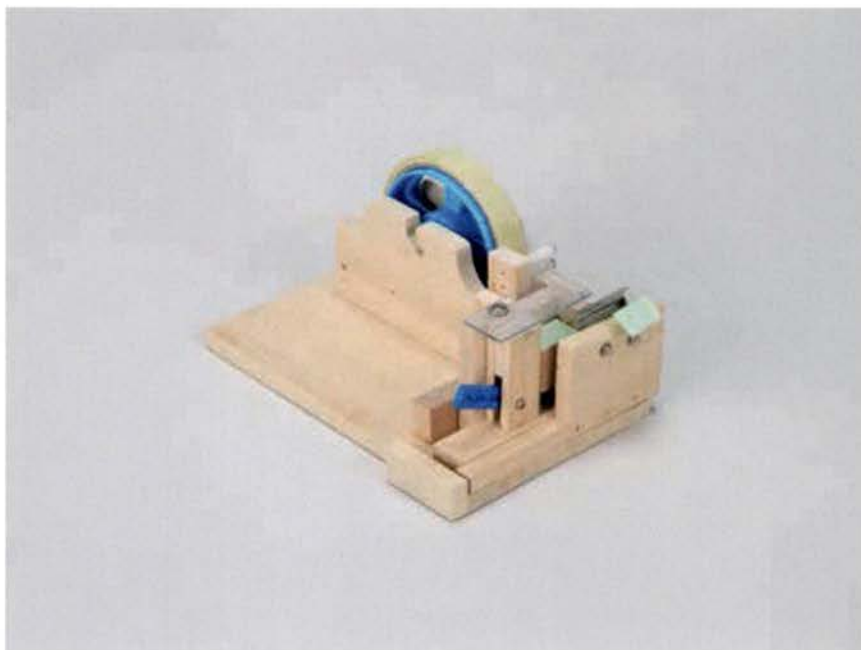


Tape Cutter That Sets Tabs For Temporary Attachments

Description of Invention

This tape dispenser can be used for two purposes: to make a tape piece for temporary adhesion, which makes removal easy, and for general adhesion. I used to have trouble removing tape used for temporary attachment of components while doing crafts. Therefore, I devised this tape dispenser. To make a tape piece for temporary adhesion, set the device

that can provide the end of the tape with a small piece of paper. When the lever is pressed down, a piece of paper is lifted up to be attached to the adhesive surface of the tape. The paper-providing device can slide to a position where it does not hinder the user cutting the tape.



Inventor(s)

NOBORU KAMIYA





Hiroshima Tourist Information Tram

Description of Invention

This item consists of three connected cars: Car A (power car,) Car B (float 2) and Car C (float 1). Cars A, B and C represent streetcars in Hiroshima (Hiroshima Electric Railway,) Hiroshima Peace Memorial Park and Miyajima (Itsukushima,) respectively. Car B has a system to fly origami birds and paper planes. Simplified projection mapping is available on Car C.



Inventor(s)

AKIHIRO KUBO
IORI NISHIMURA
RYOTARO SASAKI

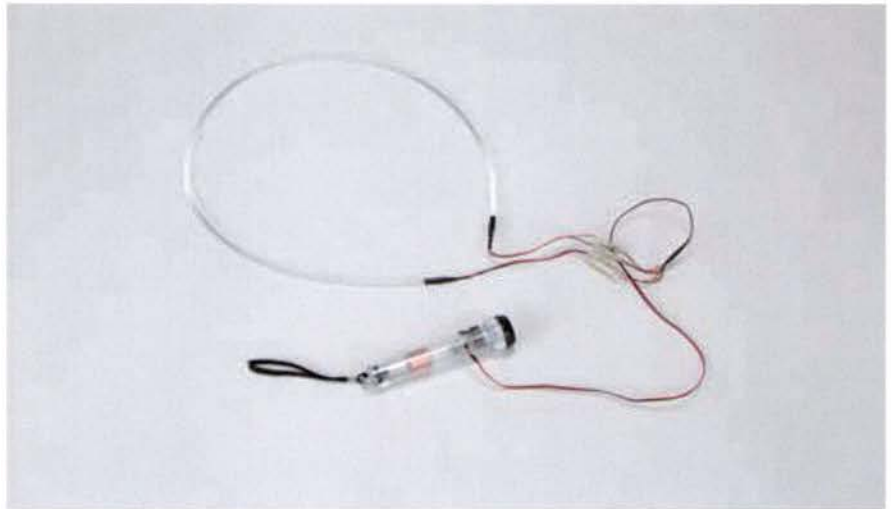




Illuminated Sash For Safe Running

Description of Invention

When I was jogging at night, I was once almost hit by a car although I was wearing a reflector on my wrist. To make sure I can be seen by drivers even at night, I decided to devise an illuminated safety sash. This sash uses optical fiber for lighting. Illuminated



by LED lights from both ends of the fiber, the entire sash becomes luminous. To generate electricity from the movement of runner's arms, a flashlight containing a coil and permanent magnet is used. Jogging at night can be safe with a flashlight and this illuminated sash.

Inventor(s)

HIROMU OGURA

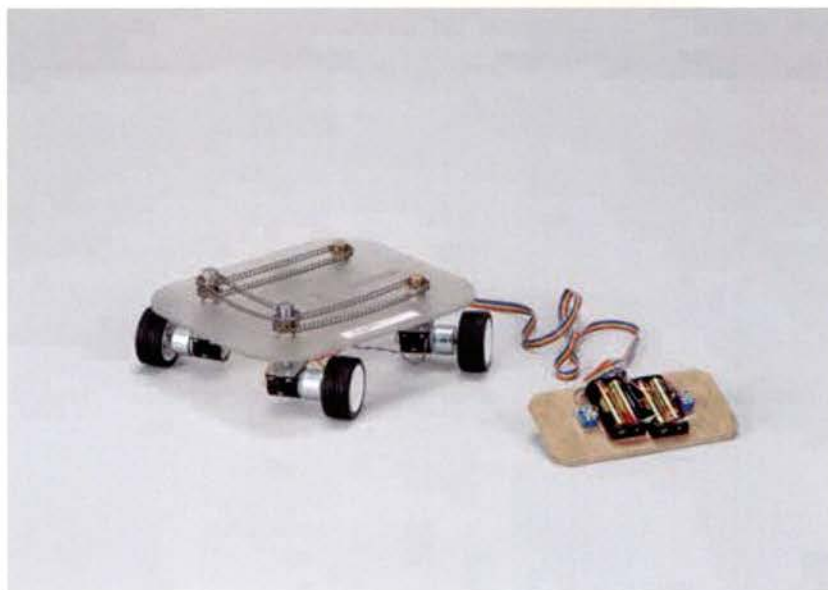




Omni-Directional Vertical Steering Columnal Driving System Using Self-Balancing Vehicle With Vertical Steering Column

Description of Invention

I wanted to create a system that enables omni-directional driving without using expensive special wheels, such as omni or mecanum wheels, so as to apply the system to wheelchairs and robots for robot contests. Each of the four steering shafts is located a distance away from each wheel, which enables a speed difference between the right and left side wheels to steer the vehicle. Connected with ladder chains, the steering shafts allows the four wheels to steer in the same phase. When this system is applied to wheelchairs, just an ON/OFF control makes it possible to easily maneuver the wheelchair in space-restricted areas.



Inventor(s)

RYUNOSUKE KUROSAWA





MACAU



Raindrop Collector And Fire

Description of Invention



The fire which is the biggest security issue in the rubbish bin. Sometimes when the rubbish bin on fire, nobody put out the fire. Then firemen will go there and put out the fire. It may waste the time and firemen's energy. So I invent "Raindrop Collector and Fire Extinguishing System of Rubbish Bin". When this invention detects the fire, it will sprinkle the water to put out the fire automatically. Moreover, this invention can collect raindrops. When the sensor detects the raindrops, the lid will open, then the collector can collect the raindrops. A rainy day is unpredictable. In order to strengthen the rubbish bin security, when the raindrops collector's water can't put out the fire, it has the running water as the secondary water source. I think this invention will be a great help for firemen.

Inventor(s)

CHAN AN YIN





A.I.Window

Description of Invention

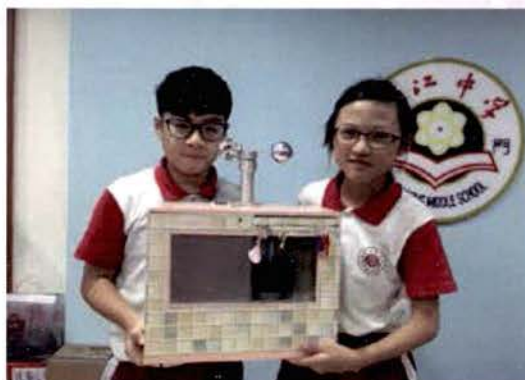


A.I.Window is an intelligent window. It is aimed at the weathers such as raining, typhoon and damp, and also we have improved the function that can identify sunlight. When it is on rainy, typhoon or wet days, the device closes the windows automatically while it opens the windows when it's on sunny days. A.I. Window keeps the property of the user safe when it's on bad weathers by closing the windows, while keeping the indoor fresh and dry when it's sunny by opening the windows, which is healthier and more environmental-friendly.

If A.I Window is installed at home, when it is on rainy, typhoon or wet days, it closes the windows automatically. Therefore, the things at home won't be blown down, get wet or moldy. In office, people nowadays prefer enjoying the natural fresh air than turning on the air conditioner. However, due to the fact that everyone is hurry for leaving, he/she always forgets to close the windows. As a result, when it is on bad weathers, the office will be destroyed by them. A.I.Window is even more valuable when it is being used in factories and storages. Since there are many products nowadays that needs to be kept in draught, yet the weathers are more capricious than before. If no one stays back at the company due to long holidays, but the cargos of the storage needs to be kept in an airy area and cannot get wet. A.I window is designed exactly for this situation, because it closes the windows when it's rainy while opening the windows when it's sunny to keep the place airy. This device can keep the cargos safe and many human resources can be saved.

Inventor(s)

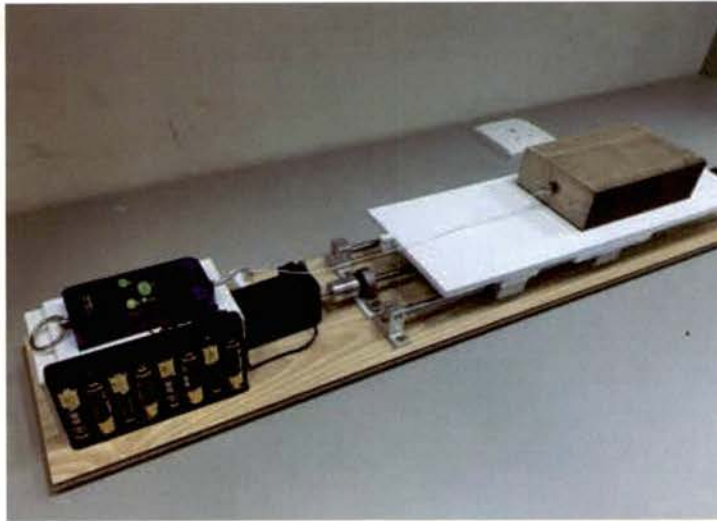
HOU SAN TAM
PEK I LIN





Friction Analyzer

Description of Invention



Friction analyzer device is simple and compact. It can accurately reflect the power of sliding friction and static friction to some extent. We can use this to analysis many condition of friction .For example. the roughness of the contacting surface ,the positive pressure between objects, the speed of relative motions etc. It was constituted by Wireless Communication,

Sliding Device, Sensing Technology, Bluetooth® and Terminal Data Analysis. It can be measured not only in daily life research under various circumstances, also applicable in teaching. Teachers can explain more vividly and it is easier for students to understand. Further more, students can be more impressed after having hands-on time on the operation of the friction analyzer, thus it will have a significant function in education.

Inventor(s)

CHAN CHEOK HENG
KONG CHIN IEONG
LIANG WEN JING





Turn Trash Into Cash - Innovative Material For Paper

Description of Invention



With the continuous development of society, the demand of paper is increasing fast. Nowadays most of the paper is made of trees and strong alkaline solution. Such paper-making method seriously damages the ecology. With this issue in mind, I proposed a new paper-making method that uses leaves as the raw material and some natural solution commonly found in our daily life as soaking solution. In the research, I choose some leaves which are easy to be found in Macau. By measuring the basis weight, thickness, density, tensile degree and the number of folds of the paper in order, the basic properties of the paper can be found. Through the experimental data we can find that using leaves to make paper is absolutely feasible,

and there are very slight differences between using one type or mixing various types of leaves to make paper, suggesting that there is no need for worry on which species of leaves to pick to make paper. In other word, making this paper is easy and feasible by the public. Moreover, using soaking solution like baking soda brings similar effect to that of traditional strong alkaline solution (sodium hydroxide). It has been found that some finished paper produced by being soaked in natural solution has a better pull, which guarantees itself as a very good substance to be made into paper bags, cartons and other paper products. This research aims at changing the paper-making method currently adopted so as to protect our precious nature.

Inventor(s)

IP CHOI KUN





Stair Climbing Shopping Bag Cart

Description of Invention

Nowadays, There are still a lot of old buildings without lift in Macau. We can find many old women dragging shopping trolley bag to the food market every day. Shopping bag cart can save effort in the flat road effectively. But climbing up a long stair to their home with a heavy bag is still a big problem. A six rolling wheel style shopping bag cart can help to solve this problem. But it still can't save effort enough. There are many kind of stair in Macau's building. Some of them are too high or too short to this cart. Especially when it is climbing down stair, we can find that it is not smooth enough. People can jump very high on a Trampoline. The Holding rod high jump player can across the height that many times higher than them with the rod. We want to invent a shopping trolley bag that with a different concept to solve the stair climbing problem. Just like a person wearing a pair of jumping shoes with spring. For making it more flexible moving on the ground, we use a 360 degree caster.



Inventor(s)

HOU FONG LEONG
QINYUAN TAN
SIT KA POU





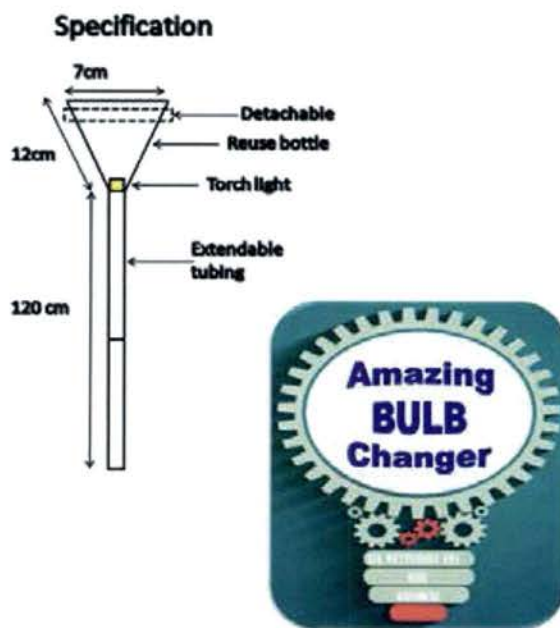
MALAYSIA



Amazing Bulb Changer

Description of Invention

Amazing bulb Changer is the smart and easy way to change light bulbs. This invention changes the different kind (Arbitrary, CFL, double/triple tube) and multiple size bulbs. It is complete with an extension pole to allow the user to remove and replace bulbs quickly and easily while standing safely on the ground.



Inventor(s)

FONG SHIONG YI
GRAHAM LAU KIONG HOO
RAFE HII JIN HAO





Butter Slicer Kit

Description of Invention



A reusable and food grade plastics made butter separator is designed to separate the cut butter slices. It avoids butter slices stick together. This invention is eco-friendly products and able to reduce environmental pollution by reducing plastics rubbish of taking butter mini tubs.

Inventor(s)

JOLENE LIM JIN RONG
LIM YUEN SHII
NG YEN PENG





Catappa Products

Description of Invention



There are million people living with a skin disease. Some are manageable, others are severe enough to kill. chronic skin conditions typically aren't curable, but they can be managed using drugs and by paying close attention to your lifestyle. Many skin problems are temporary and can be treated with medications or simply with time. But usually allergy skin disease will be repeated. there are various types of skin disease such as rashes (diapers and body), pimples, scars, renews skin, healthy hydrated, warts, scalded, cracking heel, athlete's foot, hair loss, blisters, chafing, cold sores and others skin problem. To overcome this problem, we have carried out a research on developing products that can treat the diseases by using almost 80% organic materials for the purpose of treatment. The basic idea of producing these products are reused organic waste like catappa leaves and

develop products using natural organic material (free chemical) for skin treatment. When we set out to develop catappa products as skin treatment, we had only one goal in mind that is to create the best skin treatment products for healthy, looking good skin without any adverse side-effects.

We instructed our research and development team to find the most effective ingredients, whatever the cost. Our aim was to produce significantly superior products, offering better value for money, than anything else on the market.

Inventor(s)

NOOR SYAZAWANI BINTI SAARI
SYAZWAN ISKANDAR BIN SAARI





Nano Fabric Mosquito Repellent Pouch

Description of Invention

The Nano Fabric Mosquito Repellent Pouch is a mosquito repellent patch which release its compound slowly and consistently into the environment. It consist of naturally available plants leaves, flowers and roots. These parts are cut and placed into a Nano Membrane sachets. When squeezed and crushed by the user, the botanical essential oil which will repel mosquitos. Hence, it acts as a slow release agent and increases the collective total protection from the mosquito bites.



Inventor(s)

ABIRRAMI SENTHILNATHAN
KAVIRAJ R JAYARAJU





Passion Fruit Picker

Description of Invention

It is a garden tool for picking passion fruits which are high up on the tree. It consists of two forks, one is fixed while the other is movable connected to spring or rubber bands and a string. To harvest the fruit direct the forks to the stalk of the fruit and pull the string. The fruit will drop into the transparent plastic bag.



Inventor(s)

AIN NUR SHYAZMIN BT ABDULLAH
AWANG FIZIKRILLAH BIN AG AIBIS

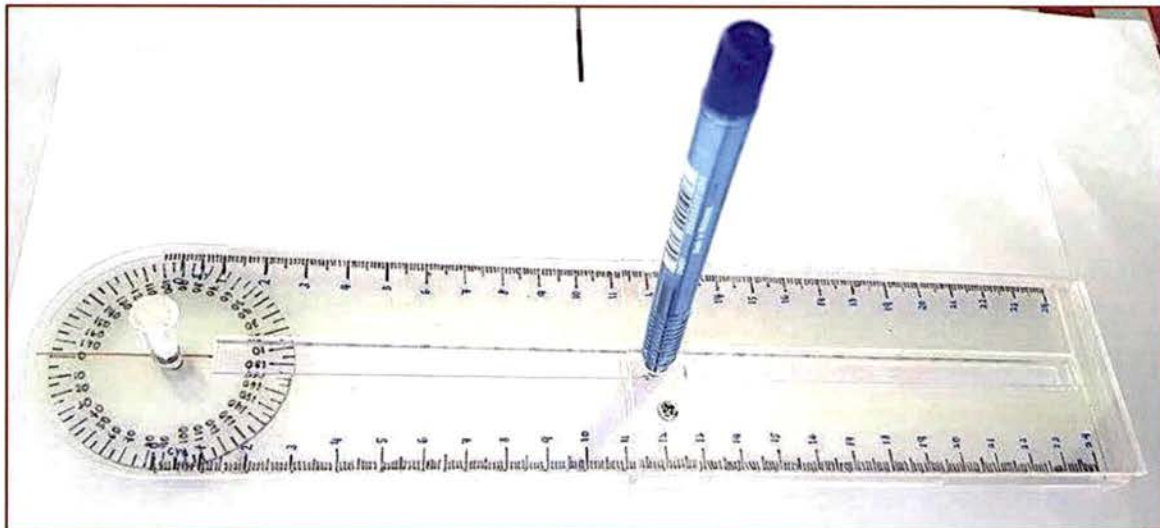




Shell Ease 2

Description of Invention

"'Shell' means the electron orbital in a nucleus, 'Ease' means making things easy while '2' represents the 2nd generation of Shell Ease. Shell Ease 2 is an improvement from Shell Ease with more uses in order to solve problems faced by target users. It can be used in Mathematics, Geography and Science.



Inventor(s)

NURUL FATIAH BINTI MOHAMED RAZI
WAN AKKIMI DANIEL SYAZWI





Fruit Cutter

Description of Invention



FRUIT CUTTER is a product that design to solve the Gardeners problem in plucking fruits. Normally, Gardeners are having problem to pluck the fruit that are located at higher branches or at difficult branches. Fruits that fell on the ground will be spoil and rotten. FRUIT CUTTER is specially design as an alternative to solve this problem. We use RECYCLE ITEMS to make this products.

Inventor(s)

MUHAMMAD ARIF BIN SABRI
MUHAMMAD MIRZA MUBARAK BIN JUNID
NUR RAHULL HERSIKESA MOHD MURNI





Fruit Picker

Description of Invention

Fruit Picker is used to pick fruits at high or difficult to reach position on a tree. It helps to prevent the fruits from falling onto the ground which may damage them.



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Inventor(s)

MIKI LAU KAH HAN
SIM HUE ZHE
WINNIE HII

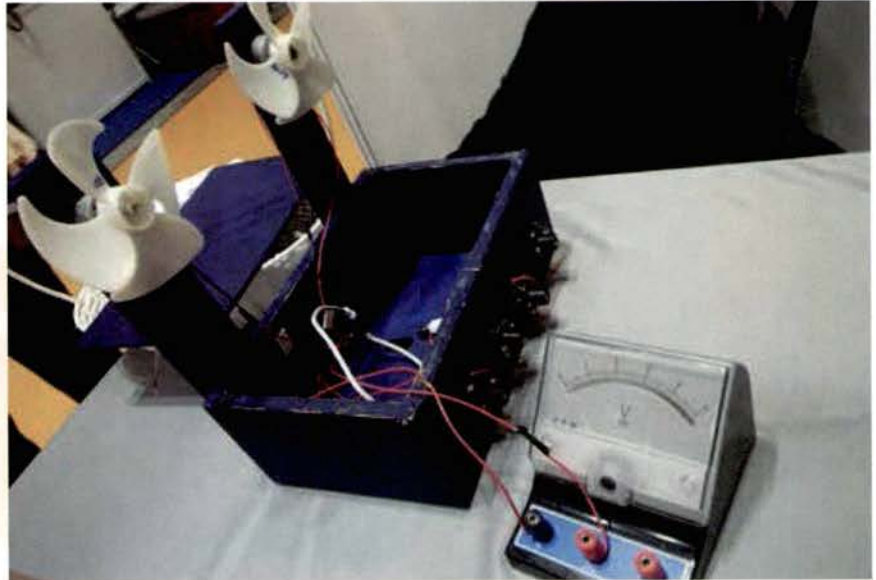




Wind Turbine Electric Generator

Description of Invention

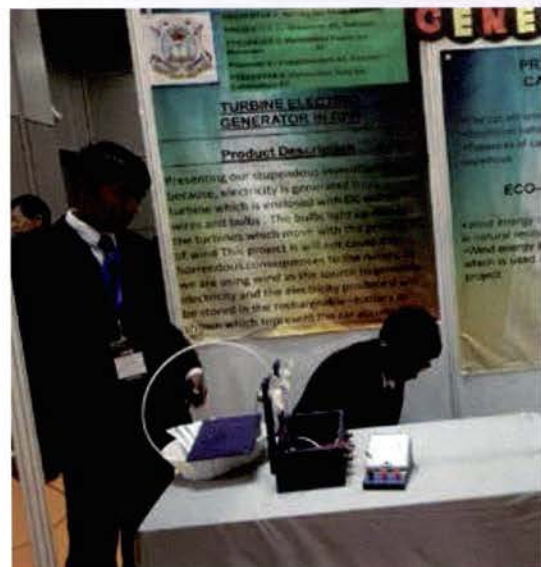
Wind turbine electric generator is an invention that relates to a method for generating electricity using high wind pressure generated by fast moving vehicles channeling the induced wind in the direction in wind in the wind turbine. A fast moving vehicle compresses the air in front of it and pushes the air from its sides.



Thereby creating a vacuum at its rear and its sides as it moves forward. The kinetic energy of the wind movement created can be used to generate electricity. The moving vehicles encounters wind, for example trains and airplanes, will sweep off it, in a faster manner making heavy wind. During this, when a wind turbine fit to a moving vehicle it will generate adequate amount of energy. the airflow will cause the turbine to rotate and thus the electricity can be produced. wind turbine operate on a simple principle. The energy in the wind turns two or three propeller around a rotor. The rotor is connected to main shaft which spins a generator to generate electricity.

Inventor(s)

AIDA SYAHIRAH BINTI NIZAM
NUR BATRISYIA BINTI SAPIAN
YUVANESH JAGATHEESAN





Solar-Powered Backpack

Description of Invention

Presenting our stupendous invention, in this hustle and bustle days, we the people of globalized era are facing a lot of problems due to lack of time, and when it comes to gadgets, we tend to waste a lot of time to charge them up. So, we have backpack to smash this problem, 2 solar panels, each producing 6 volts of electricity are fixed to the power bank which is 25 volts. Power bank is used to store the electricity produced. The electricity is then used to charge the electrical appliances which are placed inside the bag. Users will not feel bulky to charge their gadgets whenever they want.



Inventor(s)

KONG JING YING GENE
MUHD FAARIS BIN MOHD ALI
YOGGAMUNISSH A/L PERUMAL





Solar-Powered Smart Cover

Description of Invention

In this affluent society, a high cost of living is needed, but the irony is that most people are not making enough to support themselves, and smart phones are an essential in our daily lives. The Solar-Powered Smart Cover is invented to solve these problems. As we all know, power banks are bulky and not convenient for us to carry around, be it a stroll in the park, a trip to the grocer's or even when travelling. It is heavy and its not suitable to carry around. The materials we used are solar panels, power storage, cables, phone casing and LED light bulbs. The voltage produced is as high as 5 volts. Since the voltage produced by the solar panel is too high, we added resistors to control the voltage to prevent it from burning. The Smart-Powered Smart Cover is environmental friendly and it is very affordable. The Smart-Powered Phone Cover aims to decrease charging time.



Inventor(s)

NAZHIM BIN SHAIK ABDULLAH
NURUL ADLIN BINTI JAZMAN SHAHAR
SHAVEERAN A/L RAMESH





The Smart Torchlight

Description of Invention

We invented this smart torchlight to make our daily lives simple for usage in case of emergency and daily use. This smart torchlight is made up of 2 bulbs, a solar panel (3 volts), a compass, a digital clock and a rechargeable battery (9 volts).



Our smart torchlight is mainly powered by a rechargeable battery which is charged by the solar panel. The battery will never run out of power because whenever the power decreases, it will be supplied with more power generated via the solar panel. Thus, it minimizes the usage of battery as it is rechargeable. It absorbs electrical energy directed from the solar panel. However, regular torch lights run out of power and have to be restored with another battery. This will eventually lead to the usage of more batteries. In longer run, our smart torch light allows users to save cost as there is a rechargeable battery connected in it. Besides, this smart torch light allows users to save cost as there is a rechargeable battery connected in it. Besides this, smart torch light of ours comes with additional features which most torch light in the market are not equipped with it. It also comes with a compass.

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Inventor(s)

KARISHMMA A/P SREEDHARAN
KIRTHENESHVARI A/P RAMESH
VISHSMITHA A/P GUNALAN

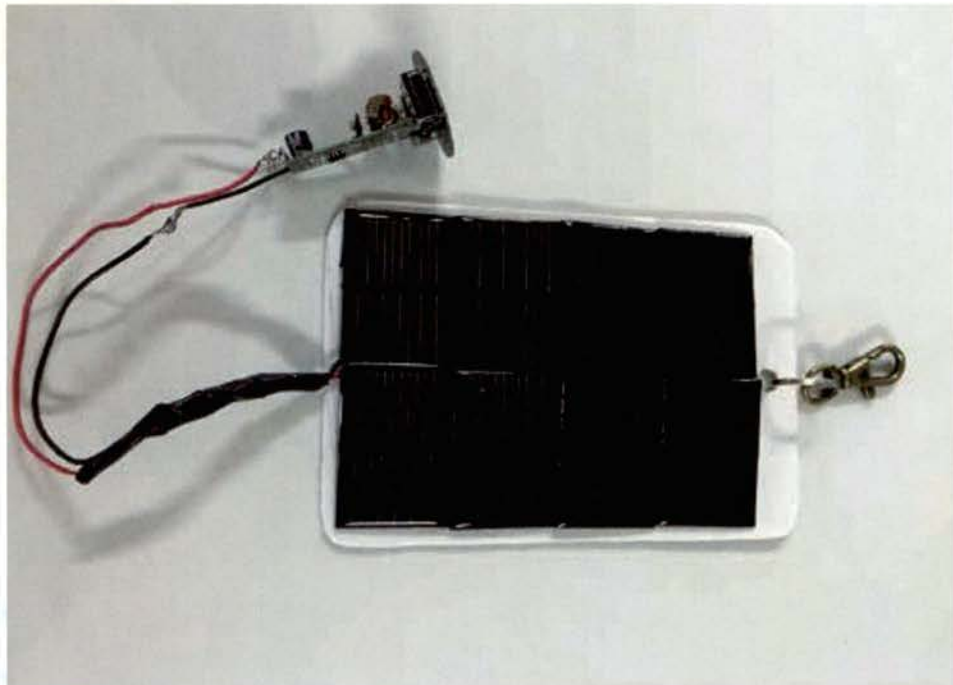




Angle-Adjustable And Portable Usb Solar Charger

Description of Invention

A portable charger is designed with angle-adjustable solar-platform, rechargeable battery and USB port. The angle-adjustable solar platform allows this solar system capture the most sun. The rechargeable battery stores excess power and provides energy to gadgets when there is no sun shining.



Inventor(s)

CHUA QIN PENG
ONG JOON PIN
VISAN NAIDU A/L KALAISELVAN





Bunion Socks

Description of Invention

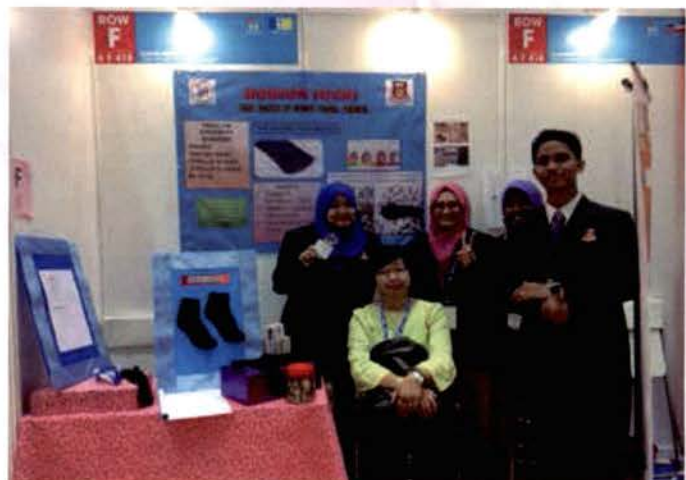
People who wear high heel and pointed shape shoes will cause their big toe to bend in and the MTP bone will stick out. They will suffer from bunions and it is painful when they stand or walk too long. They also suffer throbbing pain when they sleep.



Toe separators are used to straighten the toe but they fall off easily and are painful to wear. The Bunion Socks is comfortable and ensures long term usage and thus is a better correction for bunions.

Inventor(s)

MUHAMMAD NASRI BIN HAIDAR ALI
AHMAD ARIFFIN AZLI
SITI MAISARAH BINTI HILMI

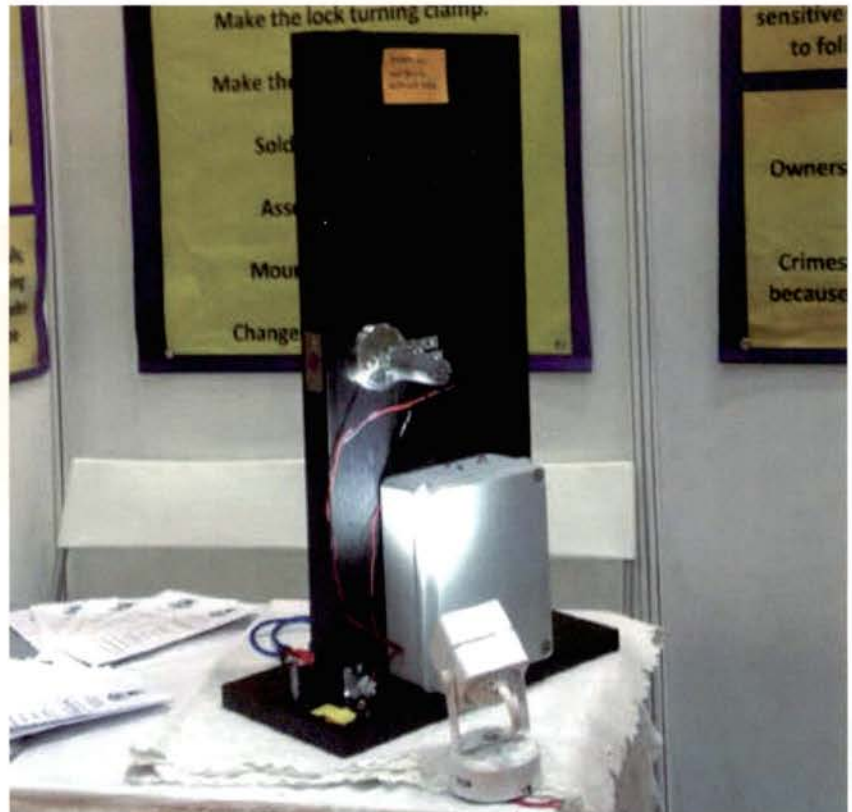




Secret Knock Lock

Description of Invention

About the "Secret Knock Lock", this project is to ensure more security and safety preventing crimes occurring and intruders. Besides, this lock based on the "knock" pulses which is programmed. It is a very sensitive and accurate programmed door lock to follow the special pulses of humans.



Inventor(s)

ISWERYA SHANMUGANATHAN
LIM ERN YEN
OOI ZI QIN

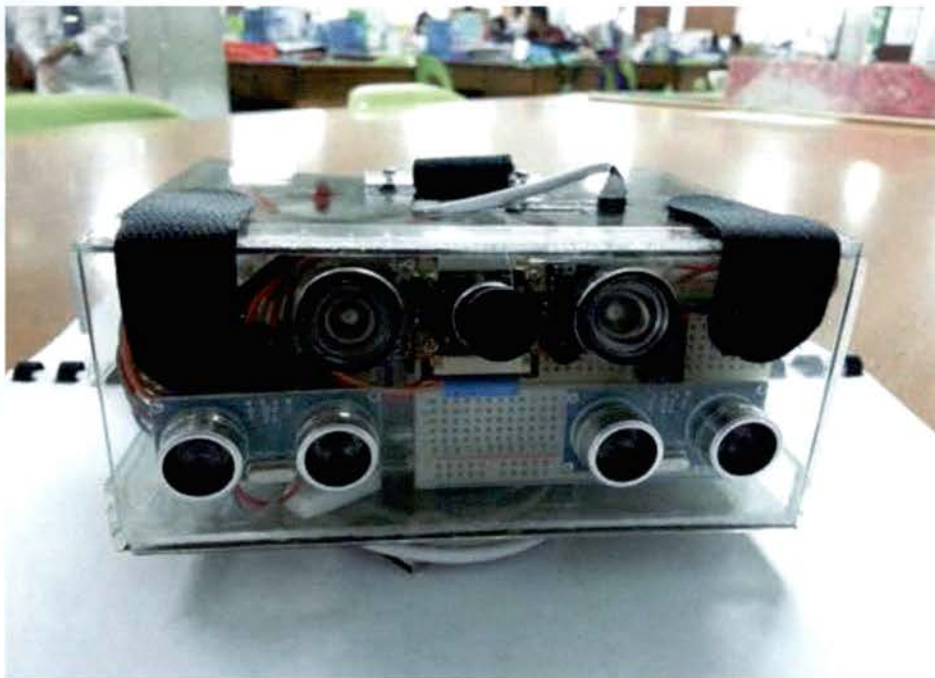




Guide Glasses Plus

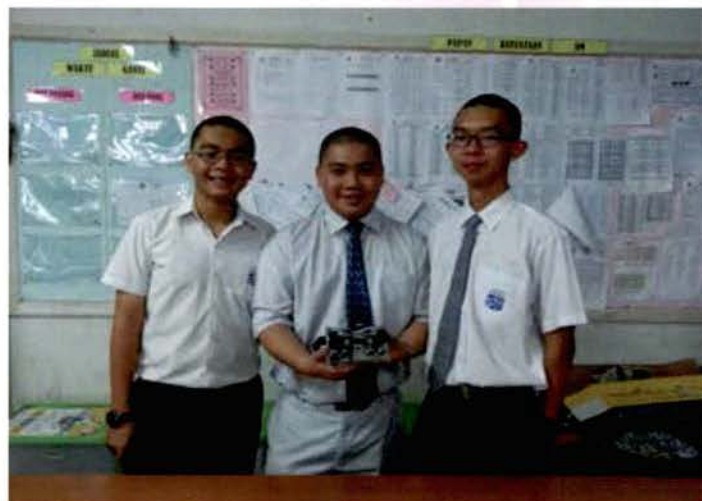
Description of Invention

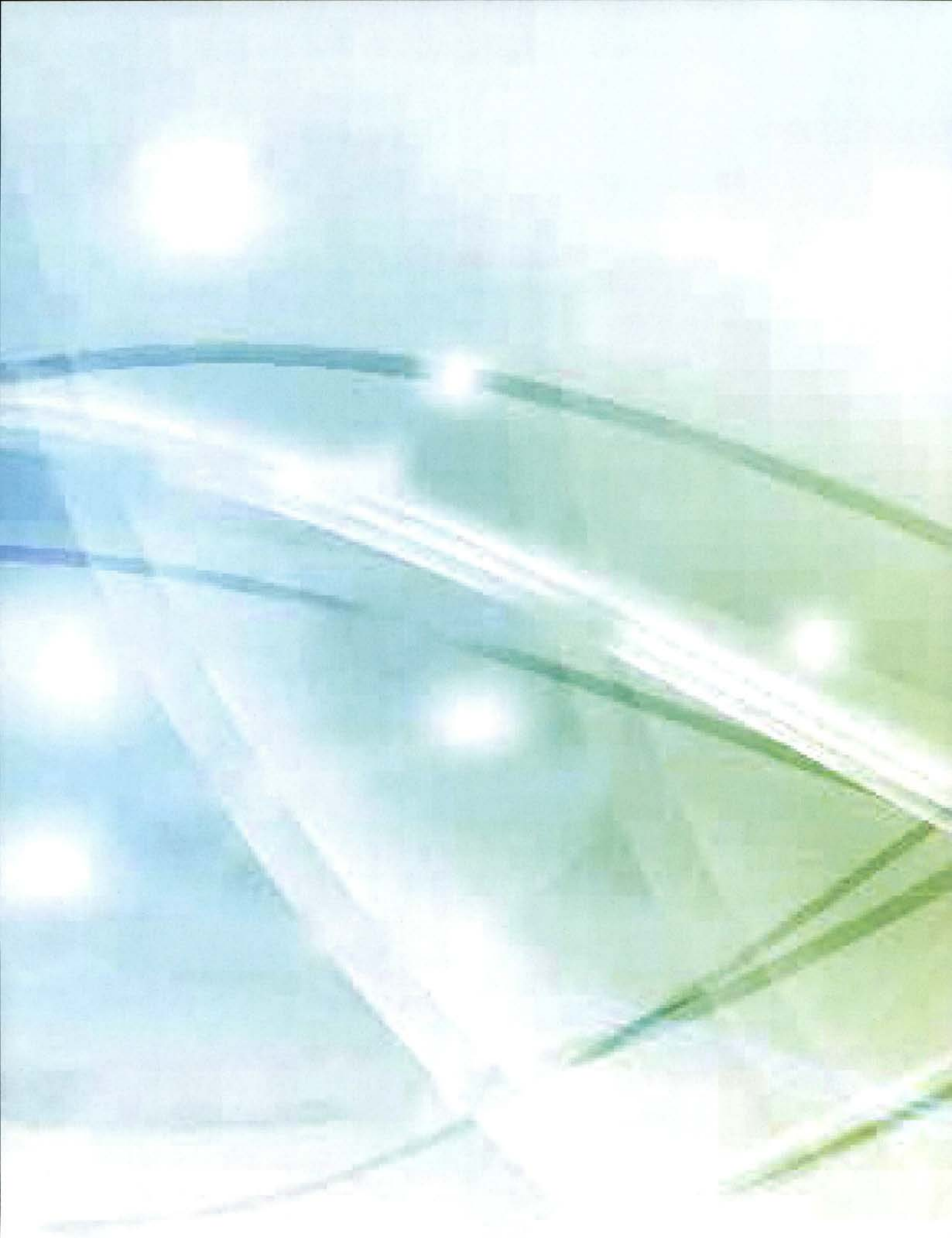
A guide glasses PLUS is fitted with electronic sensors, GPS module, stereoscopic camera and laser light to help visually impaired and low vision people to get around the world without having to worry of their safety. It is affordable and hand free device for the users to move independently and safely.



Inventor(s)

LEE QI HENG
TEOH MYNN WEI
YEOH YUN ZHI







SINGAPORE

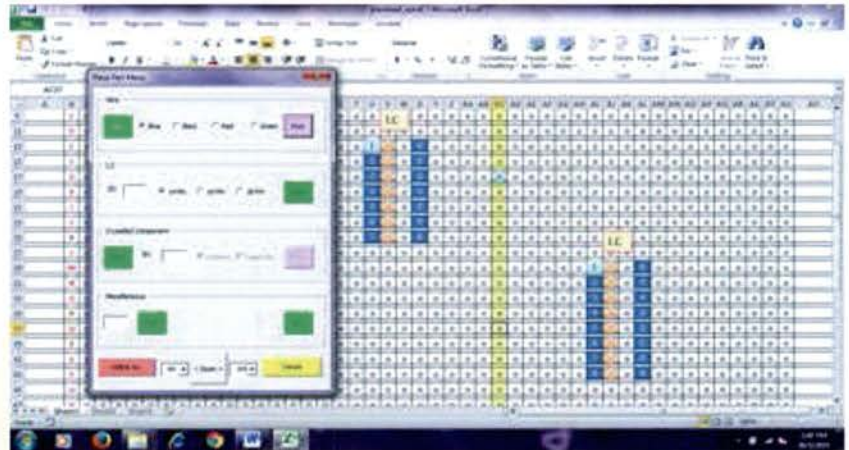


Vero-Board Designer N Trainer

Description of Invention

The usual method of vero-board design uses a 'pen-and-paper' approach. A vero-board planning sheet is completed to represent the layout design (wiring / connections) of circuit. The following problems exist for engineering students:

- Poor drawing skills lead to untidy or unreadable layout design diagrams
- Difficulty in making amendments for optimization and error correction.
- Prone to making errors due to visual errors.



Engineering teachers also faced difficulties in teaching vero-board design:

- Difficult in making a large drawing on a whiteboard for demonstration
- Difficulty in repeating demonstration.

Although some PC software tools exist in the electronics hobbyist environment, these are of limited applications in terms of board size and component library. Our invention uses MS EXCEL VBA to perform placement of pre-created components to overcome the problems encountered in vero-board design.

This approach is taken because of the following reasons:

- MS EXCEL is already available in most User PC
- Users are familiar with MS EXCEL
- Programming effort is reduced by riding on the features of MS EXCEL"

Inventor(s)

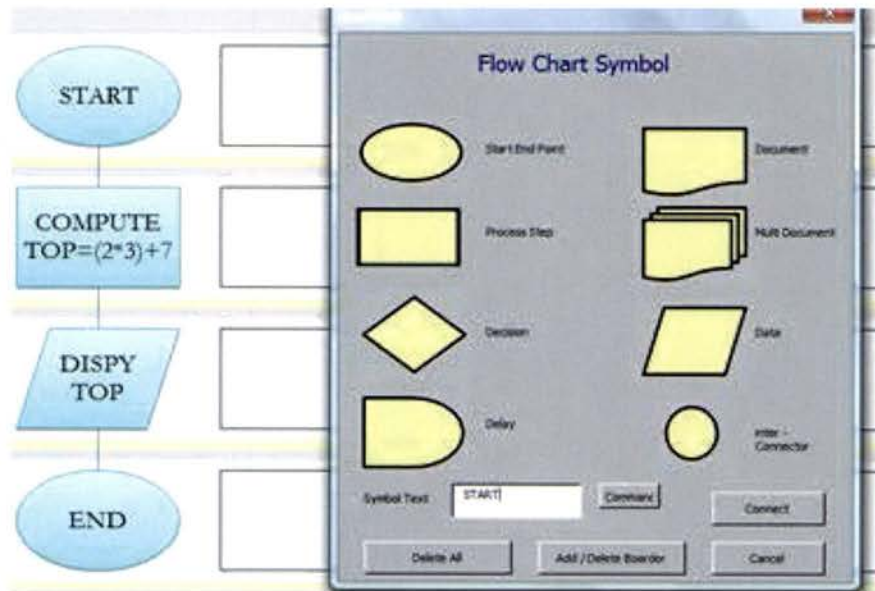
LIM YONG XIAN AUGUST
MUHAMMAD SAFIQ BIN ZAINI
SYED ALWI BIN SYED ABDUL KADIR A





Speed Draw

Description of Invention



Students can draw flow charts by hand or using conventional Excel spread sheets. These methods take a lot of time and are laborious in nature to draw with proper symbols and spacing.

Our "Speed Draw" project taps on the existing Microsoft Office platform to make drawing flowcharts easier and neater-looking flowcharts in Microsoft Excel.

Our UI provides users with easy-to-use "Click Buttons" concept to create flow charts which features ready-made templates with no messy drop down menus and drawing tools required to create flowcharts.

Inventor(s)

MUHAMMAD SHUKRI BIN SABBI
 MUHAMMAD SYAMIL B SULAIMAN
 NUR MUHAMAD FATTAHILLAH B MD JAM

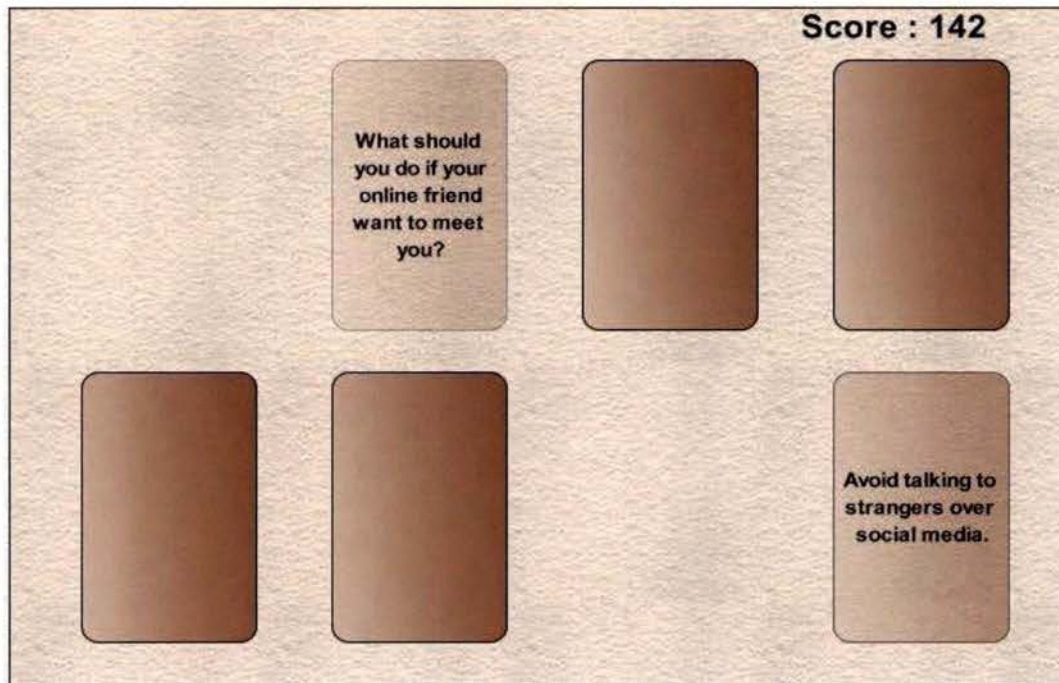




Teaching Assistant

Description of Invention

Research has shown that using well-defined games in lesson is able to enhance learning. Therefore a fun education game was created to engage, motivate and stimulate the minds of the students to learn and remember facts that were thought in class. As they play and try to win the game, they will be required to recall the facts being taught. This invention will complement traditional teaching methods.



Inventor(s)

LIM WEI XIANG
TAURUS GOH YONG CHINN
TIEN YICK WEI





CHINESE TAIPEI

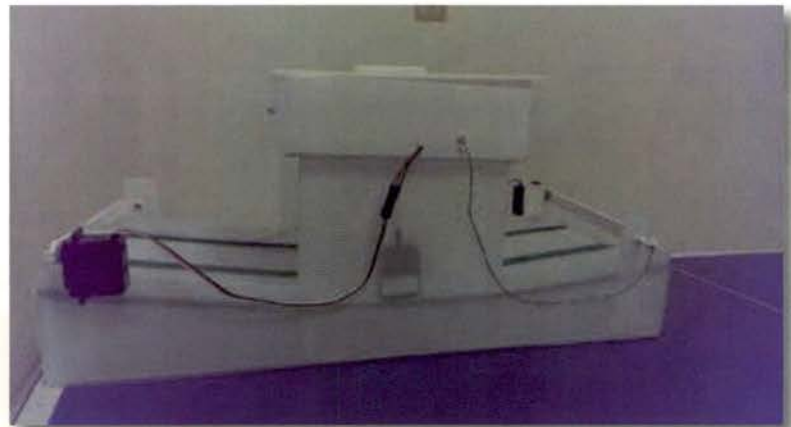


Underpass Flood Warning Device

Description of Invention

Taiwan is often hit by typhoons and heavy rains every summer and autumn, causing floods everywhere, especially underpasses and car parks. In fact, some vehicles are even submerged as a result. I find it baffling that there is no warning system for something like this. After the typhoon,

I discussed the problem with my teacher and we searched through the Internet together. We did find some patented products related to flood warning in the Taiwan Patent Search System but there was virtually no product that possesses a structure that is lightweight, compact and convenient. It is hoped that a cost-effective flood warning device could be designed through this research. The device is designed for flooding in underpasses and car parks. Using the principle for raindrop sensor, accurate reading of the actual situation is achieved through the Arduino program. Its precision monitoring ensures that vehicles are immediately stopped from entering a flooded underpass or car park, and vehicles inside the underpass or car park are alerted to leave quickly. Due to its low cost of production, the device may be customized according to the structure of different underpasses.



Inventor(s)

YING-HAN WU





Super Easy!! Slide Phone With Three Amazing Lenses

Description of Invention

The reason why we introduce this product is that we always see our family members struggling with all kinds of lenses so that they can take better quality of pictures. For example, they need the wide-angle lenses



to cover wide range of shooting, or they need macro lenses to capture some small objects. However, those beautiful senses can slip away in a second. Thus, we designed this device to solve this troublesome problem. Now, let me introduce the structure of this device. This device consists of three important designs: first, the "n" shaped clip-on design, which can tightly fix three lenses on the phone; second, the sliding design, which allows different lenses to be easily switched within a second; third, the flip-up design, which allows users to use the phone's regular camera lens without taking off the clip-on device. We feel that our sliding lens will be extremely successful because it easily allows the user to choose from multiple camera lenses by using only one device. The ease and convenience of use meets the needs of a new era where we can take any kind of picture we want anywhere we go!

Inventor(s)

PO-YEN HUANG





The Concealed Raincoat On The Sports Shoes

Description of Invention

Our invention is aimed at providing people a better quality of life and making our life more convenient. People usually get into trouble with wearing the wet shoes if it rains. It is extremely uncomfortable for people to wear wet shoes. Besides, the chance of having athlete's foot in this situation is getting higher and higher. To prevent our sports shoes from getting wet on rainy days, we pride ourselves on an accessory design called "The Concealed Raincoat."

"The Concealed Raincoat on the Sports Shoes" is to zip the raincoat up onto the sports shoes. In this case, we no longer need to worry about the weather conditions. No matter it rains or shines, we will surely be comfortable with the shoes we are wearing. If it rains, we can simply pull out the Concealed Raincoat to stop our shoes from getting wet. If it shines, the Concealed Raincoat can be easily hidden into the second layer of zipper so that it turns to be invisible.

As great as it would be, this simple accessory is an ECO-friendly product that can be replaced at a low price and be decomposed after some time in the environment. Furthermore, it is convenient to use if it is rainy. We don't have to carry another shoe cover with us. The Concealed Raincoat on the Sports Shoes is not only practical but also artistic. With a pair of shoes like this, life will definitely be more fun.



Inventor(s)

HSIANG-CHUN CHUANG
QUN-EN DING
YAO-DE HUANG

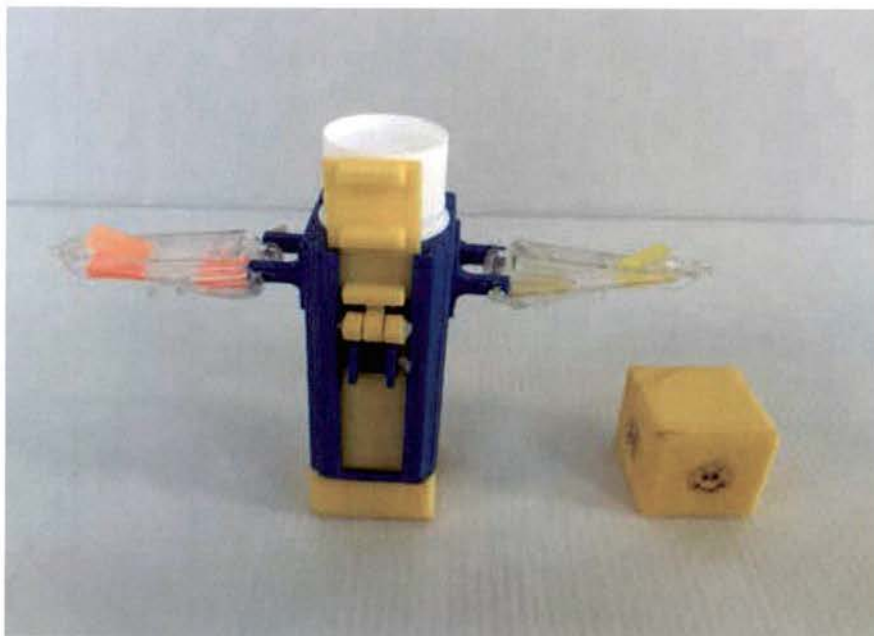




Smart Glue Stick

Description of Invention

When gluing pieces of craftworks together, the edges would curl up if the borders were not completely covered with glue. The projects then end up being uneven and ugly. However, when we try to glue the edges, the glue often ends up all over the table, on our hands, or even on other pieces of paper. This could easily dirty our projects. Thus, we set out to improve existing liquid glues and glue sticks so glue doesn't end up everywhere. We present Smart Glue Stick—a small and compact glue stick.



Inventor(s)

TZU-CHING YANG
WEI-ZHI LIN





Anti-Falling Warning Device

Description of Invention



We often hear that tourists fall down or fall off from high places because of darkness or their unfamiliarity to the circumstances when they go traveling. Therefore, this device is invented to avoid such accidents. This device possesses the infrared sensor. When it is turned on and senses people's coming, it alerts the tourists by making sound. What's more, its laser line marks the border of the safe zone which people should not cross. In the meantime, the LED light on the back is turned on and lights up the surroundings. This device also has a light sensor and a solar cell. When there is enough light, it would stay off and get recharged. And when there isn't enough light, it would be turned on in order to make people well alerted.



Inventor(s)

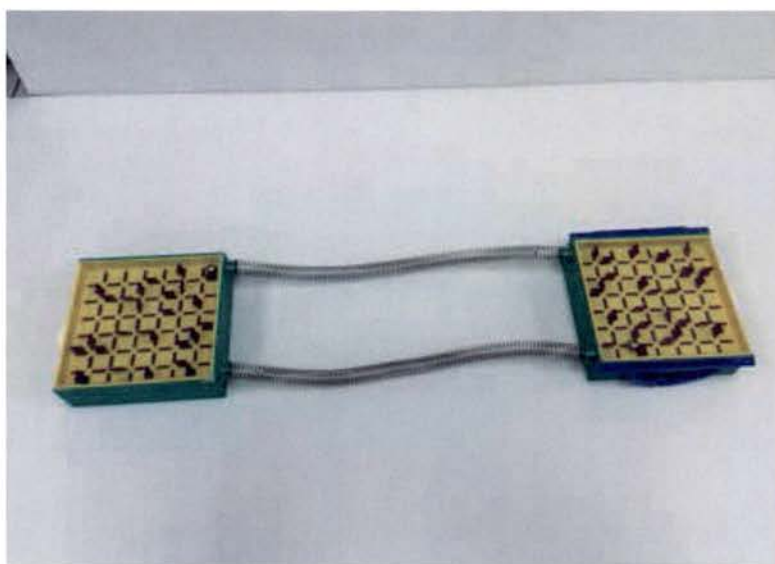
I-WEI SU
CHIH-WEN LIU
YU-XIU LU



Amazing Maze Creator

Description of Invention

The idea of The Maze Creator comes from a traditional maze, a kind of childhood toy. However, the traditional maze has only one fixed route and can be played by only one single individual, which makes it inevitable to become a dull toy and a waste of money. Therefore, I came up with a good idea: The Maze Creator.



My invention, The Maze Creator, can provide various routes and can be played by several players at the same time, which certainly increases interest and challenge to the game. The features of The Maze Creator are as follows:

1. Users can create new mazes, which saves money on similar toys.
2. Components for creating a new maze are provided for increasing interest and challenge.
3. The Maze Creator is easy to play, even for a child without adults' assistance.
4. Users can play as single player or play against friends in multiplayer mode.
5. A timer can be attached for timing.
6. A one-way device can prevent users from cheating.
7. Adjustable handles can be attached, detached, or adjusted if the needs arise.

Inventor(s)

YUNG-HSUAN CHANG





Hairband Walkman

Description of Invention

It was very inconvenient when we wore hairbands and wanted to listen to MP3 music because it was not easy to put headset and hairband together on the head. Therefore we invented Hairband Walkman. This invention looks just like a hairband. The bowknot on the hairband is not only for decoration but also works as an MP3 player. On the top is an LED light. The earphones at the both ends of the hairband allow the user to listen to music with her/his hairband.



Inventor(s)

XIN-YUE YU





Multi-Purpose Cup

Description of Invention

The multi-purpose cup can avoid the filth and dirt, especially when put in the damp and moist environment, such as the kitchen or the bathroom. When the cup is put upside down, its specifically-devised handle can prevent the rim of the cup from contacting the surface of the desk and the bottom from the residual water droplets left. The handle is specifically devised to keep the toothbrush and squeeze the toothpaste as well. As we all know, the more tool racks in the bathroom, the more difficulty we'll have in cleaning. As a result, the multi-purpose cup can make the setting of a bathroom simpler and sanitary and make our life more convenient.



Inventor(s)

HSUAN-LING LIANG





Magic Bag Dispenser

Description of Invention



On our days off, we like to visit the night market for some delicious cuisine. However, we often see stall owners handle money with their bare hands, and then reach for plastic bags to package the food. The process seems very unsanitary. Moreover, the slippery plastic bags are hard to grab. It's easy for stall owners to pull

out a handful of plastic bags in one grab, leaving them with the dilemma of setting extra plastic bags on the dirty counter and stuffing them back to make the next pull even harder. To make things worse, the plastic bags are hard to open as well. In order to solve these problems, we invented the Magic Bag Dispenser, resolving both the problem of pulling out too many bags at once and not being able to open the bags.

Inventor(s)

I-CHEN YANG
YUN-TONG ZHONG





Useful Kitchenware--- Cutting Board Dryer

Description of Invention



How to keep the wet cutting boards and knives hygienic after using them always bothered my mother a lot. This invention can solve the problem. Through a device similar to dish dryers, this invention can drain the water on the cutting boards and knives, and they can also be sanitized by Ultraviolet light. It not only provides a perfect storage space for the cutting boards and knives, but also keeps them hygienic. In addition, there are a timer to help control cooking time and a message board on the invention.

Inventor(s)

PO-CHEN YEN
TAI-HSIANG WANG
TING-AN CHIANG





360° Ceiling Fan Blade Cleaner Vacuum Attachment

Description of Invention



At home the blades of ceiling fans are in high places. They are not easy to clean. We designed a "360° Ceiling Fan Blade Cleaner Vacuum Attachment", you can just stand on the floor and clean the ceiling

fans. It's really safe. What more, you can finish ceiling fans cleaning work in a very short time. It's so easy to make your home a clean and healthy place!

"360° Ceiling Fan Blade Cleaner Vacuum Attachment" is a device used to connect to the general attachment on the vacuum cleaner, since the ""360° Ceiling Fan Blade Cleaner Vacuum Attachment"" can have 360° rotating chuck after it with a vacuum cleaner link sucker may be changed to up or down, you can easily adsorb ceiling fans up and down both sides of the dust!

In operation, as long as we have designed a "360° Ceiling Fan Blade Cleaner Vacuum Attachment"" connection on conventional vacuum cleaner and turn on the vacuum cleaner switch and ""360° Ceiling Fan Blade Cleaner Vacuum Attachmen"" exalted, you can start using it!

Inventor(s)

YU-HAN LIN
ZIH-HENG CIOU

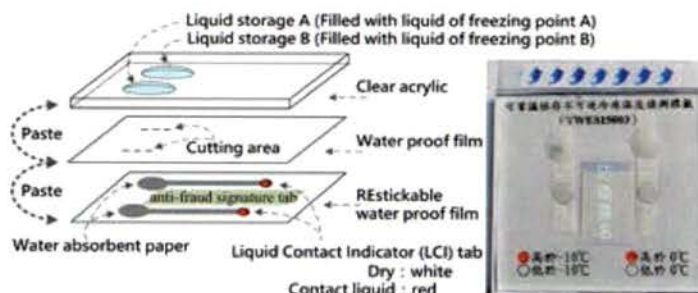




Irreversible Freeze Detector Stored At Room Temperature

Description of Invention

Recently, the demand of delivered frozen food has rapidly grown. Maintaining sub-zero temperature or freezing point throughout the shipping process is essential to the quality of frozen food, otherwise frozen food will be defrost and go bad.



So, we invent the "Irreversible Freeze Detector". It can detect the temperature of freezing point throughout the shipping process. If the temperature is higher than freezing point, the detector will change color from white to red. Even if re-freeze, the detector still keeps red color. The detector can be set detecting temperature from 0°C to -20°C with differential concentrations of saline or pure water. It also can be signed to avoid fraud. Its feature is shown as following:

- ☐ Stored at room temperature. When user needs to use it, just freeze it with frozen food.
- ☐ The frozen status on the whole way can be confirmed.
- ☐ Test with an irreversible process.
- ☐ Build-in anti-fraud signature tab.
- ☐ Multi-temperature detection capability from 0°C to -20°C
- ☐ Tiny size, overpressure resistant, non toxic.
- ☐ Low-cost (<\$0.1 US dollars)
- ☐ Simple-structure and easily mass-produced.

Therefore, our invention, the "Irreversible Freeze Detector", will help to confirm frozen status throughout the shipping process and improve food safety.

Inventor(s)

FONG-LIANG LIN
FONG-YU LIN
RUO-MEI LIU





Rolling Cane

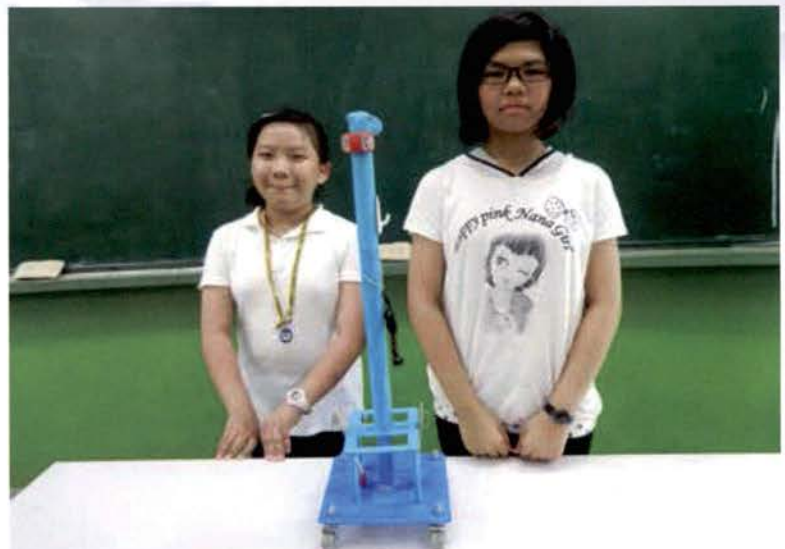
Description of Invention

When you see old people cross the street with a quad cane but the light changes before they are even half way , isn't this dangerous? If we add wheels, only using it when user needs it ,it might help older people to walk faster. We can also add a hook that you can hang a bag or other things on. When it's raining , if one hand holds the umbrella and the other hand holds the cane , it might make it easier to fall. If we combine an umbrella with a cane , is it more convenient ? According to these ideas , we can change a quad cane a little to a Rolling Cane.



Inventor(s)

MING-YUN SHI
SYUAN-YUN WANG





Smart Bottle Top

Description of Invention

This invention is a combination of an electronic pill box and a water bottle. It helps the patients, especially the elderly, to remember to bring and take medicine. The users can put the medicine in several grids in the box according to the times they need

to take in one day and set the times they want to take medicine. When they are the times, there will be light or sound to remind the users to take it. It is very convenient that both the medicine and water are prepared at once. In addition the timer can remind the users to take the medicine on time to help them get well soon.



Inventor(s)

TING-CHEN CHANG
TING-YUN HUANG
YING-TAI CHEN





Vaccum Bottle For Protecting Blind People

Description of Invention



Our invention is "Vacuum Bottle for Protecting Blind People". When we drink the liquid from a general vacuum bottle, we can see the vapor and recognize that the liquid is hot or not. But people who are blind can not see that and may be scalded when drinking hot liquid. So we do our best to innovate a so kind invention - "Vacuum Bottle for Protecting Blind People", for those people who are blind. Our "Vacuum Bottle" is suitable for elderly people, children and other people also.

Inventor(s)

JO-YA CHEN
YEN-CHENG WU





Multi-Functional Level Measure Machine

Description of Invention

Our hometown is a rainy city. Every time it rains, the level of the river will rise suddenly and sharply. Sometimes the heavy rain even makes the bridges closed. Our team noticed that when the heavy rain comes, people can't see the warning line on the bridge clearly. Because of this, accidents always happen. To solve this problem, we keep thinking and trying to find ways, and finally came our invention.



When the situation of the underpass is safe, the warning lights will become green, the pumping motors will pump water out, and the water gate allows water to flow out into the river. When the water level is about medium high, the warning lights will become blue, the pumping motor will pump water out, the water gate still makes water flow into the river. When the situation of the underpass is in great dangerous, the warning lights will show red, the pumping motor pumps water out, the water gate is close to prevent water from overflowing the city, and the buzzer is ringing aloud to strengthen the warning effects.

The advantages are:

1. It mixes several functions together, and it's more convenient than other similar inventions.
2. It can be set up at different places, such as rivers, underpasses, and water towers.
3. We can add more floating sensors at any time.
4. During the emergency situation, we can use our phone to forcibly control the machine.



We use computer graphics, 3D printers, welding, and scratchbot programs by ourselves. We tried lots of times during the process, and learned how to be a good maker. We hope this invention can help people a lot.

Inventor(s) HSUAN CHIU
YIN-HSIN HUANG
YU-PO WANG

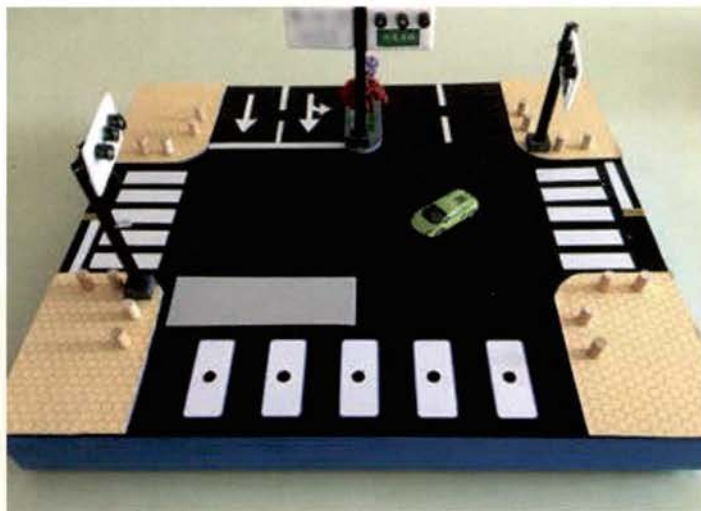


The Smart Zebra Cross

Description of Invention

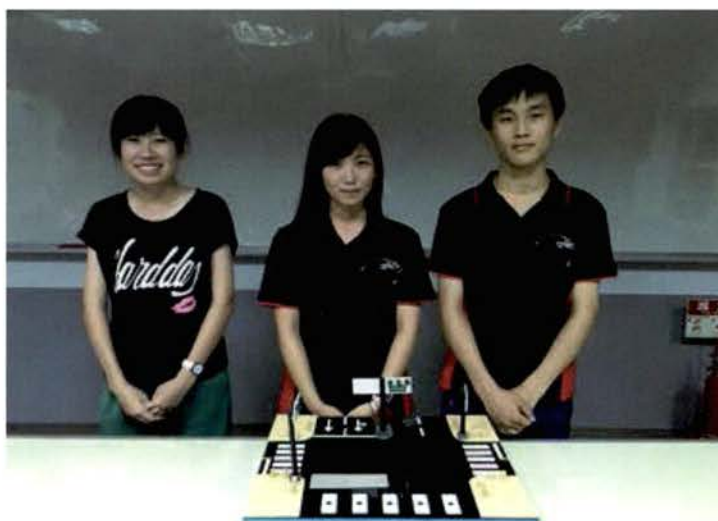
During years of ageing and using, the zebra crossing will begin to lose its color and function. The driver may have difficulty to see the pedestrian. The result may cause serious car accident especially during the bad weather conditions such as dark night, heavy rain or dense fog. In order to improve the function of the traditional zebra crossing, LEDs and sensors were added to the zebra cross. While people work through

“the smart zebra cross” LEDs will light up the road and show pedestrians the direction. Besides, it can make the drivers pay more attention to the pedestrians. Moreover, when the pedestrians are working through the smart zebra crossing and a moving vehicle is approaching to them, it will trigger pressure sensors and active the warning system to remind the driver. It was hope that this invention can bring more safety and security to the people when they use smart zebra crossing.



Inventor(s)

SHIH-CHENG TAI
TZU-YIN LIN
TZU-YUN LIAO





Smart Interior Monitoring The Concentration Of Carbon Monoxide And Air Cleaning Apparatus

Description of Invention

This new design is composed of 4 major parts: 1.CO sensor, 2.Control system, 3. Alarm 4. Fan. The CO sensor can detect the indoor concentration of CO and shows the data on the display of the control system. When it exceeds the dangerous level of 200 ppm, the control system will start the alarm to give warning to all the people indoors, and in the meanwhile, the window is opened and the fan starts to push the air out. All of these actions are done automatically. This design can keep all people safe, especially while they are sleeping.



Inventor(s)

YU-SHENG LAO





Air Pillow Cap Jacket

Description of Invention

Air Pillow Cap Jacket is the invention not only to help you take a good rest without hurting your neck but easy to carry every time and everywhere. This special Jacket is also equipped with hat. Which can be inflated by blowing air through the blow pipe and the



hat will swell up. The inflated hat can provide support for your head when you need to take a nap on the bus while long-distance traveling. Moreover, when you need to sleep but there is no bed, you can blow the pipe, full the hat and take a rest anywhere you are available. And when you wake up, you can leak the air out and fold the Jacket into your backpack. It is easy to carry when traveling. If you think this air pillow cap Jacket is only a substitute for a pillow, you may miss some important facilities of this Jacket. It is suitable for people of all ages, young and old, male and female. The cloth of the Jacket is waterproof and that means it can turn into your raincoat when it rains. Such a Jacket can be helpful for your life no matter in schools days or holidays. And it is a good Jacket that you can never miss.

Inventor(s)

CHIN-LIN YANG
MIN-HSUAN LI
PING-HUNG TSAI





Music Faucet

Description of Invention



During our daily life, many people do not really turn off the tap water, and the tap is leaking. This situation may make us lose a lot of water. In order to solve this problem the music faucet was invented. Sensors, LEDs and micro-chip were added into this electrical device. When water running through the music faucet, the music will begin to play and the LEDs will begin to shine. Moreover, the different LED colors will show the different conditions and qualities of tap water. When abnormal situations happen to the tap water such as too much acid or too much alkali, different colors of LEDs will indicate different type of conditions to the user. Moreover, the music will begin to play loudly and rapidly. It will remind the user that there is something wrong with water.

Inventor(s)

LICHING WU
SHIHCHENG TAI
TSUNGFU HUNG

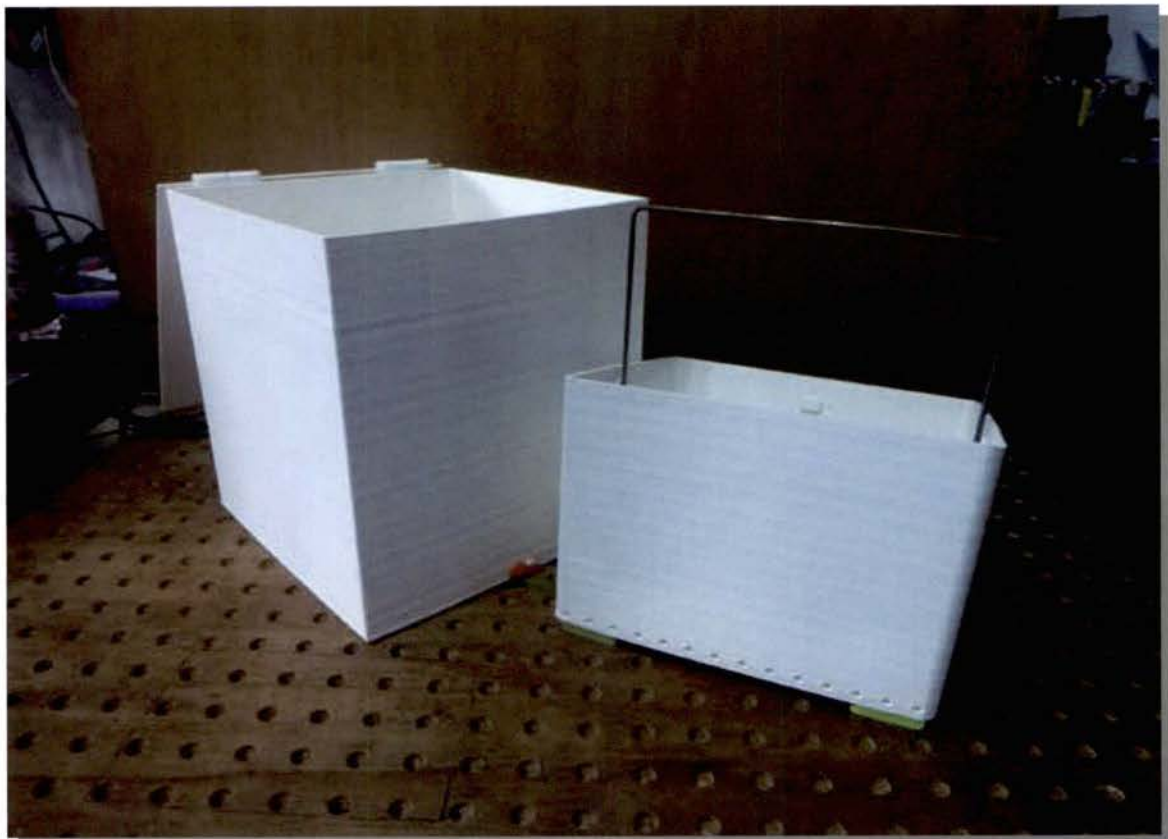




The Leftover Recycle Bin

Description of Invention

When I saw the leftover water leaking out of the plastic bag, I felt troublesome to clean it up. That is why I invented this recycle bin for leftovers. The purpose of this invention is to collect leftovers easier. Also, it reduces the amount of plastic bag usage for environmental purpose.



Inventor(s)

BO-TUNG KAO
JUI-YU KAO





High Efficient Dust Remover

Description of Invention

The traditional vacuum cleaner utilizes only the suction force and wastes the blowing force. This new design applies a "Double layer tube". The blowing air from the machine passes through the internal tube and blows dust up, the dust is then sucked by the outer layer tube into the filter bag. The efficiency is twice that of the traditional ones and it doesn't suck soft things into the machine. So, it can clean duvets, and carpets. In a traditional vacuum cleaner, the PM2.5 may pass the filter bag and pollute the room and hurt the occupants. With the new design, it circulates inside the machine and does not pollute the air.



Inventor(s)

CHONG-LUN WANG
KUN-WEI JHAO





Hydraulic Damping Electricity Generating System

Description of Invention

By implementing design of the system, for example on a bicycle, the Hydraulic damping mechanism not only provides cushion to absorb the shocks and vibrations when riding, but also gives the Kinetic Energy by the Reciprocating Flow in the suspension tube to push the Wells Turbine and the motor to generate Electricity. Originally, we want to find the new environmental friendly green energy, but eventually becomes to study recycling Kinetic Energy to Electricity Energy and the efficient way to store the energy. Through experiments by using self-made equipment, to measure and observe the interactions between different variable factors, make assumption to the theory and then optimize the design.

The concept is to use the handy materials to design and build the eco system, utilizing the Kinetic Energy generated by the Reciprocating Flow in the Complex Tube; to drive the Well's Turbine and the motor to generate Electricity. Therefore, we plan to utilize the Well's Turbine to convert Kinetic Energy from the water flow, and then combine with generating and electricity storage system, so that it can be practical for the real world use cases.



Inventor(s)

MEI-HSUAN LEE
PIN-YI CHEN





Improved Large Bathtub Faucet Of Hot Spring Resort

Description of Invention

The creation of the faucet has a technical field , especially its technically improved structure of the faucet valve port , the port is provided in a valve guide , the outside of the guide has several diversion tank , the water flow through the valve port and down, by diversion of the guide groove of pressurized water flow is accelerated so that the sludge does not accumulate , there will be no obstruction problem of the water volume. This central water outlet design, is mainly suitable for the hot spring area which they have the extended water faucet outlet "tube wall accumulation" problem. We use the direct fire nozzle , the design of structure A, with the design of the structure B plus outer vortex guide notch ,which reduces the dirt from sticking to the tube wall. Improved structure for a faucet valve port , including a faucet that has a water inlet pipe below The Faucet pipe had an outward extended outlet, The pipe shaped contact column is sealed in the water intake, so the water only flows through the contact column. There is a valve port on the top of the contact column. A knob is screw-located at the top of the faucet pipe, and there is a valve port at the bottom of the knob. The valve is then sealed when the knob is lowered down to prevent the water from coming out. From the top of the main contact column to the valve port, a guiding object is applied to it. The outside of the guiding object has several diversion notch. The guiding notch may be accelerated with the supercharger or with the vortex . When the water passes through the valve port and flows down, it will be accelerated by the diversion of the guiding notch, preventing the sludge from accumulating. Therefore, the amount of out-coming water will not be hampered.

【實物成品照片】



Inventor(s)

HSIN-CHANG CHEN
MU-RONG CAI
YUAN-CHI CHIANG





Terminator Of Aedes Mosquitoes For Container Gardening

Description of Invention

The purpose of our invention is to promote health of people all over the world ! Our invention can shut down the life-cycle of Aedes mosquitoes by means of preventing mosquitoes from laying eggs on the water-collecting plate. It is easy to terminate the infection of dengue fever virus, yellow fever virus and Zika fever virus for our invention.



In another words, our invention is powerful to eliminate disease

In order to protect environment of the Earth, we used recycled clothes to make the invention. This kind of textile material is breathable and not easy to get molds. Not only we can turn garbage into gold, but also maintain the moisture beneficial to the growth of plants.

The invention- Terminator of Aedes Mosquitoes for Container Gardening is powerful and effective at once for preventing Aedes mosquitoes laying eggs in the water-collecting plate of the pot□hanging basket or planter□

We can operate the invention- Terminator of Aedes Mosquitoes for Container Gardening easily, just like taking on the beautiful and powerful clothes for pots□hanging baskets and planters.

Inventor(s)

JUN-AI WANG
WEI-CHENG TSENG
YUAN ZHI ZHOU





Stroller's Automatic Brake System

Description of Invention

Nowadays, "safety" is very important especially for babies. They need a lot of protection. Parents want to grow their infants with peace of mind and away from danger but because of the number of accidents recorded recently due to human negligence, they tend to worry about the security and safety of their babies. When one terrifying incident happened in Taiwan about an old man who brought his grandchild to a walk, but inadvertently left the stroller in a ramp area resulting the baby to slide. In order to avoid the occurrence of baby stroller slipped accident due to human error, so we have developed the traditional stroller brake system into automatic stroller brake system to reduce the risk of danger and enhance the safety and security.

we create and produce this "Stroller's automatic brake system" which can detect a left hand grip and can automatically brake the stroller. It has some danger warning features such as: motor low battery warning and the stroller's body tilt angle warning. A simplified circuit for it can be moved easily to have the same brake structure. Also, the installation is easy and the operation is simple which makes it convenient to use.



Inventor(s)

FU-SHUN YANG
PEI-WEN CHEN
ZHAN-HUA ZHANG



Do Not Forget Me When You Leave The Toilet

Description of Invention

It has often been in the use of toilets, as confused, in a hurry, so when using the toilet, forget to take away their clothes, bags, bags on the hook, or placed on a platform of personal items. Later, when the user think of it, it'd already been a long time.

When you come back to find your lose belongings, it's already gone. If the lost property or documents (for example: health insurance card, Identity card or passport) was stolen by the stranger, may not be brought back, it may also occur identity theft, serious problem. To avoid such a situation, this invention we therefore platform sensing and sensor hook, as long as the discharge items placed on the platform or on the flat hook, when leaving the toilet forget to take away, will be a timely reminder.



Inventor(s)

PIN-HSUAN LI
YI-HAN CHEN





Lying On Front Please

Description of Invention

Mammograms are used as a screening tool to detect early breast cancer in women experiencing no symptoms.

During mammography, a specially qualified radiologic technologist will position the examinee breast in the mammography unit and compressed with a clear plastic paddle. The technologist will gradually compress the examinee breast.

Then, the examinee will be asked to change positions between images. The routine views are a top-to-bottom and an angled side view. The process will be repeated for the other breast.

To reduce the possibility of a blurred image, the examinee must hold very still and may be asked to keep from breathing for a few seconds.

When the examination is complete, the examinee may be asked to wait until the radiologist determines that all the necessary images have been obtained.

There are some shortcomings for the procedure, including:

☐ Instability

To avoid image blurring, the examinees must hold very still. It is difficult to do it when they feel pressure or even pain on their breast as it is squeezed by the compression paddle.

☐ Time consuming

To get a better view, the examinee will be asked to change positions between images and it did consume a lot of time.

☐ Discomfort and embarrassment

During the test, the examinees not only have to be almost naked but also be touched by some strangers (technologist) to speed up the position adjustment. It often makes the examinees feel discomfort and embarrassment.



To overcome them, my invention is to have a bed with three holes for head and breast separately and install the mammography camera under the bed. That is, the direction during the test is changed from upright to horizontal, hence, all the examinees have to do is lie down on the bed with their faces down and let their breast fit into the other two holes and



Inventor(s)

PIN-JUI HUANG



H&S – Magic “Hamdriver”

Description of Invention

The Hamdriver standing for “Hammer & Screwdriver” is a device of creating convenience in life, making it available and user-friendly. It contains the following five features:



(1) Multi-Functions:

“Hamdriver” combines all kinds of materials (such as steel, wood, rubber, and Teflon), along with the nail remover, the screwdriver (cross-shaped & slotted) and storage, into one tool.

(2) Saving Effort:

The magnet and the steel ball inside the “Hamdriver” increases force, making it effort-saving when hammering. Also, the head of the hammer serves as the handle of the screwdriver, thus increasing its twisting force.

(3) Safety:

A magnet is added at the end of the hammer to hold the nail. Then the spring and ball-bearing mechanism inside the hammerhead keeps the nail in place and drive it in. Thus, hammering is safer and the risk of hitting fingers is reduced.

(4) Saving Money:

Combine different kinds of hammers, the nail remover, and the screwdriver into one. People would not have to buy so many different kinds of hammers. A lot of money is thus saved.

(5) Saving Space and Being Easy to Carry:

“Hamdriver” serving as a toolbox has a hammer with four kinds of materials. It is like a storage box in which nails, the nail remover and the two-function screwdriver are stored. Instead of bringing a heavy toolbox, you can use “Hamdriver” in a quality and effective way.

In sum, considering its remarkable features: multi-functional, safe, saving effort, money, and space, together with being easy to carry, “Hamdriver” is ideal for not only all ages, but an indispensable tool in life.

Inventor(s)

CHENG-CHIA YEH
YU-CHENG HUANG
YU-HSUAN CHIANG





THAILAND



The Device Keeps Pepper

Description of Invention

This invention can help you collect chili. It is used faster than traditional chili picking equipment.



Inventor(s)

PATIPHON KANTHONSANTI
SUPPAWIT PHAEAMNATKHUN



เด เหน็บชุมชน
ประจำห้องถิ่น
คนใหญ่ รอให้
องใช่เวลาและ
เอเก็บพริกที่
โนวขึ้นดอ
ในการปลูก
เื่อการสร้าง
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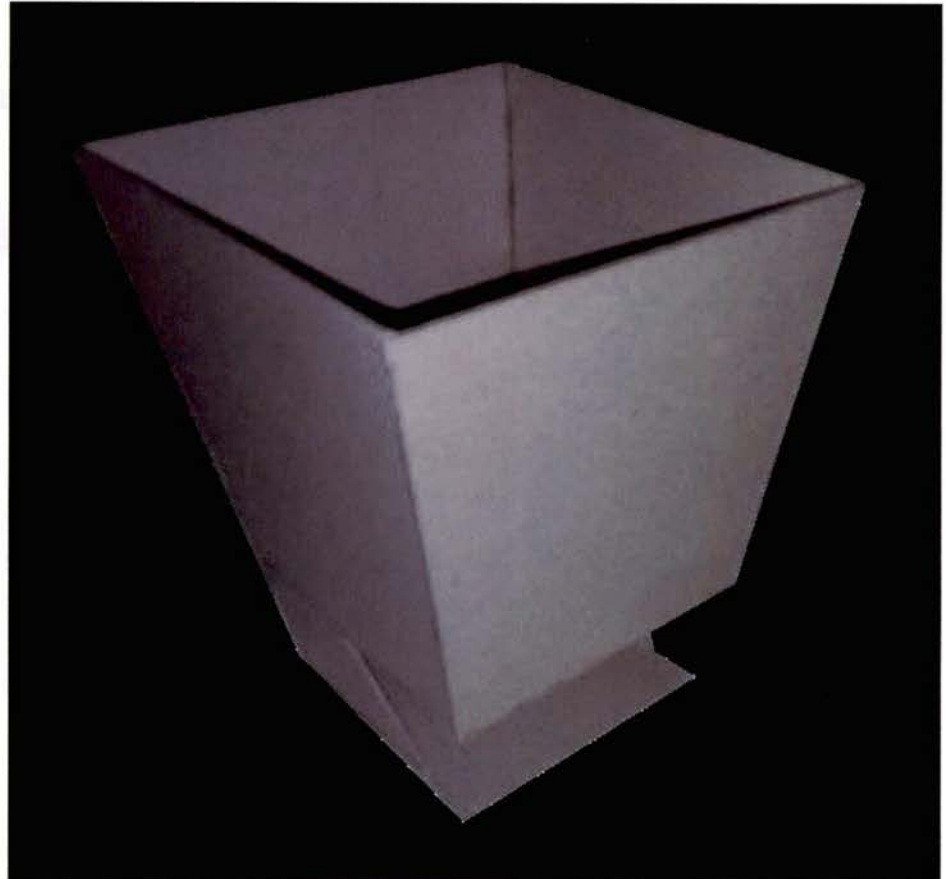
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Plants Multi Save

Description of Invention

Nowadays people like to live in condominiums which have no space for planting trees. The interesting option is to plant trees in pots. It can be grown in a limited area and move them easily. Therefore "Plants Multi Save" was developed



Inventor(s)

AKKHARAPHON XU
THAI SUTTHIWATTHANAKARN

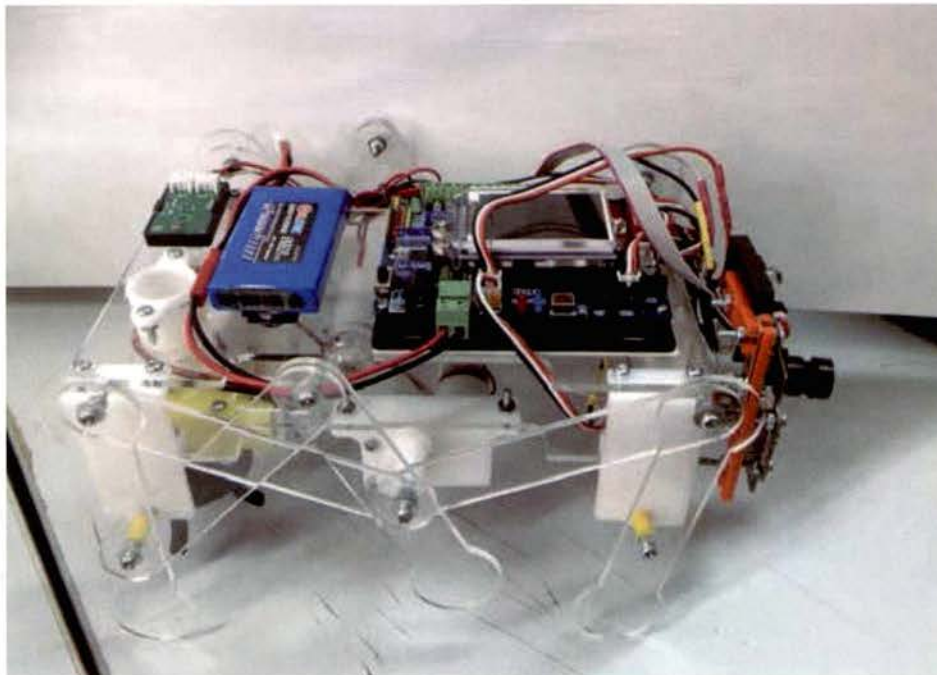




E-Bug

Description of Invention

Clean Food, Good Health is on a rising trend thus increasing in number of vegetables growers among urban people who want fresh and non chemical vegetables. E-Bug project is an innovative invention which aims to develop an electronic bug for planting vegetables.



Inventor(s)

SUPAWICH SITDHIPOL
YODSAWIT NGOENWIWATKUL





Auto Dispensing Box

Description of Invention



An Auto Dispensing Box is an innovation developed to help shorten the process of drug dispenser in hospitals or in schools. It works with IPST_MicroBox SE program to dispense household remedies automatically.

Inventor(s)

CHETNAT PRAPOBRATANAKUL
TANASART PHUANGTONG





A 3 In 1 Alarm System

Description of Invention

A 3 in 1 Alarm system was made to watch the climate events. It will warn people when the bush fire's occurring or rapid flood flowing or earthquake shaking. It will stay alert 24 hours a day and alarm everyone to save lives.



Inventor(s)

JIRAPHAT TABAO
KITTIKAN TECHA



Chitosan Paper Bag Absorbs Fat In The Food

Description of Invention

The shells of shrimp is a compound called "chitosan" which is a natural substance that has properties of a fat trap. An experiment has been done by an organizing committee which are interested in studying paper containing fats and oil and the effectiveness of chitosan by absorbing the oil or fat from food.



Inventor(s)

PIMMADA NGOENMAK
RATTANAPHON CHAI-INSOON





CULTURAL PERFORMANCES

CULTURAL PERFORMANCE

Indonesia

Performance: Sajojo Dance

Introduction:

Sajojo dance is a traditional dance from Papua, Indonesia.

Macau

Performance :A Wonderful Place

Introduction:

A wonderful place - This song is composed during the 10th anniversary Macao return to China. This contents different faces and green singers from locally.

Chinese Taipei

Performance: Gao Shan Qing

Introduction:

Gao Shan Qing, also known as Girl of Alishan, is an aborigine's song long spread in Taiwan. This song is describing the Ali Mountain (Alishan), the mountain is green, and the streams are blue. Then it started praising the beautiful Alisha girl and the healthy boy, they were never separated. There is a deep sense of aboriginal style, yet is a classic song in Taiwan.

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The background is a dark, textured surface with a gradient from deep green on the left to bright yellow and orange on the right. Overlaid on this are numerous semi-transparent circles of various sizes and colors, including shades of green, blue, purple, and yellow. A large, solid blue circle is positioned in the center, containing the text "2016 IEYI HARBIN" in white. To the right of the blue circle, there is a bright, glowing light source that creates a lens flare effect, with a small white starburst symbol nearby.

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